2022 Review of the Disability Standards for Accessible Public Transport

20230609

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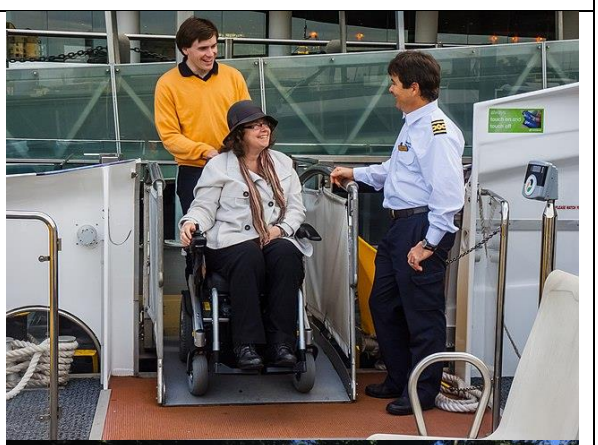
As Bon Scott—AC/DC lead singer—once crooned:

> 'It's a long way to the shop if you want a sausage roll.'

Especially if you can't access the precinct, bus, train, tram, ferry, plane, rideshare or taxi.



Four recently departed public transport champions are illustrated above. Their legacy endures.

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Introduction

For all its anachronisms, omissions and flaws, the Disability Standards for Accessible Public Transport 2002 (DSAPT-2002) has at least defined a minimum of service that people with disabilities can expect in a public transport system—or at least in those parts of their journey that are covered by the DSAPT. For this its authors and those who administer its application must be commended.

However, public transport systems are not self-contained entities serving themselves. Rather, they are mobility systems embedded within urban, suburban or rural landscapes and they depend on the accessibility of these landscapes for their efficacy. The precincts in which the public transport systems are located must be accessible for the public transport systems to be accessible. Until this occurs public transport systems will not be fully accessible to people with disabilities despite their full compliance with the DSAPT. The infrastructure and premises will be archipelagos of accessibility surrounded by savage seas.

Unfortunately, the DSAPT-2002 has not been able to deliver an accessible 'whole of journey' outcome. Significant parts of the journey fall outside the jurisdiction of operators and providers of public transport services. These will mostly be infrastructure and premises controlled by local authorities and private entities. While the Disability Discrimination Act-1992 covers these locations its complaints driven application and lack of a Disability Standard for premises that do not have a Building Class makes regulating and upgrading these premises and locations difficult.

Are you familiar with the Transport Standards and what they are designed to do?

Familiarity with the DSAPT-2002

The Transport Standards (DSAPT-2002) are well known to most disability advocates and access consultants. Jurisdictions are also well aware of them—though some officers appear to misunderstand or resent the DSAPT-2002. Industry is largely aware of them though a minority choose to ignore them. Many people with disabilities, their families, associates and supporters, are wholly or partly ignorant of the DSAPT-2002.

Purpose of DSAPT-2002

The purpose of the DSAPT-2002, as a Disability Standard formulated as per Section 31 of the Disability Discrimination Act-1992 (DDA), is to fulfil the Objects of the DDA:

> **3 Objects**
> The objects of this Act are:
> (a) to eliminate, as far as possible, discrimination against persons on the ground of disability in the areas of:
> (i) work, accommodation, education, access to premises, clubs and sport; and
> (ii) the provision of goods, facilities, services and land; and
> (iii) existing laws; and
> (iv) the administration of Commonwealth laws and programs; and

(b) to ensure, as far as practicable, that persons with disabilities have the same rights to equality before the law as the rest of the community; and
(c) to promote recognition and acceptance within the community of the principle that persons with disabilities have the same fundamental rights as the rest of the community.

The desired outcome of the Objects as relevant to public transport set out in Section 1.2 of the DSAPT-2002:

1.2 Purpose of Standards
(1) The *Disability Discrimination Act 1992* seeks to eliminate discrimination, 'as far as possible', against people with disabilities. Public transport is a service covered by the *Disability Discrimination Act 1992*.
(2) The purpose of these Standards is to enable public transport operators and providers to remove discrimination from public transport services.

Both Objects and Purpose are laudable and contribute towards Australia meeting its treaty commitments under the Convention on the Rights of Persons with Disabilities[1] and its Optional Protocol (CRPD). The CRPD entered into force for Australia on 16 August 2008, and the Optional Protocol in 2009[2]. Article 9—Accessibility of the CRPD deals with the physical environment, to transportation, to information and communications, *inter alia*.

Public, Jurisdictional and Industry awareness of the DSAPT

Understanding of Prescriptive solutions

Jurisdictions and industry

Prescriptive solutions are in most cases the minimum required to comply with the DSAT 2002. The word 'minimum' occurs 42 times in DSAPT-2002 when associated with a prescriptive requirement. Unfortunately, many operators, providers and access consultants do not think beyond minimum compliance and so the minimum required is often the maximum provided in the case of a prescriptive solution. While this approach is entirely lawful it is not good practice. However, it is often seen as successful management of risk, conservation of budget and providing legal 'certainty'—and may even mistakenly be believed to be the most accessible outcome. As such, the approach fails to provide a fit-for-purpose public transport service.

Engineers Australia have recognised that seeking 'certainty' via prescriptive solutions does not necessarily equate to good outcomes. They have noted this in their Chapter 8 Recommendations in *Engineers Australia 2022 Universal Design for Transport-Transport Australia Society Discussion Paper*[3]:

8. Recommendations
1. Recognise that compliance alone doesn't mean good accessibility – focus on universal access.

[1] https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html
[2] https://www.dss.gov.au/our-responsibilities/disability-and-carers/program-services/government-international/international-participation-in-disability-issues
[3] https://www.engineersaustralia.org.au/sites/default/files/2022-10/universal-design-for-transport-discussion-paper.pdf

7. Leverage technological advances including internet of things (IOT) and artificial intelligence into wayfinding, access to services etc.

8. Engineers and designers (and regulators) need to have agile mindset to new technologies and ways of providing accessible transport options.

11. Harmonise public transport and active transport infrastructure design standards and best operating practices.

Chapter 8 Recommendations of *Universal Design for Transport-Transport Australia Society Discussion Paper* is quoted in full in Appendix 1.

An excerpt from the Discussion Paper reads:

> The Disability Standards for Accessible Public Transport (DSAPT) establish minimum accessibility requirements to be met by providers and operators of public transport. Rather than simply complying with such standards, world best practice is now moving towards the concept of Universal Access, based upon the concepts of Universal Design.

Fortunately, some projects have opted to exceed minimum compliance and have therefore achieved commendable results. This has often involved consultation and co-design with the disability sector. While not required by the DSAPT-2002 in the case of prescriptive solutions this engagement is good practice that inevitably leads to outcomes that benefit the public in general. Once again, Engineers Australia[4] have recognised this point that universally designed rather than just 'compliant' outcomes benefit 'all individuals in the broader community'.

> Universal accessibility offers inclusion to all individuals. For those with disability, benefits arise from the opportunity to live a less dependent life and the enjoyment of enhanced respect, dignity, privacy, and rights. While universal design promotes access for individuals with disabilities, it also benefits all individuals in the broader community through good design, by easing the complexity and pressure in transport system use and by eliminating some of the barriers to mobility in our everyday life.

The Disability Standards for Accessible Public Transport Guidelines 2004 (No 3) states that the DSAPT-2002 encourages consultation. Unfortunately, this is not a requirement in the case for prescriptive solutions. Rather, it applies to Equivalent Access and Unjustifiable Hardship solutions.

> **36.1 Consultation with government and passengers**
> (1) The Disability Standards encourage consultation between operators, providers, all levels of government and the community to ensure that accessible public transport initiatives will reflect local and regional needs.
> (2) Operators and providers are encouraged to appoint access coordinators to facilitate liaison with user groups.
> (3) The most important consultation is expected to be between operators, local government and passengers. These consultations will allow operators and providers to develop cooperative implementation plans that ensure the introduction of accessible services according to locally set priorities.

It would be very useful if the reformed DSAPT required consultation on Prescriptive solutions. Following the Commission of inquiry into New

[4] https://www.engineersaustralia.org.au/sites/default/files/2022-10/universal-design-for-transport-discussion-paper.pdf

Generation Rollingstock Trains[5] this approach has been adopted by the Queensland government[6]:

> The Government will act immediately to respond to the report and ensure that all the recommendations are adopted in full. This is in addition to the steps already undertaken by the Government including:
> – a requirement for all procurement contracts to include an explicit obligation to comply with the Commonwealth Disability Discrimination Act 1992
> – the appointment of disability advocates to the industry advisory groups under the Government's Buy Queensland Procurement Policy
> – the creation of new Accessible Transport Networks team within the Department of Transport and Main Roads.

The approach is proving highly productive in terms of accessible public transport outcomes for all the public.

Access consultants

Access consultants are sometimes quite innovative and flexible, but often this is not the case. Prescriptive solutions are seen as 'safe' for the consultant and the client. Unfortunately, some access consultants who insist on strict prescriptive compliance do so without knowledge of the DSAPT's history. This lack of context can lead to poor outcomes.

An example of this insistence on compliance without context is the demand to locate braille to the left of tactile text and figures and to have a minimum eight of 0.8 mm as per Section 17.6. This is rather than below the text and with a minimum height of 1 mm as per Premises Standards and AS1428.4.2, which are standard practice.

> **17.6 Raised lettering or symbols or use of Braille**
> (1) If a sign incorporates raised lettering or symbols, they must be at least 0.8 mm above the surface of the sign.
> (2) If an operator or provider supplements a notice with Braille characters, they must be placed to the left of the raised characters.

The requirements of Section 17.6 were derived from AS1735.12 *Lifts, escalators and moving walks Part 12 Facilities for persons with disabilities* as no other suitable references were available to the DSAPT's authors.

> AS1735.12-1994
> 7.2.2 Control buttons on control panels
> A tactile symbol (see Clause 8.3 and Figure 8.4.2(c)) located either above or to the left of the communication button.
>
> 8.3 TACTILE INFORMATION
> (d) The characters shall protrude not less than 0.8 mm from the background to the characters.
>
> AS1735.12-1999
> 7.2.2 Control buttons on control panels
> A tactile symbol (see Clause 8.3 and Figure 8.4.2(c)) and Braille equivalent, located above or to the left or on the face of the respective buttons, shall be provided.

[5] https://www.traininquiryngr.qld.gov.au/
[6] https://www.traininquiryngr.qld.gov.au/assets/custom/docs/government-response-to-final-report.pdf

8.3 TACTILE INFORMATION
(d) The characters shall protrude not less than 0.8 mm from the background.

Compliance with Section 17.6—rather than seeking an Equivalent Access solution that conforms to the Premises Standards—is therefore regarded as 'safe' and 'certain' but is based on material developed in the context of a lack of information available in the 1990s to the DSAPT's authors. Work on braille signage subsequent to the publication of DSAPT is ignored in favour of a flawed DSAPT requirement—all due to the access consultants lacking context on the history of Section 17.6 and the desire for legal 'certainty'.

Disability sector

The disability sector is divided on its understanding of prescriptive solutions. Some see prescription as the most effective method of ensuring compliance and therefore accessibility. Others see compliance as minimum provision—easily misapplied—that can and should be improved upon by co-designing solutions that exceed compliance. Whether regarded as a starting point or an end point though, all agree that a measurable prescriptive requirement is a benefit to accessibility reporting and outcome consistency.

Engineers Australia appear to agree with those who believe that 'compliance alone doesn't mean good accessibility '. They have noted this in their Chapter 8 Recommendations in *Engineers Australia 2022 Universal Design for Transport-Transport Australia Society Discussion Paper*[7]:

8. Recommendations
1. Recognise that compliance alone doesn't mean good accessibility – focus on universal access.

Understanding of Equivalent Access solutions

Compliance with DSAPT may be achieved either through a prescriptive solution or an Equivalent Access solution as per Section 33.3 of DSAPT-2002.

33.3 Equivalent access
(1) Compliance with these Standards may be achieved by:
(a) applying relevant specifications in these Standards before the target dates; or
(b) using methods, equipment and facilities that provide alternative means of access to the public transport service concerned (but not using separate or parallel services) with equivalence of amenity, availability, comfort, convenience, dignity, price and safety.
(2) This may include direct assistance over and above that required simply to overcome discrimination.

Jurisdictions

In its submission on the Stage 2 reform proposals Queensland's Department of Transport and Main Roads (TMR) strongly favoured

[7] https://www.engineersaustralia.org.au/sites/default/files/2022-10/universal-design-for-transport-discussion-paper.pdf

guidance over regulation for most proposals[8]. While in itself a diminution of people's existing rights, of most concern was the frequent iteration that regulation would stifle innovation. This seems to indicate a profound misconception of how DSAPT compliance may be achieved.

The TMR staff who responded thus have apparently not read the Australian Human Rights Commission (AHRC) Equivalent Access Guidelines[9] that clearly place innovation at the heart of compliance via Equivalent Access. An excerpt from the AHRC Guidelines reads:

> Use of equivalent access:
> - potentially offers operators and providers flexibility in the delivery of accessible public transport
> - supports innovation by providing an opportunity to harness new technology to improve accessibility
> - offers the potential for the delivery of public transport that exceeds minimum published accessibility standards
> - encourages communication and collaboration between operators and providers, through required consultation with passengers with disability, organisations representing people with disability and other stakeholders, which may result in long-term access solutions developed through co-design rather than as a result of a complaint or litigation.

This lack of understanding of Equivalent Access solutions by some of TMR's highly qualified—and paid—transport professionals is extremely disappointing—and is no doubt extraordinarily limiting of innovation.

The misconception is by no means uniform. The Cross River Rail[10] project and the Queensland Train Manufacturing Program[11] are exemplars how excellent results exceeding base compliance can be achieved via Equivalent Access solutions that are developed through co-design.

Access consultants

Access consultants—with notable exceptions—appear to be wary of Equivalent Access solutions. They often have no process framework for the necessary consultation and are also loath to arrive at a solution that might be construed as non-compliant by a party not involved in consultation. Prescriptive solutions—however poor—are perceived as much safer for the access consultants and their clients.

Some access consultants are also prone to confusing Equivalent Access with Unjustifiable Hardship. For example, at times a prescriptive compliance cannot be achieved on a particular feature and no equivalent solution presents itself. A suboptimal solution for the feature can be achieved however—such as a narrow but functional access path or a steep but still acceptable ramp—and this is deemed to be 'equivalent' when

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[8] https://www.infrastructure.gov.au/sites/default/files/documents/dsapt--queensland-department-of-transport-and-main-roads.PDF

[9] https://humanrights.gov.au/our-work/disability-rights/publications/guidelines-equivalent-access-under-disability-standards

[10] https://crossriverrail.qld.gov.au/about/accessibility/

[11] https://www.tmr.qld.gov.au/projects/queensland-train-manufacturing-program-qtmp#accessibility

clearly it is not. Greater education of the access consultants on the nature, process and outcomes expected of Equivalent Access would seem to be required.

Disability sector

Disability sector understanding and acceptance of Equivalent Access appears to be much stronger than that of jurisdictions and access consultants. Having participated in several successful co-design processes—and being actively engaged in several current co-design processes—the sector and its representatives see the benefit of involvement that allows them to convey user experience and needs directly to the tender proponents and infrastructure / premises designers.

Understanding of Unjustifiable Hardship

Jurisdictions, industry, access consultants and certifiers often view Unjustifiable Hardship as a sword rather than a shield. The craving for 'certainty' in order to have legal protection is a major factor in perceiving Unjustifiable Hardship as a failure to reach compliance, an exposure to complaint, and therefore a looming threat. This grossly misunderstands a provision in the DSAPT that aims to protect operators and providers—while seeking to minimise the impact on people with disabilities.

Many in the disability sector regard Unjustifiable Hardship as an opt out mechanism—often mischievously employed—that is designed to diminish their rights. This is also a misconception—though it has on occasion been mischievously employed as an opt out which colours the view of the disability sector.

Section 33.7 makes it abundantly clear that while 'compliance is required to the maximum extent not involving unjustifiable hardship' any shortfall can be best defended via evidence of a robust consultation and co-design process.

Operators and providers should see the disability sector as partners in solution development rather than antagonists poised to pounce on solution failures. This bipartisan approach will enable shared understanding and better acceptance of any Unjustifiable Hardship solutions developed via consultation and co-design.

33.7 Exceptional cases — unjustifiable hardship

(1) It is not unlawful to fail to comply with a requirement of these Standards if, and to the extent that, compliance would impose unjustifiable hardship on any person or organisation.

(2) However, compliance is required to the maximum extent not involving unjustifiable hardship.

(3) In determining whether compliance with a requirement of these Standards would involve unjustifiable hardship, all relevant circumstances of the particular case are to be taken into account including the following:

(o) the nature and results of any processes of consultation, including at local, regional, State, national, international, industry or other level, involving, or on behalf of, an operator concerned, any infrastructure providers as relevant, and people with a disability, regarding means of achieving compliance with a relevant requirement of these Standards and including in relation to the factors listed in this section;

(4) If a substantial issue of unjustifiable hardship is raised having regard to the factors listed in paragraphs (3) (a) to (p), the following additional factors are to be considered:

(a) the extent to which substantially equal access to public transport services (including in relation to equality of independence, amenity, availability, comfort, convenience, dignity, price and safety) is or may be provided otherwise than by compliance with these Standards;

(b) any measures undertaken, or to be undertaken by, on behalf of, or in association with, a person or organisation concerned to ensure such access.

Education for operators and providers and the disability sector on Unjustifiable Hardship and how it can lead to defensible and functional outcomes via consultation and co-design is sorely needed in order to dispel the misconceptions that surround it.

Public consultation with people with disabilities

Participation by people with disabilities in the DSAPT Reform workshop and consultation process Stages 1 & 2 showed varying amounts of awareness of the DSAPT's contents and purpose. Some were *au fait* with the DSAPT while others were aware of it but ignorant of much of its purpose and content. Most people sat between these extremes. No doubt there are individuals who are totally unaware of the DSAPT and therefore did not participate in consultation. Any outreach or educational programs can only benefit the public and better equip them for participating in the ongoing reform of the DSAPT.

Do we need to increase awareness of the Transport Standards? If so, how?

An ongoing promotion and education program for the DSAPT would be useful. New practitioners are always entering the field and people will continue to acquire disabilities. While these people will to an extent learn through practice, nothing can replace dedicated training and information provision by well qualified educators.

Liaison with the institutions that offer professional development training would be helpful in the ongoing education of the procurers, designers and builders of public transport assets. Engineering students and management students should do a compulsory module focussed on community engagement during project evaluation and implementation.

Other education programs tailored to suit the audience—whether designers, managers, builders, access consultants, certifiers, members of the public and so on—could be developed through a co-design process and delivered in various formats by the Australian Human Rights Commission, jurisdictions, industry and disability sector to their respective constituencies.

Educating the general public is always a valuable exercise. A multimedia approach would no doubt assist members of the public to better understand the needs of people with disability in public transport.

Contracts that require service providers to fully comply with DSAPT, and report against their efforts to reach compliance with legacy assets, should be standard in all jurisdictions.

To what extent do you think the Transport Standards have removed discrimination from public transport services?

The DSAPT-2002 has had mixed success in removing discrimination from public transport services. As such it has fallen short of its Purpose. The Australian Institute of Health and welfare (AIHW) Web Report (5 July 2022) *People with disability in Australia*[12] paints a bleak picture of the situation still facing some people with disabilities despite DDA and DSAPT.

> Some people with disability also find it difficult to use public transport. About 1 in 6 (16% or 326,000) people aged 15–64 with disability, living in households who leave home, have difficulty using some or all forms of public transport. This includes:
>
> - using steps (34% or 111,000 people)
> - facing fear or anxiety (32% or 104,000 people)
> - getting to stops or stations (21% or 69,000 people)
> - finding a seat or standing (20% or 65,000 people) (ABS 2019a).
>
> About 1 in 9 (11% or 221,000) people aged 15–64 with disability, living in households who leave home, are unable to use public transport at all. About 1% (21,000) of people aged 15–64 with disability living in households do not leave home (ABS 2019a).

Various matters of success and failure will be considered below.

Funding commitment

The failure to meet full compliance, or compliance to the degree possible, for infrastructure and premises in service in 2002—despite a 20 year timeframe—results from jurisdictions and asset owners not rigorously planning, costing and funding the work. Those who develop and approve jurisdictional and industry budgets have not treated the DSAPT with the priority it deserves.

Infrastructure Australia comments on lack of funding commitment in its *Australian Infrastructure Audit 2019*[13].

> **70. Challenge**
> There is insufficient funding to make our public transport networks accessible to people with disability. Unless funding shortfalls are addressed, legislated accessibility targets for public transport will not be reached and our networks will not be inclusive.
>
> A lack of funding is perhaps the greatest challenge in meeting legislated standards. The latest review of the Standards identified that the infrastructure upgrades required between 2017 and 2022 are likely to cost the most, and achieve the lowest relative benefit to accessibility, making them unattractive investments to governments.
>
> The financial pressure has been highlighted by local governments, which are often responsible for bus stops. Local Government NSW notes that the introduction of the Standards was not accompanied by additional funding for implementation, making it difficult to meet requirements.

[12] https://www.aihw.gov.au/reports/disability/people-with-disability-in-australia/contents/justice-and-safety/disability-discrimination#Access%20to%20facilities%20and%20services
[13] https://www.infrastructureaustralia.gov.au/sites/default/files/2019-08/Australian%20Infrastructure%20Audit%202019.pdf

> State government operators have also struggled financially. Metro Tasmania, the state's largest government-owned transport operator, has advised it is unlikely to meet 2022 accessibility targets as significant financial investment is required and this has not been provided for in future budgets.

Engineers Australia have identified the need for program commitment and funding commitment to meet DSAPT retrofit requirements in *Engineers Australia 2022 Universal Design for Transport-Transport Australia Society Discussion Paper*[14] and have included this in their Chapter 8 Recommendations:

> **8. Recommendations**
> 4. Need for long term program and state commitment to retrofitting existing infrastructure to achieve DSAPT standards – including a funding commitment.
>
> Developing long term program and commitment – some cities have performed better than others in meeting the challenge of upgrading transport systems to meet modern accessibility guidelines. If tasks such as station upgrades to achieve DDA compliance are defined as a single project, obtaining the required level of one-off funding may be impossible. Adelaide and Brisbane have adopted long-term programs of gradually upgrading several rail stations per year. With this gradual approach, a significant proportion of their stations have now been upgraded to DDA compliant standards.

Unless the planning and funding commitment is made by operators, providers and jurisdictions, significant numbers of public transport legacy assets are likely to remain inaccessible well into the future.

Consultation and co-design

A DSAPT requirement for consultation and co-design for all solution categories—Prescriptive, Equivalent Access and Unjustifiable Hardship—is sorely needed if the CRPD's Article 4—General obligations, Section 3[15] and Australia's Disability Strategy 2021-2031[16] 'Engaging People with Disability' requirements on consultation are to be met.

Having no voice, or only a limited voice, in the delivery of new or refurbished assets has disadvantaged passengers with a disability. This is particularly the case where outdated Prescriptive solutions are implemented in the name of 'compliance and certainty' rather than co-designing solutions that offer 'function and accessibility'.

Prescriptive solutions should also carry a requirement to consult and co-design. This approach has been taken by the Cross River Rail[17] project which formed an Accessibility Reference Group[18] with the aim of hearing about how solutions were most effectively applied. Co-design has achieved outstanding results at new underground stations[19], new above

[14] https://www.engineersaustralia.org.au/sites/default/files/2022-10/universal-design-for-transport-discussion-paper.pdf
[15] https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html
[16] https://www.disabilitygateway.gov.au/ads/strategy
[17] https://crossriverrail.qld.gov.au/
[18] https://crossriverrail.qld.gov.au/about/accessibility/
[19] https://crossriverrail.qld.gov.au/stations-routes/

ground stations[20] and refurbished legacy stations[21] that were in many cases constructed over 100 years ago.

Aligning with the practice of the Cross River Rail Delivery Authority the CRPD makes clear that people with disabilities shall be closely consulted on matters that concern them via their representative organisations.

> **Article 4**
> **General obligations**
> 3. In the development and implementation of legislation and policies to implement the present Convention, and in other decision-making processes concerning issues relating to persons with disabilities, States Parties shall closely consult with and actively involve persons with disabilities, including children with disabilities, through their representative organizations.

Australia's Disability Strategy 2021 – 2031 reiterates and expands upon the CRPD obligations.

> *Policy Priority 4:*
> *The rights of people with disability are promoted, upheld and protected*
> Promoting awareness and respect for the rights of people with disability and building on Australia's rights-focused legislative protections for people with disability, will help to systematically uphold and safeguard these rights. It will also help realise Australia's commitments under the UN CRPD.
>
> *Engaging People with Disability*
> People with disability will play a central and active role in the Strategy over its life. For the Strategy to be implemented effectively, the views of people with disability, disability sector stakeholders and diverse groups within the sector must be heard and considered.
>
> The Strategy's Engagement Plan (the Engagement Plan) is published on the Strategy's website.
>
> The Engagement Plan will give people with disability a voice in the implementation and monitoring of the Strategy and a structured, ongoing role in influencing how it is addressing their rights and needs. Ensuring people with disability can make a tangible difference to a Strategy designed to assist them, is an important step in helping the Strategy achieve its vision and purpose. The Engagement Plan will also ensure people with disability are connected with governments and can be involved in guiding governments to consider how policies and programs impact on their lives.

The DSAPT requires consultation on any Equivalent Access solutions as stated in Section 33.4. Similar requirements apply to Unjustifiable Hardship solutions in Section 33.7(3)(o). There are no DSAPT requirements to consult on the minimum requirements of prescriptive solutions and how these might meet higher and more contemporary specifications. This locks compliant solutions into dated minimum standards that may be lawful but are not always good outcomes as Engineers Australia have recognised in *Engineers Australia 2022 Universal Design for Transport-Transport Australia Society Discussion Paper*[22]:

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[20] https://crossriverrail.qld.gov.au/stations-routes/gold-coast-line/
[21] https://crossriverrail.qld.gov.au/stations-routes/salisbury-to-fairfield-line/
[22] https://www.engineersaustralia.org.au/sites/default/files/2022-10/universal-design-for-transport-discussion-paper.pdf

8. Recommendations

1. Recognise that compliance alone doesn't mean good accessibility – focus on universal access.

Daniels-Mayes and Howe in their 2021 paper *The need for inclusive design; going beyond the minimum standards in the built environment*[23] reiterate the point about compliance not being a measure of accessibility:

> Accessibility in the built environment is often tackled as a technical exercise quite late in the design process and not used creatively in concept development (Boys, 2014). Leaving this too late in the process might mean that while a building technically complies, it is not fit for purpose and can remain stigmatising and exclusionary.

Credible consultation and co-design during procurement and design would have saved Queensland's NGR trains from the conflict and contention that followed their acquisition as the Commission of inquiry into New Generation Rollingstock Trains[24] noted:

> **6.9 Findings and conclusions**
> *Inadequate consultation during procurement process*
> In the Commissions' view, consultation during the procurement phase of the NGR project was inadequate.
>
> While there are strict confidentiality and probity requirements in procurement processes, in the Commission's view, this did not preclude consultation with key stakeholders to inform performance specifications. Undertaking genuine, early consultation about NGR train design from an accessibility perspective prior to or early in the procurement process, without disclosing confidential information, would have facilitated a greater understanding of accessibility considerations and preferences. This could then have informed performance specifications, requests for changes and negotiations about proponents' proposals, and highlighted key accessibility requirements for consideration through the procurement and design approval process.
>
> *Limited consultation during the design phase*
> Consultation during the design approval phase of the NGR project was slightly improved, in that some consultation occurred; however, in the Commission's view, the consultation was limited and flawed.
>
> Feedback from the QR–ARG suggests that its members were not given sufficient information at the mock-up inspections to make fully informed comments. For example, the members were not advised that only one of the accessible cars would contain a toilet module. They consequently assumed the mock-up was representative of both accessible cars. Feedback also suggested that the purpose of the consultation was not clearly articulated to the QR–ARG, with members only becoming aware at the stage three mock-up that key design features were fixed and design elements that they were requesting changes to were 'non-negotiable'.

Had the NGR project followed a credible consultation and co-design process from pre-procurement phase rather than after the trains entered

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23 https://www.academia.edu/48849722/The_need_for_inclusive_design_going_beyond_the_minimum_standards_in_the_built_environment

24 https://www.traininquiryngr.qld.gov.au/assets/custom/docs/coi-final-report-2018.pdf

service it would have saved the Queensland government $335 million in retrofitting costs[25] as stated on the TMR website:

> During 2018, we carried out an innovative codesign process with the disability sector to explore design changes and resolve non-compliances.
>
> As a result of this process, the Queensland Government is delivering the $335 million NGR accessibility upgrade project, which is installing accessibility upgrades into the entire NGR fleet.

Unfortunately, the Premises Standards requirement for public transport premises are out of scope in the DSAPT review. When transport Premises mostly moved to the Premises Standards in 2010 the requirement to consult on Equivalent Access solutions was not transferred to Performance Solutions but was lost entirely. This was a significant step backwards in ensuring the accessibility of public transport premises. While many architects and designers are highly skilled people none will have the breadth of expertise that is offered by a properly constituted Accessibility Reference Group or Project Working Group.

Forming such project related groups is entirely discretionary on the part of the operator or provider. Cross River Rail[26] and Gold Coast Infill Stations[27] projects have elected to do so despite the absence of requirement under the Premises Standards. The results have been outstanding cooperation between parties, design excellence even on 100-year-old rail stations, and ringing endorsements from the disability sector regarding process and outcome.

Engineers Australia have recognised the value of consultation and co-design in *Engineers Australia 2022 Universal Design for Transport-Transport Australia Society Discussion Paper*[28] and have included them in their Chapter 8 Recommendations:

> **8. Recommendations**
>
> 1. Recognise that compliance alone doesn't mean good accessibility – focus on universal access.
>
> 5. Make more use of state-based accessibility groups in understanding solutions and prioritisation of finite funding- i.e., maximise accessible benefits.
>
> 10. Universal access needs to be a guiding principle through the design process not post-design check.
>
> 12. Subject matter experts should be engaged at project commencement to identify appropriate standards that lead to good accessibility outcomes.

[25] https://www.tmr.qld.gov.au/projects/new-generation-rollingstock/accessibility-upgrades
[26] https://crossriverrail.qld.gov.au/about/accessibility/
[27] https://crossriverrail.qld.gov.au/stations-routes/gold-coast-line/
[28] https://www.engineersaustralia.org.au/sites/default/files/2022-10/universal-design-for-transport-discussion-paper.pdf

Infrastructure Australia also make a strong point about the opportunities arising from customer insights in its *Australian Infrastructure Audit 2019*[29].

> **3. Opportunity**
> User data and customer insights can enable innovation to better meet users' needs. Better understanding users' needs can help operators to improve user experience, attract more users and provide services more efficiently.

Engaging people with disabilities in any accessibility upgrades was seen as a priority by the Rail Safety and Standards Board (RSSB) of Great Britain in their 2019 research document *Rail travel and disability: An international perspective on accessibility*[30]:

> The second enduring point through literature on accessible transport has been the criticality of engaging people with disabilities in the choice, design, and implementation of improvements to accessibility. People with disabilities know best what their needs are and engaging them in the improvement process can avoid costly mistakes. Furthermore, engaging people with disabilities makes them more invested in using a network which acknowledges their presence. Projects in the future should endeavour to engage PwD throughout the design process in order to effectively make a transport network which is appealing and accessible for all.

The clear, unambiguous message from all these documents and reports is to engage credibly, engage early and maintain engagement for the life of the project. DSAPT should require this engagement for all projects, engaging at a level appropriate to the scale of the project.

Procurement

At times, procurement of new public transport assets is poorly executed while at other times it is handled quite efficiently. To assist with non-discriminatory procurement outcomes the inclusion of a model non-discriminatory procurement process in the DSAPT or its guidelines would be very useful. Infrastructure Australia have recognised the challenges in procurement and the need for carefully following just such a well-considered process in its *Australian Infrastructure Audit 2019*[31].

> **32. Challenge**
> Truncated bidding timelines, unnecessary documentation requirements, and under-resourced government project teams are leading to poor procurement and delivery outcomes. This results in higher levels of risk and uncertainty being priced into tenders. These costs are ultimately carried by the users through poor quality services or additional costs, or met through government reimbursements.
>
> Large, complex projects require careful consideration of risks and a considered process to allocate and manage these risks. With good commercial advice, prudent gateways and careful delivery oversight, the community can expect better value, better designed and better quality infrastructure.

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[29] https://www.infrastructureaustralia.gov.au/sites/default/files/2019-08/Australian%20Infrastructure%20Audit%202019.pdf
[30] https://www.acri.net.au/wp-content/uploads/2019/11/Rail-travel-and-disability-An-international-perspective-on-accessibility_Final.pdf
[31] https://www.infrastructureaustralia.gov.au/sites/default/files/2019-08/Australian%20Infrastructure%20Audit%202019.pdf

As noted above, procurement is a process fraught with the risk of error. It demands meticulous attention to detail prior to going to tender. Lamentable errors sometimes occur due to overlooking the obvious. Spanish trains ordered for operation in the north of that country were found to be too wide to fit through the older tunnels[32]. Blue Mountains tunnels[33] were found to be too narrow for new trains. Sydney's light rail is in difficulties and well over budget due to foreseeable utilities issues[34]. In early 2007 it was discovered that air-conditioning units on the Queensland Rail IMU160 and SMU260 trains were 10 millimetres too wide for the loading gauge, sparking concerns over tunnel clearance in a 4m section between Central and Fortitude Valley stations[35].

The 2018 Commission of inquiry into New Generation Rollingstock Trains[36] found that the NGR trains failed to comply with disability legislation and functional requirements. Briefly, the inquiry found that people in decision making roles were unaware of DSAPT requirements and those who were aware of DSAPT requirements failed or neglected to inform the decision makers. Consultation with the disability sector, who would have pointed out the issues, did not occur early enough. This was a procedural comedy of errors.

Happily, following vigorous advocacy by the disability sector—and a very commendable co-design process following the advocacy—the compliance failures of the train are being rectified. Even more encouraging was the Queensland government's response to the inquiry's recommendations[37]:

> The procurement of New Generation Rollingstock trains that failed to comply with disability legislation is clearly unacceptable.
>
> This situation falls short of the Government's aim to provide an accessible public transport network for all members of our community.
>
> As the report makes clear, decisions taken as early as 2012 have led to the development of trains which do not meet legislative standards, and which require rectification to improve accessibility.
>
> This Government believes that customers have a right to expect a safe, reliable and efficient public transport system.
>
> This Government has accepted all 24 recommendations in Commissioner Forde's report.

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[32] https://www.bbc.com/news/world-europe-64717605
[33] https://www.news.com.au/technology/innovation/nsws-2-billion-new-trains-are-too-wide-to-get-through-tunnels/news-story/47bd2ee36f43cd3cdd2819078feb6011
[34] https://www.afr.com/companies/we-all-knew-the-biggest-risk-was-the-utilities-caf-looks-beyond-sydney-20180511-h0zxxy
[35] https://web.archive.org/web/20110811094831/http://www.couriermail.com.au/news/queensland/bungle-halts-trains/story-e6freoof-1111113052829
[36] https://www.traininquiryngr.qld.gov.au/
[37] https://www.traininquiryngr.qld.gov.au/assets/custom/docs/government-response-to-final-report.pdf

Following Queensland's adoption of the Commission's recommendations the Queensland Train Manufacturing Program[38] has been an exemplar of a procurement program that has co-design at its core:

> Since 2021, we've undertaken comprehensive engagement with the disability sector to co-design the new trains, to ensure that the fleet is compliant, accessible and functional for all passengers.
>
> We have taken onboard all recommendations from the New Generation Rollingstock Commission of Inquiry and are working closely with Commissioner Michael Forde and the Queensland Accessible Transport Advisory Council.
>
> An accessibility advisor has been appointed to the program.

Not every procurement failure ends as happily as the NGR train and not every procurement process proceeds as smoothly as the Queensland Train Manufacturing Program. Some operators and providers in Queensland have reacted with surprise when informed that the NGR Commission's findings and recommendations concerned failure of procurement practices rather than poorly designed trains. This misconception risks future failures for modalities other than heavy rail.

Equally, the interstate impact of the NGR Commission appears to have been limited—often being viewed as a purely 'Queensland problem'. This puts operators and providers at risk of procurement failures through not fully considering or consulting on the accessibility needs of people with a disability prior to procurement.

Unless 'success' is defined and agreed prior to contracts being signed, post procurement consultation will strike the same issues as the NGR train. In that example advice from the disability sector could not be followed due to the recommended changes breaching contractual obligations or being hampered by the already designed layout of essential features such as power plants or bogies.

Engineers Australia have recognised the perils of late engagement with the disability sector in *Engineers Australia 2022 Universal Design for Transport-Transport Australia Society Discussion Paper*[39] and have included this principle in their Chapter 8 Recommendations:

> **8. Recommendations**
>
> 5. Make more use of state-based accessibility groups in understanding solutions and prioritisation of finite funding- i.e., maximise accessible benefits.
>
> 10. Universal access needs to be a guiding principle through the design process not post-design check.
>
> 12. Subject matter experts should be engaged at project commencement to identify appropriate standards that lead to good accessibility outcomes.

[38] https://www.tmr.qld.gov.au/projects/programs/queensland-train-manufacturing-program

[39] https://www.engineersaustralia.org.au/sites/default/files/2022-10/universal-design-for-transport-discussion-paper.pdf

Precincts

Public transport infrastructure and premises are embedded in precincts in which people live, work, recreate, study and otherwise go about their daily lives. The accessibility of the precinct, whether via footpaths, pedestrian crossings, walkways or via connecting services delivered by other public transport modalities will determine the effectiveness and accessibility of the public transport infrastructure and premises in those precincts.

Unfortunately, many precincts have challenging topography, substandard pedestrian infrastructure and / or old inaccessible buildings[40]. These challenges can limit or prevent precinct accessibility and therefore render the otherwise accessible public transport infrastructure and premises as 'stranded assets' for passengers who have a disability[41].

The problem of accessible assets in difficult precincts is acknowledged in a recent Access Insight[42] article by Kiersten Fishburn the Deputy Secretary, Cities & Active Transport at Transport for New South Wales:

> We need to make sure that along with investing in the transport infrastructure and services, that anyone, regardless of ability, can actually get to it. There is no point in having new, upgraded train stations and new trains, without having the paths that lead to them to encourage active transport connections. And for many people with disabilities, this is where the challenge exists.

Engineers Australia have recognised the challenge in providing accessible precincts in *Engineers Australia 2022 Universal Design for Transport- Transport Australia Society Discussion Paper*[43]:

- Local government has a large role in providing accessible transport, varying by state. Accessible pedestrian infrastructure is often inconsistently applied across different local government areas.
- The "first mile" and "last mile" remains an impediment to universally accessible transport. Each element needs to be considered in a "whole of journey" context.

They have further recognised the issue in their Chapter 8 Recommendations:

> **8. Recommendations**
> 6. Need to make sure there is access to public transport for those who are reliant on public transport for mobility due to their disability, including in regional areas.

In Australia's Disability Strategy 2021-2031[44] Policy Priority 5: *Transport systems are accessible for the whole community* 'getting to and from the

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[40] https://www.disabilitysupportguide.com.au/talking-disability/public-transport-remains-inaccessible-as-20-year-targets-are-not-met
[41] https://www.forbes.com/sites/gusalexiou/2021/02/17/for-disabled-people-inclusive-transportation-is-about-much-more-than-lifts-and-ramps/?sh=e69d9032b085
[42] https://access.asn.au/component/edocman/access-insight-autumn-2022
[43] https://www.engineersaustralia.org.au/sites/default/files/2022-10/universal-design-for-transport-discussion-paper.pdf
[44] https://www.disabilitygateway.gov.au/ads/strategy

transport (e.g. footpaths and walkways)' is recognised as a challenge to using transport systems.

While no national, state or local assessments of precinct accessibility have been carried out the matter of inaccessible precincts is continually raised in consultation and discussion. The problem is therefore likely to be widespread though by no means uniformly spread as some precincts are comfortably accessible while others are not.

Exactly what the accessibility status of the precincts surrounding public transport nodes is, cannot be known as data are scarce. Mary Ann Jackson in her Jackson, M.A. 2019 *Accessing the Neighbourhood: Built Environment Performance for People with Disability*.[45] mentions the 'performance measure blind spot' for accessibility of precincts.

> Many people with disability across regions as diverse in resources, geography, politics and culture as the UK, New Zealand, Australia, Canada, the USA, continental Europe, Scandinavia, Asia, the Pacific Islands, the African continent and Latin America, find their everyday environments a daily, overwhelming struggle. Common themes are very obvious: social inclusion is stymied by the inability to navigate broken travel chains; built environment elements of greatest concern are housing, the public realm pedestrian environment, and public transport; lack of enforcement of existing legislation is a very significant problem; and inconsistent and/or misinterpretation of existing legislation is also problematic.
>
> Despite all this, accessibility for people with disability in the urban realm, a realm intimately related to 'planning', appears to be a built environment performance measure blind spot.

Without data to understand the problem of 'broken travel chains' the issues are unlikely to be resolved. DSAPT should require precinct accessibility as a reported performance measure.

A precinct's pedestrian infrastructure and its older buildings are mostly the assets of the local authority or of private landlords and while covered by the DDA are not covered by the DSAPT. There is therefore no schedule for their upgrade to a state of compliance or accessibility. Support for these asset owners via grants, information and other appropriate means will be needed if precincts are to allow the greater efficacy of the public transport system.

Connecting services via other modalities such as hail and ride[46], on-demand transport[47], taxi, rideshare or other mobility as a service (MaaS) options can increase the permeability of an otherwise topographically or structurally challenging precinct. All of these modality options require supporting infrastructure for boarding and alighting—responsibility for which will fall to local authorities either as a DSAPT or DDA imperative. Once again, support to deliver these assets may be required.

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[45] https://uclpress.scienceopen.com/hosted-document?doi=10.14324/111.444.amps.2019v16i1.004

[46] https://www.brisbane.qld.gov.au/traffic-and-transport/public-transport/personalised-public-transport

[47] https://translink.com.au/travel-with-us/on-demand

Smart ticketing

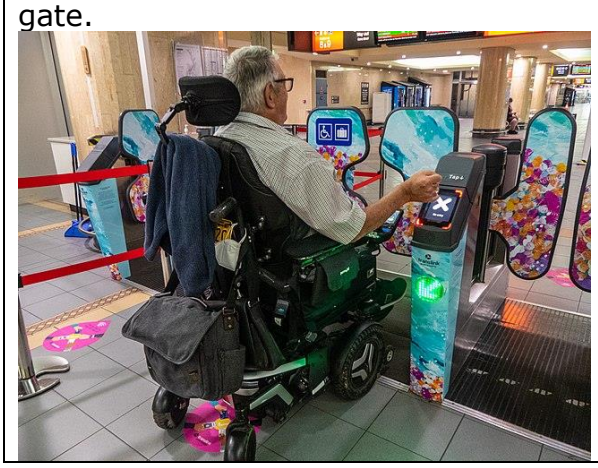
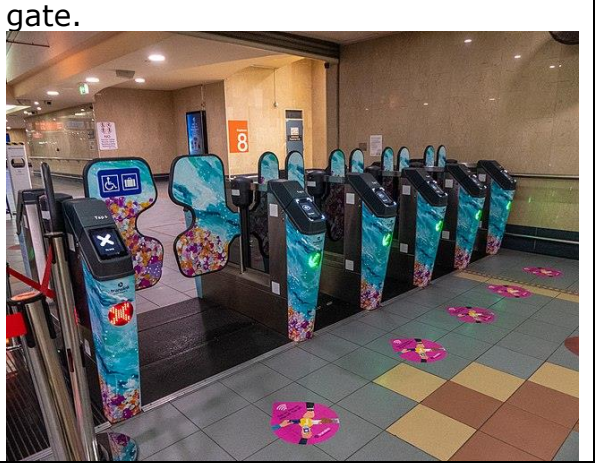
DSAPT-2002 requirements for fare payment are performance based and this has permitted operators and providers to develop often very innovative and accessible systems.

> **25.2 Fare payment and ticket validation systems**
> (1) Fare payment and ticket validation systems must not require actions from passengers with disabilities that exceed the requirements for other passengers.
> (2) For passengers who have difficulties with standard fare payment systems, operators and providers must offer a form of payment that meets equivalent access principles.

Smart Ticketing[48] has elected to be guided by both AS EN 301 549-2016 *Accessibility requirements suitable for public procurement of ICT products and services* and a rigorous co-design process. The results to date for both hardware and software are commendable with multiple payment options available, accessible fare validators and further 'hands free' contactless payment options still being considered[49].

Smart Ticketing fare validator on rail platform.	Smart Ticketing fare validator on fare gate.
	

[48] https://translink.com.au/about-translink/projects-and-initiatives/smart-ticketing
[49] https://translink.com.au/about-translink/projects-and-initiatives/smart-ticketing/info

Smart Ticketing fare validator on fare gate.	Smart Ticketing fare validator on fare gate.
	

Translink are not alone in the pursuit of accessible and inclusive ticketing systems. Transport for New South Wales have partnered with iMove Australia to co-design a 'frictionless ticketing for public transport accessibility'[50]:

> Open systems are account-based where identification is separated from the funding. This can leverage various types of frictionless technology such as biometrics and personal verification methods including fingerprint readers, facial recognition (CCTV and camera), iris scanners and radio.
>
> For example, radio frequency identification (RFID) enabled wearables and Bluetooth technologies have the potential to support transport operators in improving their services.
>
> This new technology can enable customers with disability to approach and automatically pay for their fare thanks to gate sensors that immediately detect the RFID tag or sensor card at a train station.
>
> The outcome is a frictionless journey where customers with disabilities no longer have to have to engage a transport worker or face struggles in trying to reach the card readers to tap their card or digital wallets.
>
> This can create accessible connected journeys across private and public operators through Mobility as a Service (MaaS).

These accessible and inclusive ticketing initiatives are to be commended.

Route buses and coaches

Almost the entire national fleet of route buses is low floor and accessible via boarding ramp and / or kneeling, with only a few non-compliant buses left in service[51]. This is an excellent outcome mostly driven by the DSAPT-2002. Containment of mobility aids in the allocated spaces and next stop announcement during journey are areas of non-compliance, but solutions are being sought for both issues.

The majority of the nation's coach fleet appears to be non-compliant with regard to wheelchair access. Some operators do have accessible

[50] https://imoveaustralia.com/project/frictionless-ticketing-public-transport-accessibility/
[51] https://the-riotact.com/broken-promise-government-accused-of-breaching-disability-standards-with-old-buses/626979

coaches[52]—and these operators are to be commended—but they are a minority. Operators of non-compliant coaches may be subject to legal challenge now that the Schedule for Compliance for coaches has concluded. Operators of non-compliant coaches that were procured after 2002 would be particularly vulnerable.

School buses

Exempting school buses from sections of the DSAPT-2002 has been a point of contention. Parallel services are not permitted as a form of Equivalent Access. But, only a paratransit option—private vehicle or wheelchair accessible taxis (WATS)[53]—remains for students who are reliant on mobility aids such as wheelchairs. In rural locations where no WAT service is available the student has no transport option other than private transport[54].

For other users of WATS the lack of available WATS at morning and afternoon school pick up times places restrictions on their travel. Exempting school buses from sections of DSAPT-2002 is clearly discriminatory, both for students and other members of the public who rely on WATs.

Commendably, TMR has a funding program to assist school bus operators purchase roll-over compliant buses[55]:

> The Queensland Government provides funding to eligible school bus delivery partners to assist with the purchase of new buses or buses that are less than 5 years old. The objective of the scheme is to help accelerate the introduction of rollover-compliant buses into the Queensland school bus fleet.

TMR also subsidises wheelchair lifts on eligible school buses[56],[57],[58]. With this level of support, it is unclear as to why school buses should be exempted from sections of DSAPT.

In 2021 South Australia announced the first of 20 low floor accessible school buses being manufactured by Bustech[59]. These buses are fully accessible—recognising student needs and the cost of paratransit—despite

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[52] https://www.kangaroobuslines.com.au/our-fleet/
[53] https://education.qld.gov.au/parents-and-carers/school-information/transport/disability-transport-assistance
[54] https://education.qld.gov.au/parents-and-carers/school-information/transport/disability-transport-assistance
[55] https://www.tmr.qld.gov.au/travel-and-transport/school-transport/assistance-schemes/school-bus-upgrade-scheme
[56] https://www.support.transport.qld.gov.au/qt/formsdat.nsf/forms/QF4763/$file/F4763_CFD.pdf
[57] https://www.tmr.qld.gov.au/_/media/travelandtransport/school-transport/assistance-schemes/for-school-bus-operators-schoolbus/information-statements/schoolbus-guidelines-and-conditions-16a-2022.pdf?sc_lang=en&hash=CFA29B64FFE8FC7939ED8A7CCF6B7DB7
[58] https://www.tmr.qld.gov.au/_/media/travelandtransport/school-transport/assistance-schemes/for-school-bus-operators-schoolbus/information-statements/schoolbus-guidelines-and-conditions-16b-2022.pdf?sc_lang=en&hash=6DA56E2CC67A08BE5FA676B3739EAAA8
[59] https://bustechgroup.com.au/locally-manufactured-hybrid-school-buses/

the DSAPT exempting school buses from carrying students using wheelchairs and similar mobility aids. It seems that regulation lags behind reality.

It is acknowledged that for schools with a very small enrolment and for rural / remote schools that face difficult roads a small, high floor bus such as a Toyota Coaster is appropriate. For these school buses a subsidy such as offered by TMR would have permitted a fully accessible school bus fleet over the 20 year life of DSAPT-2002.

Rail replacement buses

Rail replacement buses have often been non-compliant coaches. This has obliged operators to rely on WATS to transport passengers with a disability whenever maintenance of service failure put a rail service out of commission. These WATS often fail to arrive due to alternate booked commitments or they are commandeered by other passengers.

Failure to comply by one modality (coaches)—and the frequent unavailability of another (WATs)—has had significant impact on the service failure responses of yet another (rail).

While it is implicit in DSAPT that replacement services or facilities should be accessible it would be far better to be explicit that replacement services or facilities must be accessible.

Legacy infrastructure and premises

Legacy premises that have a building class, usually 9b or 10, fall under the Premises Standards and include airports, rail stations and ferry terminals. These premises are subject to the same Schedule for Compliance as legacy infrastructure covered by DSAPT-2002, such as bus and tram stops. For the Premises Standards, Section 3.1(3) is applicable while for DSAPT-2002 it is Section 33.2.

Even allowing for situations where Unjustifiable Hardship is legitimately applicable it must be acknowledged that a substantial proportion of public transport premises and infrastructure that were in service in 2002 have failed to be upgraded to meet either the Premises Standards or DSAPT-2002 requirements. A recent ABC documentary[60] and article[61] highlighted this.

Infrastructure Australia predicted in 2019 that compliance of legacy assets was unlikely to be achieved within the legislated timeframe. It was blunt in its assessment of the cause of this failure in its *Australian Infrastructure Audit 2019*[62].

> **70. Challenge**
> There is insufficient funding to make our public transport networks accessible to people with disability. Unless funding shortfalls are addressed, legislated

[60] https://iview.abc.net.au/show/7-30
[61] https://www.abc.net.au/news/2023-01-16/australia-misses-20-year-public-transport-accessibility-target/101858532
[62] https://www.infrastructureaustralia.gov.au/sites/default/files/2019-08/Australian%20Infrastructure%20Audit%202019.pdf

accessibility targets for public transport will not be reached and our networks will not be inclusive.

There are multiple reasons for the failure to meet scheduled targets. Some are entirely legitimate, such as bus or tram stops on steep inclines. Failure to adequately budget for the upgrades or a lack of commitment to upgrading are less excusable reasons for compliance failure. That said, operators and providers will doubtless be better disposed to upgrading if upgrade funding is made available by jurisdictions and if funding for projects is dependent on upgrading associated legacy assets as per recommendations in *Engineers Australia 2022 Universal Design for Transport-Transport Australia Society Discussion Paper*[63] Chapter 8:

> **8. Recommendations**
> 3. Leverage existing programs (fleet purchasing, major projects) to get universal access outcomes.
>
> 4. Need for long term program and state commitment to retrofitting existing infrastructure to achieve DSAPT standards – including a funding commitment.

Despite the failure to meet targets these Schedules have nevertheless driven improvements to legacy infrastructure that would otherwise not have occurred. These improvements have been welcomed by people with disabilities.

Regulatory capture

Private building certifiers and private access consultants working on public transport infrastructure or premises rely on operators and providers for their employment. This makes industry and jurisdictions—rather than the public interest—their client. To ensure future employment private building certifiers and private access consultants must walk a very fine line, balancing minimisation of risk and financial stress for the client with ensuring a good—rather than merely compliant—product for the public.

This is a form of regulatory capture[64]. A report to the Australian Parliament[65] on the Australian Securities and Investments Commission highlighted the issue:

> **Industry and regulatory capture**
> With an increased reliance on private industry to deliver what were once public services, there is potential for conflicted relationships. This can lead to 'regulatory capture', where regulators and their employees potentially align their values and actions with that of the industry they are regulating – rather than with the values and legislated purpose of the regulator.

Poor practice by private building certifiers / surveyors has led to action by the New South Wales government[66]. While this poor practice has been

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[63] https://www.engineersaustralia.org.au/sites/default/files/2022-10/universal-design-for-transport-discussion-paper.pdf

[64] https://theconversation.com/vital-signs-when-watchdogs-become-pets-or-the-problem-of-regulatory-capture-111170

[65] https://www.aph.gov.au/Parliamentary_Business/Committees/Joint/Corporations_and_Financial_Services/No1of45thParliament/Report/c03#:~:text=3.24%20Regulatory%20capture%20refers%20to,secondments%3B%20and

detected in residential properties to date[67], many private certification companies are also involved in public transport projects.

Peter Shergold and Bronwyn Weir's February 2018 report to the Building Ministers' Forum (BMF), *Building Confidence: Improving the effectiveness of compliance and enforcement systems for the building and construction industry across Australia*[68] found:

> A building regulatory model that includes private certification carries with it an inherent potential for conflict of interest. That is not to say that a model where only a government official certifies building design and construction is entirely free from potential conflict. There is evidence that government processes can be open to poor practices. However, the private certification model will always have a significant potential for conflict of interest given the commercial relationship that must necessarily exist between the designer/builder and building surveyor. Even if the building surveyor is appointed by the owner, this appointment will be influenced by the builder and/or designer.

This 'capture' scenario lends itself to outcomes where absolute minimum compliance has priority rather than good public outcomes. Accessibility Reference Groups not infrequently find themselves battling with access consultants, building certifiers / surveyors, architects and other designers who robustly defend poor but compliant designs.

A stronger voice for credible accessibility reference groups in project consultation is needed in the DSAPT. Currently, advice can be ignored with near impunity leaving DDA complaint—with all its inherent bias against the complainant—as the only recourse.

Outdated technical requirements

By using obsolete, withdrawn or superseded technical standards operators and providers are able to claim full compliance with DSAPT-2002 when providing products that fall short of what might be achieved using contemporary technical standards and products. Reluctance by operators and providers to use Equivalent Access and co-design in order to achieve contemporary outcomes only exacerbates the problem. This reluctance appears to be based on fear of legal jeopardy due to lack of 'certainty' that 'compliance' has been achieved via Equivalent Access.

Lack of reform over the life of DSAPT

The DSAPT-2002 has not seen any significant update to the referenced Australian Standards since its publication. This has left obsolete, withdrawn and superseded Australian Standards as the technical references. This would be completely unacceptable for regulatory technical documents such as the National Construction Code or the Australian Design Rules.

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[66] https://www.fairtrading.nsw.gov.au/resource-library/trades-and-businesses/audit-strategy-building-certifiers

[67] https://sapphirealuminium.com.au/what-are-australias-other-defective-towers-aside-from-sydneys-opal-tower/

[68] https://www.industry.gov.au/sites/default/files/July%202018/document/pdf/building_ministers_forum_expert_assessment_-_building_confidence.pdf?acsf_files_redirect

Standards covering new technologies such as software, smartphones, electronic ticketing, digital screens and so on have emerged and been entirely missed.

A long overdue reform process that has just been completed will hopefully allow contemporary Australian Standards to be referenced. In addition, Australian Standards for technologies not in existence in 2002 will hopefully be included. These include *AS EN 301 549 Accessibility requirements for ICT products and services* which should inform fare payment and other ICT systems and AS 1735.12-2020 *Lifts, escalators and moving walks Part 12 Facilities for persons with disabilities* (EN 81-702018, MOD) which has vastly improved accessibility provisions on the 1999 edition of AS1735.12 cited by DSAPT 2002.

Accessible information in a timely manner

The DSAPT-2002 in Section 27.1 has an accessibility requirement for information but is silent on timely provision of information in preferred format:

> **27.1 Access to information about transport services**
> General information about transport services must be accessible to all passengers.

The DSAPT Guidelines expand on this but use the term 'readily available' rather than specifying a timeframe for provision of less frequently requested formats.

> **1.26 Publicity**
> Information is an essential component of any public transport system. The Disability Standards assume that information about accessible public transport services will be readily available.
>
> **27.1 Assumption of minimum literacy and language standards**
> (1) The Disability Standards provide that operators or providers will supply all passengers with information necessary to use a transport service.
>
> (2) However, the Disability Standards assume that passengers have a minimum level of literacy and language skills.

This falls short of the right to timely provision of information in alternative formats afforded in the Convention on the Rights of Persons with Disabilities (CRPD)[69]:

> **Article 21 – Freedom of expression and opinion, and access to information**
> States Parties shall take all appropriate measures to ensure that persons with disabilities can exercise the right to freedom of expression and opinion, including the freedom to seek, receive and impart information and ideas on an equal basis with others and through all forms of communication of their choice, as defined in article 2 of the present Convention, including by:
> a) Providing information intended for the general public to persons with disabilities in accessible formats and technologies appropriate to different kinds of disabilities in a timely manner and without additional cost;

[69] https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-21-freedom-of-expression-and-opinion-and-access-to-information.html

c) Urging private entities that provide services to the general public, including through the Internet, to provide information and services in accessible and usable formats for persons with disabilities;
d) Encouraging the mass media, including providers of information through the Internet, to make their services accessible to persons with disabilities;

Failure to provide accessible information in a timely manner also falls short of international good practice. Network Rail[70] is a public sector arm's length body of the Department for Transport of the United Kingdom. Network Rail's policy document *Accessible Travel Policy; Making Rail Accessible—Helping Older and Disabled Passengers*[71] actually commits to a timeframe:

> **Accessible Travel Policy documentation including alternative accessible formats**
> This Accessible Travel Policy and our station guides are published on the Network Rail website in accessible formats so that they can be viewed on mobile devices and using screen readers or other accessibility software.
>
> Passengers may request this Accessible Travel Policy or the any Network Rail station guides in alternative formats such as large print or audio, if the alternative version provided on our website do not meet their needs. When any request is made, we will action this within seven working days.

DSAPT should require that information in preferred formats be provided in a timely manner as per CRPD Article 21. 'Timely' will understandably vary with requested format and whether the operator or provider is based regionally or in a metropolitan area. The thrust of the matter though is that accessible information that is not readily available is provided on request as soon as is practicable.

Standards locked behind a paywall

While the DSAPT-2002 is available free online the Australian Standards cited in it are not. Members of the public must purchase the Australian Standards or access them via online subscription. This places an unfair burden upon people who wish to better understand their rights and also the responsibilities of operators and providers. The paywall puts them at a disadvantage to operators and providers who have easy access to the Australian Standards. This is not compatible with the intent of a Disability Standard that promotes human rights.

Members of the public should have free access to any Australian Standards clauses cited in DSAPT. Alternatively, technical material can be embedded in the text of the DSAPT.

While the Americans with Disabilities Act's transport standards do cite standards that are behind a paywall the vast majority of technical material is included in the text of the transport standard and therefore available free to all[72].

[70] https://www.networkrail.co.uk/who-we-are/
[71] https://www.networkrail.co.uk/wp-content/uploads/2022/02/Accessible-Travel-Policy.pdf
[72] https://www.transit.dot.gov/regulations-and-guidance/civil-rights-ada/ada-regulations

The imbalance of access to technical information appears to conflict with Convention on the Rights of Persons with Disabilities (CRPD)[73],[74] treaty obligations:

> **Article 9 – Accessibility**
> 1. To enable persons with disabilities to live independently and participate fully in all aspects of life, States Parties shall take appropriate measures to ensure to persons with disabilities access, on an equal basis with others, to the physical environment, to transportation, to information and communications, including information and communications technologies and systems, and to other facilities and services open or provided to the public, both in urban and in rural areas. These measures, which shall include the identification and elimination of obstacles and barriers to accessibility, shall apply to, inter alia:
>   a) Buildings, roads, transportation and other indoor and outdoor facilities, including schools, housing, medical facilities and workplaces;
>   b) Information, communications and other services, including electronic services and emergency services.
> 2. States Parties shall also take appropriate measures:
>   f) To promote other appropriate forms of assistance and support to persons with disabilities to ensure their access to information;
>
> **Article 21 – Freedom of expression and opinion, and access to information**
> States Parties shall take all appropriate measures to ensure that persons with disabilities can exercise the right to freedom of expression and opinion, including the freedom to seek, receive and impart information and ideas on an equal basis with others and through all forms of communication of their choice, as defined in article 2 of the present Convention, including by:
> a) Providing information intended for the general public to persons with disabilities in accessible formats and technologies appropriate to different kinds of disabilities in a timely manner and without additional cost;
> c) Urging private entities that provide services to the general public, including through the Internet, to provide information and services in accessible and usable formats for persons with disabilities;
> d) Encouraging the mass media, including providers of information through the Internet, to make their services accessible to persons with disabilities;

No consistent data or no data.

A nationally consistent, easily accessed and comprehended database that provides accurate and current accessibility information on all assets covered by DSAPT is lacking.

Over its 20-year life the DSAPT-2002 has not required nationally consistent compliance data to be periodically supplied by operators and providers. This should at least have been a feature of the Five Year Reviews. Regrettably, Part 34 provides no framework for nationally consistent data gathering and reporting on the 'efficiency and effectiveness of these Standards':

[73] https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-9-accessibility.html
[74] https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-21-freedom-of-expression-and-opinion-and-access-to-information.html

Part 34 Review

34.1 Timetable for review

(1) The Minister for Transport and Regional Services, in consultation with the Attorney-General, is to:

(a) review the efficiency and effectiveness of these Standards within 5 years after they take effect; and

(b) carry out a subsequent review every 5 years after the initial review.

(2) The review must include:

(a) whether discrimination has been removed, as far as possible, according to the requirements for compliance set out in Schedule 1; and,

(b) any necessary amendments to these Standards.

Because of this lack of framework, the adherence to the Schedule for Compliance cannot be accurately determined. Further, the accessibility information that is published or supplied by operators and providers varies markedly in quality and coverage of their assets. This makes journey planning very difficult and complicates Australia's reporting to the United Nations on the progress made in implementing the CRPD.

Infrastructure Australia in its *Australian Infrastructure Audit 2019*[75] captures the challenges to the public and government posed by poor reporting quite succinctly. They recognise that even when captured and reported, data is often not relevant to people's daily needs or life experience:

> Infrastructure is not an end in itself. It is not so much an engine of growth as an enabler of growth. It exists to provide services to users in a way that best meets their immediate and future needs. Focusing on improving user outcomes helps to crystallise decisions to invest in infrastructure or reform the way it is governed and delivered.
>
> However, public reporting on infrastructure, when it does occur, often does not reflect users' experiences and is rarely described in terms that are meaningful to individuals. This makes assessing the performance of assets, networks and services difficult, and limits opportunities for households, businesses and political representatives to make informed choices about the infrastructure we use.

Hopefully, the reporting requirements mooted in Australia's Disability Strategy 2021 – 2031 will improve the situation:

> **Improving the Data**
> Governments are committed to collecting and sharing relevant data to support effective monitoring and reporting of outcomes for people with disability in order to drive change. Australian state and territory data, for both disability-specific and mainstream service systems, will be essential for measuring outcomes and tracking the degree of change.

Data gathered for DSAPT Review reporting should be coupled to the Disability Strategy 2021—2031 for the sake of both reporting rigour and consistency. If the two are not read as one the risk of inconsistent and contradictory datasets will only continue.

[75] https://www.infrastructureaustralia.gov.au/sites/default/files/2019-08/Australian%20Infrastructure%20Audit%202019.pdf

Schedule for Compliance ambiguously enforceable

An interesting legal case[76] produced a judgement that has puzzled many and thrown ambiguity over the Schedule for Compliance. The judge opined:

> Non-compliance with the Standards does not of itself provide a sufficient basis for a person to lodge a complaint under s 46P or to commence a proceeding under s 46PO(1). This is because non-compliance with the Standards does not of itself constitute unlawful discrimination.

This seems to conflict with the wording of Section 32 of the DDA-1992:

> **32 Unlawful to contravene disability standards**
> It is unlawful for a person to contravene a disability standard.

It also appears to conflict with the judgement in another celebrated case[77]:

> It is unlawful for a person to contravene a disability standard. The exemption provisions (Part II Division 5) generally do not apply in relation to a disability standard. However, if a person acts in accordance with a disability standard the unlawful discrimination provisions in Part II do not apply to the person's act.

It would very useful—to better inform learned jurists—that the legal status of the schedule for compliance—current and future—was stated unambiguously with supporting legislation amended where necessary.

Misuse of temporary exemptions

The DSAPT allows for Temporary Exemptions in Part 33A. In most instances these have been for legitimate reasons, for a fixed time and were supported by the disability sector. A small minority of operators and providers seem to have taken a different approach and have had numerous extensions to their exemptions. In effect the 'temporary' had become quasi status quo. Greater rigour on the part of the Australian Human Rights Commission is called for in the granting of these rolling extensions, some of which are still in effect post the 2022 deadline for 100% compliance.

In the past five years, have you seen improvements in accessibility and safety for people with disability on public transport services?

Improvements in the public transport environment have been noted in the past five years. Some improvements have been driven by DSAPT-2002 while others have been driven by the DDA as the items are not covered by DSAPT-2002. Many improvements have simply been operators and providers implementing contemporary practices or procuring contemporary products that have improved the accessibility of the public transport system for all users.

That said, the number of people able to use public transport appears to have plateaued. The Australian Institute of Health and Welfare (2023)

[76] https://www8.austlii.edu.au/cgi-bin/viewdoc/au/cases/cth/FCA/2013/217.html
[77] https://www6.austlii.edu.au/cgi-bin/viewdoc/au/cases/cth/FMCA/2013/36.html

Australia's Disability Strategy 2021–2031 Outcomes Framework: First annual report[78] states:

> The proportion of people with disability who could use all forms of public transport with no difficulty increased between 2012 and 2015 (from 64% to 66%) but remained the same in 2018 (66%).

The reasons for this plateau are unclear.

Other data from the Australian Institute of Health and Welfare (2023) *Australia's Disability Strategy 2021–2031 Outcomes Framework: First annual report*[79] that give an indication of transport system accessibility are:

> In 2018, approximately 2 in 3 (66%) people with disability, aged 5 and over, could use all forms of public transport with no difficulty.
>
> The proportion of people with disability who could use all forms of public transport with no difficulty increased between 2012 and 2015 (from 64% to 66%) but remained the same in 2018 (66%) (Figure 3.8).
>
> A greater proportion of males with disability (70%) than females with disability (63%) could use all forms of public transport with no difficulty.
>
> The youngest (5–14 years) and oldest age groups (65 years and over) had the lowest proportions of people with disability who could use all forms of public transport with no difficulty (45% and 63%, respectively). There was no real difference between the age groups 15–24, 25–44 and 45–64 (71%, 75% and 72%, respectively).
>
> A lower proportion of people with severe or profound disability could use all forms of public transport with no difficulty (25%) than people with other disability (83%).

New infrastructure and premises

Newly built transport infrastructure and premises are often of quite high quality. New rail stations, tram stations and stops and new bus stops, stations and interchanges are usually in full compliance with DSAPT. Some new bus and tram stops are unavoidably located on inclines and so fall short in some regards, but for the most part remain highly functional.

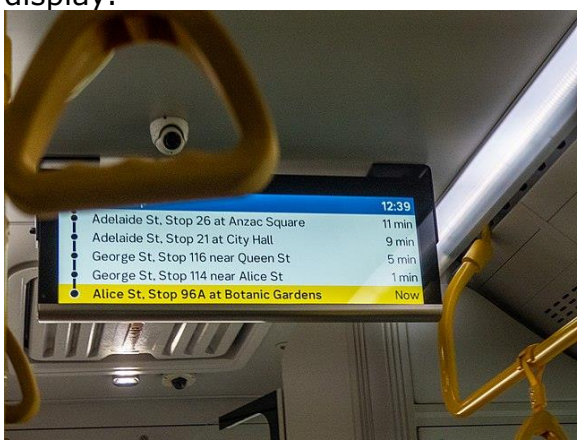
As an observation, the quality of all these assets improves as the level of consultation and co-design undertaken in their design increases.

Next stop announcements.

A number of route buses have now entered service or will soon enter service that feature audio-visual next stop announcements as standard. In Brisbane, these are rigid chassis Yutong E12 buses and biarticulated Metro buses[80]. This is welcome if belated. The bulk of the 1,200[81] strong

[78] https://www.aihw.gov.au/reports/australias-disability-strategy/australias-disability-strategy-outcomes-framework/contents/inclusive-homes-and-communities/transport-system-accessibility
[79] https://www.aihw.gov.au/reports/australias-disability-strategy/australias-disability-strategy-outcomes-framework/contents/inclusive-homes-and-communities/transport-system-accessibility
[80] https://www.brisbane.qld.gov.au/traffic-and-transport/public-transport/brisbane-metro/metros

Transport for Brisbane bus fleet lacks these announcements, however, rely instead on direct assistance by drivers or the MyTranslink app[82] to inform passengers of their stop.

Yutong E12 next stop audio-visual display.	Yutong E12 next stop audio-visual display.
	

Rail station accessibility upgrades

Complimentary to the Cross River Rail upgrade program for legacy stations are the Station Accessibility Upgrade Program[83], Logan and Gold Coast Faster Rail[84] project and other projects still developing business cases. These will deliver significant upgrades to legacy stations. While progress on upgrades has been slow over the life of DSAPT-2002—the target date of December 31, 2022, for 100% compliance has not been met—it has at least been steady. Credible consultation has occurred on all these projects.

On-demand transport

On-demand transport[85] is an emerging means of moving people within local areas.

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[81] https://www.brisbane.qld.gov.au/traffic-and-transport/public-transport/buses/your-buses
[82] https://translink.com.au/plan-your-journey/mytranslink
[83] https://www.queenslandrail.com.au/inthecommunity/projects/station-accessibility-upgrade-program
[84] https://www.tmr.qld.gov.au/projects/logan-and-gold-coast-faster-rail
[85] https://translink.com.au/travel-with-us/on-demand

> On demand transport is a new way to think about public transport.
>
> It's a flexible, shared and pre-booked service that connects you to the wider public transport network as well as shopping, healthcare and employment.
>
> On demand services usually operate within a roam zone - a selected area in which the service can pick you up and drop you off - and in some cases also include a fixed route portion of travel.

Both DDA and DSAPT cover elements of on-demand transport. Its door to door, point to point capability is seen as one way to overcome precinct difficulties[86] and media reports tend to indicate a degree of success in this[87] and other areas[88].

School buses

In 2021 South Australia announced the first of 20 low floor accessible school buses being manufactured by Bustech[89]. These buses are fully accessible—recognising student needs and the cost of paratransit—despite the DSAPT exempting school buses from carrying students using wheelchairs and similar mobility aids. It seems that regulation lags behind reality.

Commendably, TMR has a funding program to assist eligible school bus operators purchase roll-over compliant buses[90]:

> The Queensland Government provides funding to eligible school bus delivery partners to assist with the purchase of new buses or buses that are less than 5 years old. The objective of the scheme is to help accelerate the introduction of rollover-compliant buses into the Queensland school bus fleet.

TMR also subsidises wheelchair lifts on eligible school buses[91],[92],[93]. With this level of support, it is unclear as to why school buses should be exempted from sections of DSAPT.

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[86] https://theconversation.com/how-on-demand-buses-can-transform-travel-and-daily-life-for-people-with-disabilities-199988
[87] https://theconversation.com/how-on-demand-buses-can-transform-travel-and-daily-life-for-people-with-disabilities-199988
[88] https://www.busnews.com.au/industry-news/2304/gold-coast-on-demand-transport-trial-hits-special-milestone
[89] https://bustechgroup.com.au/locally-manufactured-hybrid-school-buses/
[90] https://www.tmr.qld.gov.au/travel-and-transport/school-transport/assistance-schemes/school-bus-upgrade-scheme
[91] https://www.support.transport.qld.gov.au/qt/formsdat.nsf/forms/QF4763/$file/F4763_CFD.pdf
[92] https://www.tmr.qld.gov.au/_/media/travelandtransport/school-transport/assistance-schemes/for-school-bus-operators-schoolbus/information-statements/schoolbus-guidelines-and-conditions-16a-2022.pdf?sc_lang=en&hash=CFA29B64FFE8FC7939ED8A7CCF6B7DB7
[93] https://www.tmr.qld.gov.au/_/media/travelandtransport/school-transport/assistance-schemes/for-school-bus-operators-schoolbus/information-statements/schoolbus-guidelines-and-conditions-16b-2022.pdf?sc_lang=en&hash=6DA56E2CC67A08BE5FA676B3739EAAA8

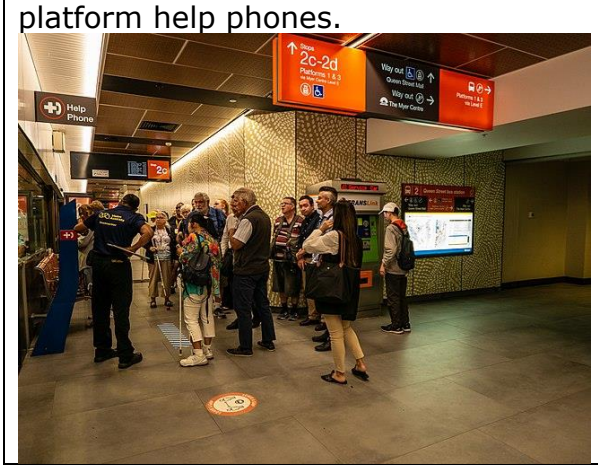
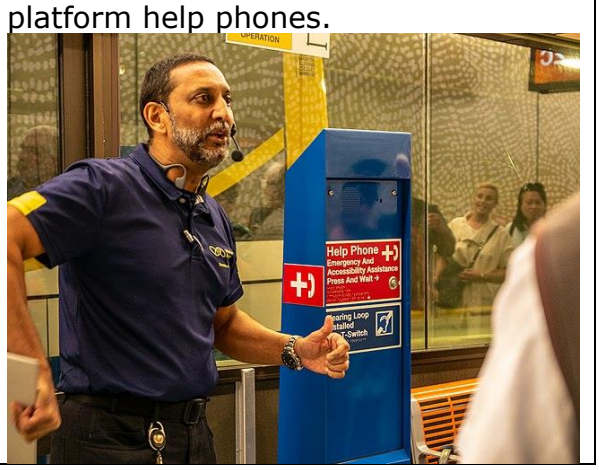
Hailing

People with vision or cognitive impairment often have difficulty in identifying and hailing their service. Various methods by which people with vision impairments can hail a bus have therefore been implemented.

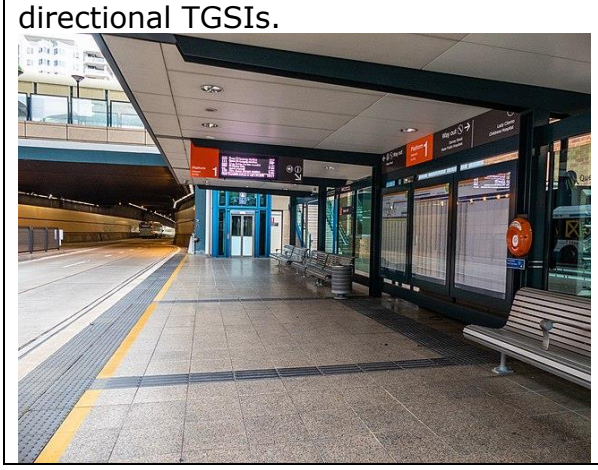
On bus station platforms, people with a vision impairment can use the platform help phone to inform the Translink Busway Operations Centre (BOC) that they are at a particular platform and require a particular service. The BOC then inform the driver of the requested service of the passenger and their position on the platform.

Brisbane City Council provides a Visually Impaired Passenger Telephone Service[94] that covers the 6,000 plus bus stops in its network. As per the TransLink platform-based service, people with vision impairments can inform Council of the stop at which they are waiting and which service they require. Drivers can then be informed that they have a passenger waiting at a particular stop.

> *Visually impaired passenger telephone service*
> The visually impaired passenger telephone service is for passengers with a visual impairment that require assistance to access a Council bus service.
> To use this service, phone Council on 07 3403 8888 and provide the:
> - location
> - route
> - time of the service you intend to catch.

Vision Australia training in the use of platform help phones.	Vision Australia training in the use of platform help phones.
	

[94] https://www.brisbane.qld.gov.au/traffic-and-transport/public-transport/buses/bus-accessibility

Platform help phone and associated directional TGSIs.	Vision Australia training in the use of platform help phones.
	

Smartphone apps that allow hailing of buses and autonomous vehicles are under development[95],[96] and these will hopefully be integrated into transport systems in the near future. They will be an important tool for those who are able to use a smartphone with even a moderate amount of skill.

WCAG 2.1.

Encouragingly, many projects are voluntarily implementing WCAG 2.1 AA when developing new online resources and apps. WCAG 2.1 has success criteria for mobile devices that are missing from WCAG 2.0. Otherwise though WCAG 2.1 is backwards compatible with WCAG 2.0, there being no contradictory success criteria. Mobile devices are an increasingly important means of obtaining services and information, so this development is welcome. It would be preferred though if WCAG 2.1 AAA was implemented wherever practicable as this includes success criteria for audio description, Auslan interpretation and other success criteria that better include people with sensory disabilities.

Bus stop tactile signs, QR Codes and NFC tags

Braille and tactile inserts with QR code have been installed in Brisbane CBD bus stop blades. These allow people with vision impairment to identify the stop by touch and via the QR code access the timetable information printed on the blade.

Near field communication (NFC) tags are being installed at Queensland bus stops after a successful trial[97]. The tags provide easy smartphone access to stop related information, timetables and so on. The tags require no power and merely activate a phone tapped on them—not unlike a credit card tapping on and activating an *electronic funds transfer at point of sale* (EFTPOS) reader.

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[95] https://www.latrobe.edu.au/news/articles/2023/release/better-transport-design-for-people-with-disability

[96] https://www.sageautomation.com/news/pages/cassie-hames-wins-international-award-celebrating-blind-ambition

[97] https://translink.com.au/news-and-media/articles/196076

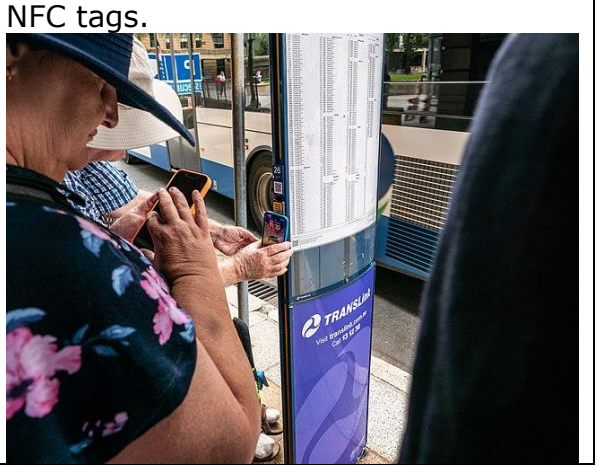
Bus stop tactile sign and QR Code. 	Bus stop tactile sign and QR Code. 
NFC tag on a bus stop J pole. 	NFC tag on a bus stop J pole. 

NFC tag on a bus stop blade.

NFC tag on a bus stop blade.

Vision Australia training in the use of NFC tags.

Vision Australia training in the use of NFC tags.



Public Transport Infrastructure Manual

TMR updated its Public Transport Infrastructure Manual (PTIM) in 2020[98]. It is an excellent publication that seeks best practice outcomes rather than minimum compliance.

> The public transport infrastructure manual (PTIM) applies best practice planning and design principles to public transport infrastructure. It defines the elements of good public transport facilities, helps with evaluating existing facilities and should be used as a design tool when developing new infrastructure within the TransLink network.

PTIM is not a legal requirement but is increasingly listed in the references for infrastructure projects.

Assistance dog toilets

People who rely on assistance and guide dogs will be limited by the degree of accessibility that the transport systems offer the dogs. As per humans, dogs require access to toileting facilities. Lack of dog toileting facilities is a deterrent to travel for some dog handlers. Assistance dog toilets have been installed at Brisbane airports terminals[99]. These should be available at all major public transport nodes. They may be as simple

[98] https://www.publications.qld.gov.au/dataset/public-transport-infrastructure-manual
[99] https://www.bne.com.au/passenger/passenger-information/special-assistance/assistance-dogs

as grassed areas with bins near entrances or as sophisticated as the Brisbane airport examples.

For people travelling outside their usual routes a geocoded map giving direction to the nearest dog toileting facility or lawn would be invaluable. Asset owners should be encouraged to include this information on app based products such as local mobility maps.

Lifts

Due to advances in lift technology and the adoption of the European lift standard EN 81-70-2018 - *Safety rules for the construction and installation of lifts - Particular applications for passenger and goods passenger lift - Part 70: Accessibility to lifts for persons including persons with disability* by Standards Australia, lifts are now far more accessible than is required by DSAPT Part 13. Lift cars complying with AS 1735.12-2020 *Lifts, escalators and moving walks Part 12 Facilities for persons with disabilities (EN 81-702018, MOD)* have audio announcements at all landings and these announcements are also carried over a hearing loop. In addition, the help phone is also linked to the hearing loop. Part 13 cites AS1735.12-1999 which has no such requirements. The Part 13 reference is obsolete and thankfully good practice and industry have moved beyond it.

Lift car that carries audio announcements via hearing loop, Yeronga Railway Station, Brisbane.	Lift car with help phone linked to hearing loop, Yeronga Railway Station, Brisbane.
	

Do barriers still exist for people with disability using or wanting to use public transport?

Many barriers to a nationally inclusive public transport system still exist. Some are quite legitimate and can be classed as Unjustifiable Hardship challenges. These are chiefly topographic, spatial or structural in nature. Others are less legitimate and represent lack of funding or planning to meet the Schedule for Compliance. Yet others result from poor procurement practices that see new services and products either falling well short of compliance or complying in such an incoherent manner as to be non-functional. These types of failure are a result of ill-informed staff or simple incompetence. Daniels-Mayes and Howe in their 2021 paper *The need for inclusive design; going beyond the minimum standards in*

the built environment[100] make a valid point about inadequate and badly timed planning resulting in poor but compliant outcomes:

> Accessibility in the built environment is often tackled as a technical exercise quite late in the design process and not used creatively in concept development (Boys, 2014). Leaving this too late in the process might mean that while a building technically complies, it is not fit for purpose and can remain stigmatising and exclusionary.

The Australian Institute of Health and Welfare (2023) *Australia's Disability Strategy 2021–2031 Outcomes Framework: First annual report*[101] notes various barriers to accessing public transport:

> **Public transport usability**
> Mobility limitations and difficulties using public or private transport can make it difficult for people with disability to get to the places they need to go. Accessible transport options, mobility aids and assistance are important to ensure that people with disability can participate in society equally and independently (AIHW 2022).
>
> Barriers to accessing public transport include inaccessible travel information, inadequate disability car parking, inaccessible stops and stations, as well as discriminatory or abusive behaviour by staff or members of the public (DRC 2018).

Some barriers are beyond the jurisdiction of DSAPT but may still be covered by DDA. A recent article in The Conversation[102] makes the point that compliance with DSAPT is only part of a whole journey.

> Making vehicles accessible is really only the tip of the iceberg. Focusing only on infrastructure misses two key points:
>
> - our public transport journeys begin before we board the service and continue after we've left it
> - accessibility means providing people with quality transport experiences, not just access to resources.

A Disability Standard that deals with public spaces and infrastructure that are not regulated by either the DSAPT or Premises Standards—and which sets out clear technical and / or performance expectations for asset owners—is a pressing need. Currently, only the now outdated *Advisory Notes on streetscape, public outdoor areas, fixtures, fittings and furniture*[103] and the well-regarded *The Whole Journey: A guide for thinking beyond compliance to create accessible public transport journeys*[104] offer advice on the accessibility of areas (premises) that

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100 https://www.academia.edu/48849722/The_need_for_inclusive_design_going_beyond_the_minimum_standards_in_the_built_environment

101 https://www.aihw.gov.au/reports/australias-disability-strategy/australias-disability-strategy-outcomes-framework/contents/inclusive-homes-and-communities/transport-system-accessibility

102 https://theconversation.com/how-on-demand-buses-can-transform-travel-and-daily-life-for-people-with-disabilities-199988

103 https://humanrights.gov.au/our-work/disability-rights/publications/advisory-note-streetscape-public-outdoor-areas-fixtures

104 https://www.infrastructure.gov.au/infrastructure-transport-vehicles/transport-accessibility/whole-journey-guide

according to DDA Part 1, Section 4 occupy a significant portion of the national estate.

> **premises** includes:
> (a) a structure, building, aircraft, vehicle or vessel; and
> (b) a place (whether enclosed or built on or not); and
> (c) a part of premises (including premises of a kind referred to in paragraph (a) or (b)).

Data collection and reporting

To date, reporting on progress in implementing the DSAPT has been mediocre. This is not isolated as data on disability related issues is poorly gathered, haphazardly collated and often inconsistent across all jurisdictions and community services. Therefore, Australia's Disability Strategy 2021 – 2031 has reporting at its core:

> **Improving the Data**
> Governments are committed to collecting and sharing relevant data to support effective monitoring and reporting of outcomes for people with disability in order to drive change. Australian state and territory data, for both disability-specific and mainstream service systems, will be essential for measuring outcomes and tracking the degree of change.
>
> **Reporting under the Strategy**
> All levels of government have committed to deliver more comprehensive and visible reporting. Reporting under the Strategy aims to ensure accountability and build the evidence base for making informed decisions on areas of future focus. It will also drive improvements in the design and implementation of future policies and programs. Reporting under the Strategy will be an important input to reports developed to meet Australia's reporting obligations under the UN CRPD, and will support Australia in continuing to strengthen its response to ensure the equal rights of people with disability in line with the UN CRPD.

Ideally, this reporting on public transport accessibility under the Disability Strategy would present identical data to that gathered for five-yearly DSAPT reporting. This would strike two targets with one arrow and introduce a degree of rigour to process and product. We might even be able to surprise the United Nations by presenting accurate information on our national progress in implementing the transport component of the CRPD.

Decisions on what, where and when to construct or upgrade are most effective when based on accurate data. While some databases exist, they are often incomplete or fail to capture critical information. This hampers the process of upgrading assets efficiently and well. Infrastructure Australia highlight the challenge of poor data and inadequate reporting in its *Australian Infrastructure Audit 2019*[105].

> **1. Challenge**
> Governments and service providers do not always adequately measure and report on access, quality and costs for users. Insufficient user-focused data makes it difficult for users and policy makers to make decisions that improve user outcomes.

[105] https://www.infrastructureaustralia.gov.au/sites/default/files/2019-08/Australian%20Infrastructure%20Audit%202019.pdf

> **5. Challenge**
> Limited reliable data exists to allow government, regulators and users to understand the total costs of infrastructure. Poor data limits the ability for government to understand the affordability of infrastructure services and cost of living pressures.

DSAPT's Part 34 states the requirement for five year reviews that must determine 'whether discrimination has been removed, as far as possible, according to the requirements for compliance set out in Schedule 1' in addition to other matters. These reviews have been hampered by the lack of reliable and nationally consistent data.

Engineers Australia have recognised the challenge that the lack of adequate data and reporting poses to improving the accessibility of public transport. They have noted this in their 'Chapter 3 Current State of Play in Australia' in *Engineers Australia 2022 Universal Design for Transport-Transport Australia Society Discussion Paper*[106]:

> **3. Current State of Play in Australia**
> There are several immediate challenges in the Australian context:
> • There is no mandatory national compliance reporting for accessibility standards.

Work to establish a National Disability Data Asset (NDDA) is underway[107] with a pilot recently completed. The Disability Advisory Council (Council) for the NDDA met on August 6, 2020 and suggested that[108]:

> The Council suggested to consider including data outside of the data provided in the pilot, such as transport data, in the final design of the NDDA. This would help ensure the NDDA was of greatest value to people with disability.

If implemented this may be a suitable location for DSAPT related public transport data to be stored and available to the public. This has potential to allow both DSAPT reporting data and Australia's Disability Strategy 2021-2031 reporting data to be combined[109].

> *What will the National Disability Data Asset do?*
> The National Disability Data Asset will help improve the lives and outcomes of people with disability in Australia. The asset will provide more information about the outcomes, experiences and needs of people with disability by linking de-identified information. This information will help improve programs and services.
>
> When complete, the National Disability Data Asset will be used to:
>
> - Provide a more complete picture of the programs and services used by people with disability
> - Help governments improve these programs and services
> - Share information about how opportunities and outcomes could be improved
> - Improve reporting on outcomes for people with disability under Australia's Disability Strategy 2021 – 2031.

[106] https://www.engineersaustralia.org.au/sites/default/files/2022-10/universal-design-for-transport-discussion-paper.pdf
[107] https://ndda.dss.gov.au/about/the-ndda/
[108] https://ndda.dss.gov.au/message-from-the-council-august/
[109] https://ndda.dss.gov.au/faq/

The Disability Strategy's *Policy Priority 5: Transport systems are accessible for the whole community* will be captured by the NDDA reporting. The Disability Strategy also commits to 'collecting and sharing relevant data'[110] and circles back to the NDDA:

> *Improving the Data*
> Governments are committed to collecting and sharing relevant data to support effective monitoring and reporting of outcomes for people with disability in order to drive change. Australian state and territory data, for both disability-specific and mainstream service systems, will be essential for measuring outcomes and tracking the degree of change.
>
> The National Disability Data Asset (NDDA) could provide a better understanding of how people with disability are supported through services, payments and programs across multiple service systems through the linkage, improvement and sharing of de-identified data.
>
> Improving data to track progress against the Outcomes Framework will also support evaluations and policy development, and will lead to improved outcomes for people with disability.

Every effort to align DSAPT and Disability Strategy reporting should be made.

Legacy infrastructure and premises

The deadlines for compliance in the Schedules for Compliance in both DSAPT and the Premises Standards have not been met. Some quite good work has been done but nationally it seems that the accessibility shortfall is significant. A recent ABC 7.30[111] report stated:

> "Across the country, we would be at best 50 per cent compliance to those standards," said Susie Pascoe, CEO of Sterling Infrastructure — a company that delivers services across Australia's rail network and assesses the accessibility of stations and walkways around trains.
>
> In NSW, a third of train and ferry stations aren't independently accessible, while that figure is around 40 per cent for Queensland Rail and Western Australia's train stations.
>
> In Victoria, 73 per cent of tram stops don't meet the accessibility standards.

Infrastructure Australia in their *Table 3: Numerous jurisdictions are unlikely to meet legislated accessibility requirements* in its *Australian Infrastructure Audit 2019*[112] present data that make a similar melancholy point (see Appendix 2).

Accessibility gaps of this magnitude render not only individual stops and stations inaccessible but compromise the accessibility of entire networks. Dysfunctional networks have a significant impact on the lives and opportunities of people who have disabilities and who depend on public transport for some or all of their movement through public space.

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[110] https://www.disabilitygateway.gov.au/sites/default/files/documents/2021-11/1786-australias-disability.pdf
[111] https://www.abc.net.au/news/2023-01-16/australia-misses-20-year-public-transport-accessibility-target/101858532
[112] https://www.infrastructureaustralia.gov.au/sites/default/files/2019-08/Australian%20Infrastructure%20Audit%202019.pdf

The matter of challenging precincts surrounding transport infrastructure and premises is dealt with in detail elsewhere. Suffice to say that every public accessway in the country is subject to the DDA. Asset owners are either unaware of this or chose not to act for various legitimate or less legitimate reasons. While the DDA itself has no Disability Standard equivalent to the United States Access Board's proposed *Public Rights-of-Way Accessibility Guidelines*[113] The Australian Human Rights Commission does have an *Advisory Note on streetscape, public outdoor areas, fixtures, fittings and furniture*[114] that—even though outdated—assists asset owners in meeting DDA requirements. The intent of the US Access board is to make the Rights of Way guidelines an enforceable Standard:

> The Board is developing new guidelines for public rights-of-way that will address various issues, including access for blind pedestrians at street crossings, wheelchair access to on-street parking, and various constraints posed by space limitations, roadway design practices, slope, and terrain. The new guidelines will cover pedestrian access to sidewalks and streets, including crosswalks, curb ramps, street furnishings, pedestrian signals, parking, and other components of public rights-of-way.
>
> The Board's aim in developing these guidelines is to ensure that access for persons with disabilities is provided wherever a pedestrian way is newly built or altered and that the same degree of convenience, connection, and safety afforded the public generally is available to pedestrians with disabilities. Once these guidelines are adopted by the Department of Justice, they will become enforceable standards under title II of the ADA.[115]

Since precincts are mostly out of scope for DSAPT a Disability Standard for public infrastructure that is not regulated by either the DSAPT or the Premises Standards and that is similar to the US document—setting out clear expectations for asset owners—would very useful.

Over reliance on IT solutions

While WCAG compliant solutions are welcome, IT solutions also come with a caveat. Infrastructure Australia make a good point about over reliance on IT solutions in its *Australian Infrastructure Audit 2019*[116].

> **4. Challenge**
> Users that are disadvantaged, such as those with low digital literacy or with disability, may be unable to access infrastructure services provided through new technologies. Not extending the benefits of change to all Australians is likely to increase inequality and reduces quality of life by limiting access to services for some members of the community.
>
> **163. Challenge**
> The quality of telecommunications services varies for different groups across Australia, with digital inclusion lagging for low-income households, people who did not complete secondary school, those aged over 65 and people with disability.

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[113] https://www.access-board.gov/prowag/

[114] https://humanrights.gov.au/sites/default/files/2013_AdvisoryNoteStreetscape.pdf?_ga=2.52781288.1364783600.1675998946-851507057.1636581856

[115] https://rockymountainada.org/resources/general/2010-ada-standards-vs-prowag

[116] https://www.infrastructureaustralia.gov.au/sites/default/files/2019-08/Australian%20Infrastructure%20Audit%202019.pdf

> Without action, these people will be increasingly excluded from an increasingly digital world, exacerbating disadvantage.
>
> Improvements in technology also increase barriers to entry, in terms of skill and knowledge, for those who have not accessed services in the past. Some users do not own a smartphone or have insufficient digital literacy to access services such as ridesharing applications. Many infrastructure operators lack meaningful targets for improving access and quality for all users, or publicly available plans and strategies for achieving improvements.

With the emergence of digitally hailed driverless buses[117] and other conveyances that must be hailed Infrastructure Australia's warning is timely. Accessible IT is vital, but accessible IT as the sole source of service is discriminatory. Non-discriminatory information and services must be available and accessible in multiple formats.

The Australian Institute of Health and Welfare (2023) *Australia's Disability Strategy 2021–2031 Outcomes Framework: First annual report*[118] drawing on data from the Australian Digital Inclusion Index (2022) notes the digital inclusion disadvantage that people with disabilities experience:

> In 2021, the ADII score was, on average, 62 for people with disability and 71 for the total population: a gap of 9 points.
>
> The gap in 2021 was narrower (4 points less) than the gap in 2020, when it was 13 points. In 2020, people with disability recorded an Index score of 55, compared with the total population's score of 68 (Figure 3.9).
>
> In 2021, the gap between the score for males with disability (58 points) and the total male population (72 points) was 14 points. This is more than twice as high as the gap between females with disability (65 points) and the total female population (71 points) of 5 points.
>
> For people with disability, the youngest age group (18–44 years) had the highest 2021 Index score of all age groups (76). This age group also had the lowest gap (except for those aged 75 and over) between them and the total population aged 18–44 (4 points: scores of 76 and 80 for people with disability and the total population, respectively).
>
> The gap for the 18–44 age group was 4 points while the gap for the age groups 45–54 and 55–64 was more than twice as large (8.9 and 8.6 points, respectively).
>
> The gap was narrowest (0.3 of a point) for those aged 75 and over (47.1 and 47.4, respectively), indicating that both people with and without disability in this age group are more likely to be digitally excluded.

Digital information often comes at a cost to the user. For example, buses that do not have next stop announcements may rely on smartphone apps to inform people with vision impairments that they are approaching their desired stop. The data consumed by the smartphone is at the cost of the passenger but passengers who do not rely on apps and who know their

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[117] https://www.governmentnews.com.au/accessible-tech-points-to-future-of-driverless-transport/

[118] https://www.aihw.gov.au/reports/australias-disability-strategy/australias-disability-strategy-outcomes-framework/contents/inclusive-homes-and-communities/information-and-communication-systems-accessibility

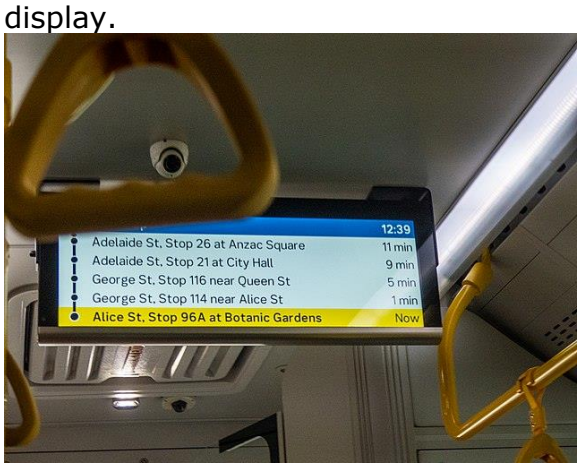
location during journey are not placed under the same cost burden, which is discriminatory.

Next stop announcements

Only a small proportion of Australia's route buses provide automated next stop announcements. That said, some smaller operators and providers have 100% of their fleet with next stop announcements. In the main though, passengers must rely on apps, which have a data cost impost, or on direct assistance from the driver. Some newer buses in Queensland do provide a next stop audio and visual announcement, which has been welcomed by people who have a vision impairment in particular. Transport for Brisbane's Yutong E12 buses are equipped with a next stop announcement function and the 65 Metro buses currently in production will also have this function[119].

The scant provision of automated next stop announcements is in contrast with rail, tram and ferry where almost 100% of services have either automated or staff enunciated next stop announcements. Providing automated next stop announcements on route buses is not technologically difficult. Transport for London's 9,300 buses have had audio visual next stop announcements since 2009[120]. All buses in the United Kingdom will have next stop announcements by 2026[121]. It is sad that a DSAPT requirement in place since 2002 has been so blatantly ignored until recently. The technology was available but the will to implement was lacking.

[119] https://www.brisbane.qld.gov.au/traffic-and-transport/public-transport/brisbane-metro/metros
[120] https://en.wikipedia.org/wiki/IBus_(London)
[121] https://www.focustransport.org/2023/04/audible-announcements-and-visual.html

Yutong E12 next stop audio-visual display.	Yutong E12 next stop audio-visual display.
	

Staff training

Staff vary in their ability to offer service to passengers with a disability. In some instances this is attitudinal—for example taxi and rideshare drivers who refuse service to passengers with guide dogs[122],[123]—but mostly it is a lack of disability awareness training. Staff cannot offer first class service if they have not received appropriate training. For example, bus drivers will almost invariably deploy the boarding ramp but may not think to flip up the seats in the allocated space if these are down. Training in the full procedure of how to accommodate a passenger using a mobility aid to board and position themselves in the allocated space would rectify this.

While many bus drivers exhibit exemplary customer service to all passengers a recently published paper: Bonnie Das Neves, Carolyn Unsworth & Colette Browning (2022): 'Being treated like an actual person': attitudinal accessibility on the bus, *Mobilities*[124] highlights a few less than commendable attitudes by some drivers:

> Very little research has been conducted specifically investigating disabled passengers' experiences with bus drivers. Instead, comments on bus driver

[122] https://vic.guidedogs.com.au/news/guide-dogs-handlers-refused-entry-or-service-because-of-their-guide-dog/
[123] https://vic.guidedogs.com.au/news/one-in-three-guide-dog-handlers-put-in-danger-when-refused-access-or-service-because-of-their-guide-dog/
[124] https://doi.org/10.1080/17450101.2022.2126794

behaviour are often imbedded in wider studies looking at other aspects of transport accessibility (see e.g. Unsworth et al. 2019). Participants across transport accessibility research report bus drivers demonstrate inappropriate or ineffective behaviour (Risser, Iwarsson, and Ståhl 2012; Unsworth et al. 2019; Velho et al. 2016), or communication methods (Peck 2010) and negative attitudes towards disabled passengers (Buning et al. 2007; Belcher and Frank 2004; Øksenholt and Aarhaug 2018; Risser, Iwarsson, and Ståhl 2012; Stjernborg 2019). Complaints typically referenced bus drivers being rude (Stjernborg 2019), driving past passengers (Bezyak, Sabella, and Gattis 2017; Buning et al. 2007; Risser, Iwarsson, and Ståhl 2012; Unsworth et al. 2019); acceleration, cornering, and braking practices threatening to unbalance passengers (Risser, Iwarsson, and Ståhl 2012); and not calling out stops (Bezyak, Sabella, and Gattis 2017).

People surveyed during the study reported similar issues to the published literature:

Survey participants reported bus drivers would 'always' (17.4%) or 'sometimes' (25.2%) not wait until passengers were sitting down, or equipment or assistance animal were positioned before driving off, even when being asked to wait by the passenger.

Nearly half of survey participants reported bus drivers only 'sometimes' brake, corner, and accelerate appropriately. Falls and other injuries were reported in the surveys and two of the focus groups due to bus drivers' driving, which left participants vulnerable to be thrown from their seats/position.

Both disabled passengers and support persons reported in focus groups that bus drivers may assume a passenger is intoxicated or dangerous due to how they communicate or move, in particular passengers who are neurodiverse;

Passengers reported being excluded from buses due to bus driver behaviour, such as being driven past; denied access due to their mobility equipment or assistance animal; denied bus equipment use, such as putting down the ramp or providing assistance they require; and/or denied access to priority seating. Almost a third of survey participants reported always (29.6%) being driven past whilst waiting at the bus stop.

Participants in all focus groups shared the impact of transport anxiety following negative experiences, which meant that they had reduced or stopped bus use altogether.

The recommendation from the study participants was for training of staff delivered in part by people with a disability:

Recommendations from the survey and focus groups included a lived experience led educational training program for transport staff, improvements to the complaint process, and a means to signal hidden disability. Participants were asked in the survey and focus groups what they would include in an educational training for bus drivers. Survey participants ranked bus drivers learning how to assist and communicate with disabled passengers as the two most important elements to include (Table 6). Ensuring that the educational training program was developed and presented by disabled people, to provide bus drivers the opportunity to understand disabled people as individuals with agency, was raised in two of the focus groups;

These recommendations can be broadly applied to staff throughout the public transport industry. Network Rail[125] in their policy document

[125] https://www.networkrail.co.uk/who-we-are/

Accessible Travel Policy; Making Rail Accessible—Helping Older and Disabled Passengers[126] acknowledge the importance of staff training and particularly training co-delivered by people with a disability:

> All of our frontline station staff have specific training on inclusive service, including disability equality training which helps to equip them to communicate with each individual passenger in the way the passenger prefers.
>
> All 44,000 of our employees are required to carry out eLearning in the area of diversity and inclusion (our Everyone Matters training), which includes disability awareness. For our management and leadership roles, we have classroom based 'Inclusive Leadership' training and further everyone matters eLearning for managers which incorporates disability awareness as well as other protected characteristics. This helps us to ensure our decision making considers accessibility and inclusion best practice.
>
> All new Network Rail passenger-facing station employees will attend inclusive customer service training co-delivered by disabled trainers in a classroom setting. During Covid19, we will deliver this in a virtual classroom setting. This training emphasises treating everyone as an individual, and communicating with people in the most appropriate way to find out their particular needs.

Techniques for communicating with passengers who are Deaf, lip-reading, have intellectual or cognitive impairments, vision impairments and so on should be part of induction and on-going training as is the case with occupational health and safety training. This will allow appropriate and effective direct assistance as per the Network Rail policy cited earlier.

New websites, web pages and apps are not always accessible to people who rely on assistive software—such as screen readers or voice to text programs—to access the digital information or service provided. This is often a result of the designers not being familiar enough with the WCAG Guidelines or even aware of the impact that poor design has on users who rely on assistive software. The designers are often private entities and not employees of an operator or provider. Appropriate training of contractors and clear evidence of their professional development is required.

Proving hidden disability

The recommendation in Bonnie Das Neves, Carolyn Unsworth & Colette Browning (2022): 'Being treated like an actual person': attitudinal accessibility on the bus[127] to find 'a means to signal hidden disability' is well intended but should be discussed nationally among people who have hidden disabilities. Transport for New South Wales has opted for self-identification via lanyards[128]. Many people with hidden disabilities will welcome this as it visibly 'proves' that they actually have a disability. Others will be loath to wear a visible symbol of disability, particularly those who have a history or fear of discrimination or poor treatment based on their disability.

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[126] https://www.networkrail.co.uk/wp-content/uploads/2022/02/Accessible-Travel-Policy.pdf

[127] https://doi.org/10.1080/17450101.2022.2126794

[128] https://www.transport.nsw.gov.au/news-and-events/media-releases/support-for-train-customers-hidden-disabilities-across-nsw

While the lanyard is welcome, if it is the single 'proof' of hidden disability it risks excluding support for people who, while eligible for it, will not wear it. DSAPT should never force a single means of obtaining assistance on people but rather should require multiple ways of seeking support or assistance.

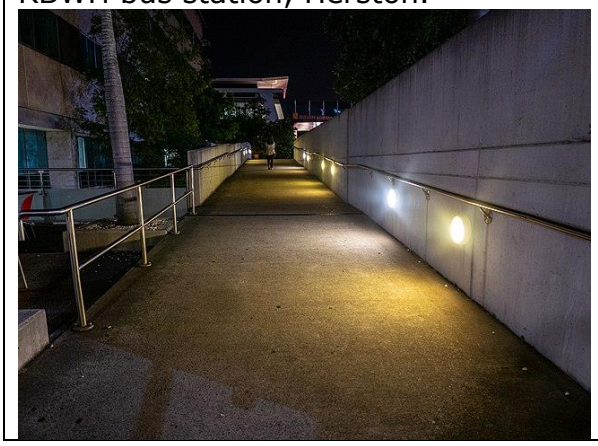
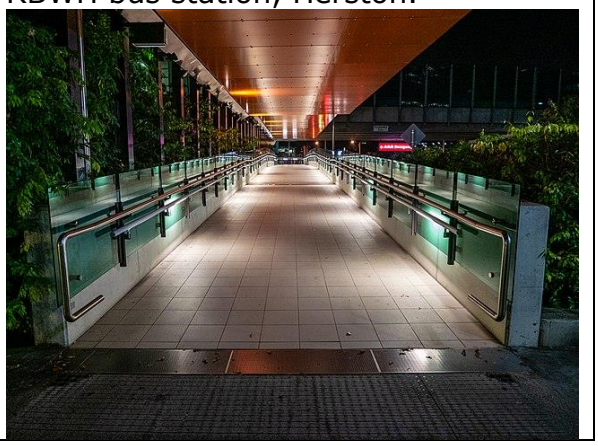
Lighting

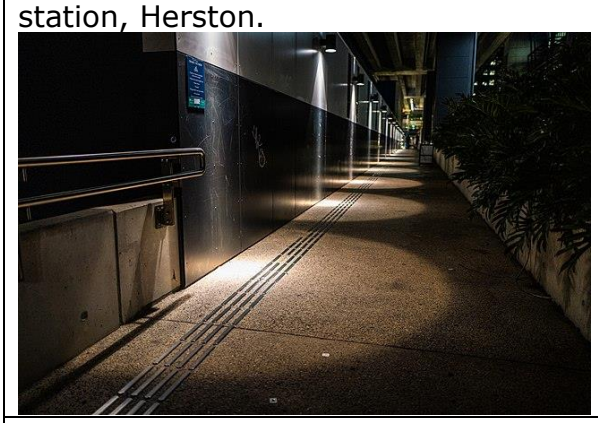
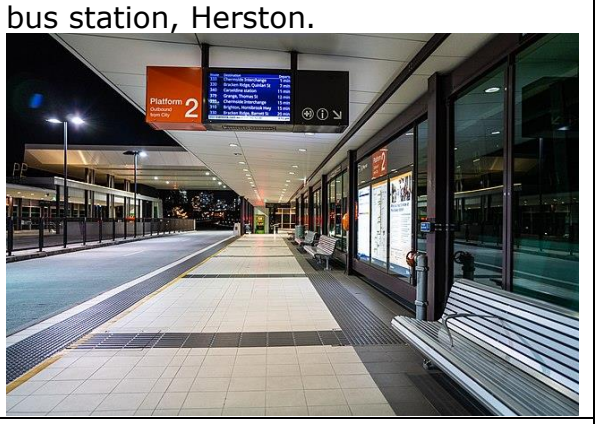
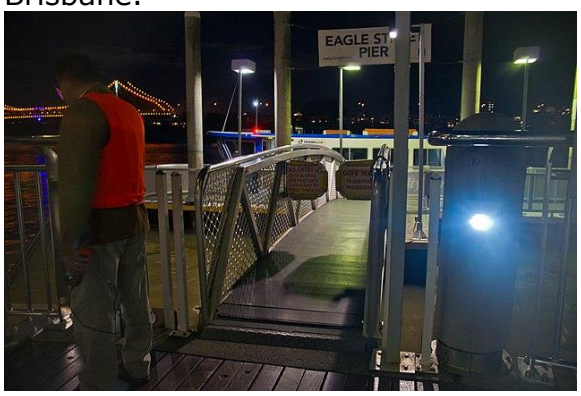
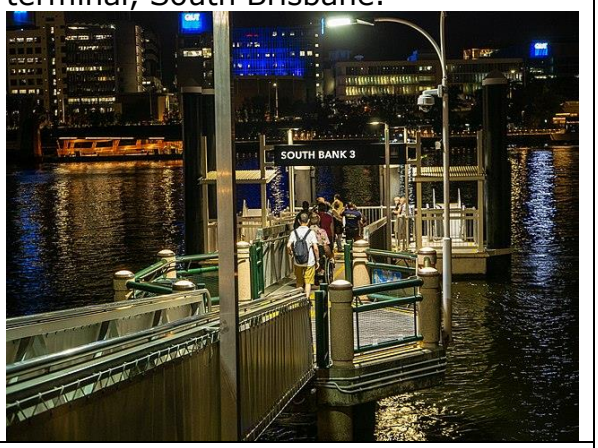
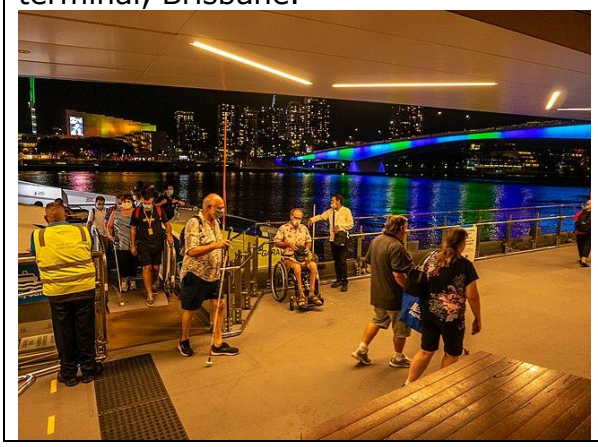
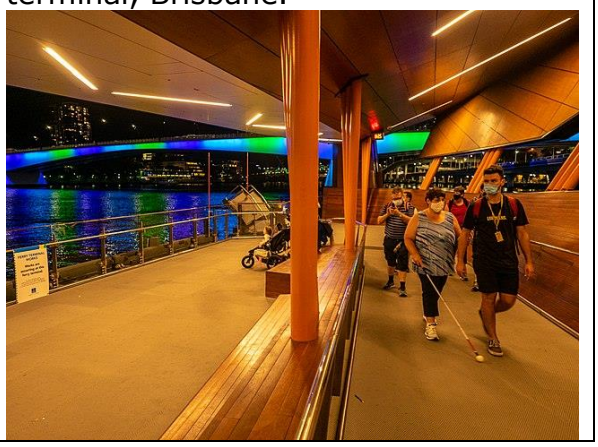
DSAPT lighting requirements of Section 20.1 have been difficult to implement in many locations. Good lighting practice is not difficult to achieve. Evenly spread lighting that does not throw strong shadows or cause glare is easily installed by following well established Australian Standards. Despite this, poor illumination regimes—even at new facilities—continue to challenge people who have vision and cognitive impairments. That said, excellent examples of good, functional illumination can be found at both old and new facilities. Getting lighting right is not hard.

DSAPT should require that surfaces in public transport facilities and conveyances be non-reflective. Glare from reflective surfaces is disconcerting for many people and very poor design practice. The best lighting regimes can be thwarted by poor selection or maintenance of surfaces.

Lighting required by DSAPT should allow a transition between the public transport facility and the surrounding precinct. Sudden changes in illumination between transport node and footpath can be blinding and disconcerting. Particular care is needed at these transition points. This should be stated in any guidance on lighting published to supplement the DSAPT.

Lighting quality can vary widely even within a single site such as RBWH bus station, Herston. This is simply poor design by professional people.

Light pools and glare on access path, RBWH bus station, Herston.	Light pools and glare on access path, RBWH bus station, Herston.
	

Light pools on access path, RBWH bus station, Herston. 	Even illumination on platform, RBWH bus station, Herston. 
Strong glare at gangway entrance, Eagle Street Pier ferry terminal, Brisbane. 	Even illumination on pontoon and gangway, South Bank 3 ferry terminal, South Brisbane. 
Even illumination on pontoon and boarding point, North Quay ferry terminal, Brisbane. 	Even illumination on pontoon and access path, North Quay ferry terminal, Brisbane. 

Luminance contrast

Measurement

On-site measurement of the luminance contrast of objects abutting access paths, of TGSIs, controls and other features presents quite a technical challenge. The photometers required by the AS1428 series of Australian Standards are quite expensive, require a degree of training to operate and must be constantly recalibrated to ensure accuracy. Further complicating matters, there would appear to be contradictory

instrumentation requirements for on-site measurement of luminance between AS1428.4.1-2009 and two editions of AS1428.1.

AS1428.4.1-2009

> **E3 MEASUREMENT OF LUMINOUS REFLECTANCE**
> *E3.2 Instrumentation*
> A tristimulus colorimeter or spectrophotometer with a diffuse illumination/normal viewing (d/o) geometry shall be used with CIE Standard Illuminant D65. The instrument shall be capable of measuring both the absolute CIE tristimulus XYZ values and the derived CIE Y_{xy} chromaticity values. The measured luminous reflectance is defined by the tristimulus value (Y). The luminous reflectance 'Y' value of the CIE 1964 colour system is recognized in AS/NZS 1580.601.2.

AS1428.1-2009

> **B5 MEASUREMENT OF LUMINANCE CONTRAST—ON-SITE**
> *B5.2 Instrumentation*
> A single lens reflex luminance meter commonly known as a photometer with a 1° measurement field and a spectral responsivity approximating the CIE 1931 Standard Observer V (λ) function as specified in ISO 11664-1 are to be used.

AS1428.1-2021

> **B.5 Measurement of luminance contrast — Contact method**
> *B.5.2 Instrumentation*
> A single lens reflex luminance meter commonly known as a photometer with a 1° measurement field and a spectral responsivity approximating the CIE 1931 Standard Observer V (X) function as specified in ISO/CIE 11664-1 should be used.

If this was not confusing enough, testing of luminance contrast by practitioners is often arbitrary and is seldom part of ongoing maintenance. This is highlighted in an article by Galbraith, P and Bowman, R. (2021). *Luminance Contrast Standards, the Boy Who Could, and Visionary Pathfinders*[129].

> As an accessibility and compliance practitioner, Galbraith routinely observed that LRV was not measured on new construction, nor as part of ongoing maintenance of existing assets. A barrier to measurement was thought likely to be the expensive and/or bulky equipment prescribed in the Australian Standards' methodology, namely colorimeters and photometers. This equipment is well established and has been since the standards were developed decades ago; indeed, well before the digital technological advancements we take for granted today.
>
> Galbraith (2017) carried out a survey of access practitioners (n = 84) that revealed 66% relied on 'by eye' judgement to determine luminance contrast compliance with the NCC. For specified finishes, some designers/consultants obtained laboratory LRV test certificates, based on controlled lighting test conditions to develop compliant designs. However, when tested using photometers, lab based LRVs were not replicated in as-installed situations, indicating that the sole reliance on lab LRV values would not guarantee as-built compliance.

129 https://www.researchgate.net/publication/351311312_Luminance_Contrast_Standards_the_Boy_Who_Could_and_Visionary_Pathfinders

The test methodologies detailed in the various Australian Standards appear to be so onerous as to be ignored. Simple, easy to conduct tests with inexpensive equipment are required at time of installation and for ongoing maintenance. The DSAPT should prescribe this or recommend Equivalent Access solutions.

One possible Equivalent Access solution that would greatly simplify luminance contrast measurement is the *Get Luminance* smartphone app[130]. Get Luminance is free to download, operates on Android and Apple systems and is simple to use. Points noted on the website are:

> Get Luminance has been developed from research and uses image analysis to calculate luminance.
>
> Get Luminance measures what is 'seen' by a camera (as shown in a photograph) and more indicative of what is experienced by users.
>
> It measures luminance in the prevailing light conditions, (rather than the pure colour with a controlled light source - the basis of most colorimeters).
>
> Get Luminance includes the 4 main calculation methods used worldwide.

It would be extremely helpful if *Get Luminance* and similar rigorously tested apps or products could be highlighted in DSAPT guidance material as potential Equivalent Access solutions for calculating luminance contrast.

Percentage of contrast

For objects other than TGSIs the minimum luminance contrast between objects and background is 30%. Integrated TGSIs are also required to luminance contrast by ≥30%, but discrete TGSIs have higher requirements. It has been suggested on numerous occasions by researchers and vision impairment advocates that the 30% minimum is too low.

The 30% luminance contrast is a compliance minimum of doubtful value in the opinion of Blind Citizens Australia. Good practice should set a minimum of higher value. Blind Citizens Australia Stage 2 Consultation response to Reforms of the Disability Standards for Accessible Public Transport (DSAPT) 2002[131] stated:

> **7.8 Poles, objects, and luminance contrast**
> Luminance contrast remains an area where significant research needs to be conducted to ensure an appropriate specification for contrast is applied in public areas to assist in wayfinding for people who are blind or vision impaired.
>
> It is however known that the 30 percent luminance contrast stipulation is insufficient. Further, it should be noted that this is stipulated as a minimum, not an absolute figure for an appropriate percentage of luminance contrast.
>
> Anecdotally, the evidence provided by people who are vision impaired when wayfinding in public transport determines that the contrast is insufficient in many instances e.g., it is difficult to identify the waist-height bollards at train/tram/light rail infrastructure which have no contrast or luminance.

[130] https://www.box50.com.au/home
[131] https://www.bca.org.au/wp-content/uploads/2022/08/BCA-Stage-2-DSAPT-consultation-submission-v1.0-09082022.docx

Academic research appears to support the BCA opinion that 30% only satisfies a compliance benchmark rather than offering a good contrast for elements in the pedestrian environment. Manandhar, S et al 2021 *Luminance contrast preferences of people with a vision impairment for elements in the built environment*[132] have found:

> **Abstract:**
> BACKGROUND: Standards for building elements recommend a minimum luminance contrast of30%. The basis of this value and the metric originally used is not known.
>
> CONCLUSIONS: 30% Michelson contrast for building elements renders building elements only poorly visible for those with severe vision impairments. 65% luminance contrast is necessary for all elements to be "easily visible". Some increase (not a decrease) on the present 30% requirement and encouragement to exceed this requirement would seem appropriate.

Lukman, A. L., Bridge, C., Dain, S. J., & Boon, M.-Y. (2020). *Luminance Contrast of Accessible Tactile Indicators for People With Visual Impairment*[133] found:

> **Abstract**
> Australia is one of only two known countries with a safety standard specifying levels of contrast required to provide accessible environments for people with visual impairment. However, these requirements were not developed based on empirical research involving people with vision loss. We investigated whether the level of luminance contrast in Australian accessibility standards, 30%, is adequate for people with visual impairments to detect and identify discrete tactile ground surface indicators over a range of contrasts with the background flooring before contact. We found that the 30% luminance contrast is adequate for people with low vision, although they preferred higher contrast.

Maikala, RV 2020 *Comment from the editor-in-chief* qualified Lukman et al.[134] findings with regard to good luminance contrast practice and pedestrian comfort and security:

> However, participants preferred a contrast reserve, expressed as a ratio, that they could detect comfortably without having to realize the presence of tactile ground surface indicators at the limits of their contrast sensitivity. The authors further reported that higher the luminance contrast, greater the distance from which the participants could detect warning elements visually.

ISO 21542:2011 *Building construction — Accessibility and usability of the built environment* sets luminance contrast requirements for the built environment:

> **35 Visual contrast**
> *35.1 General*
> In order to facilitate orientation and to ensure safe use of an environment, adjacent surfaces, information and potential hazards shall provide a discernible visual contrast.
>
> A minimum difference in LRV shall be provided in relation to the visual task (see Table 5). Additionally, one of the two surfaces should have an LRV value of

[132] https://content.iospress.com/articles/work/wor210997
[133] https://doi.org/10.1177/1064804619841841
[134] https://journals.sagepub.com/doi/10.1177/1064804620905855

minimum 30 points for door furniture, 40 points for large area surfaces and 70 points for potential hazards and text information.

The minimum difference in the LRV shall be achieved and maintained throughout the life of the building elements. Deterioration and maintenance shall be considered at installation.

Table B1 of ISO 2152:2011 defines elements as:

Large area surfaces (i.e. walls, floors, doors, ceiling), elements and components to facilitate orientation (i.e. handrails, switches and controls, tactile walking surface indicators)

Potential hazards (i.e. steps, glass surfaces) and text information

Table B2 of ISO 2152:2011 equates the 40 points and 70 points with the Bowman-Sapolinski equation derived percentages of AS1428.1-2021 of 30% and 60% respectively.

Bearing in mind the uncertainties and discrepancies involved in the provision of visually contrasting elements, further research to determine the best measure of visual contrast is warranted. This research should be based on a nationally inclusive co-design process.

TGSI colour contrast

While safety yellow TGSIs may not achieve the best luminance contrast values there is evidence to suggest that they have excellent visibility when compared to more compliant colours. Bentzen, B.L., Nolin, T.L. & Easton, R.D. (1994). *Detectable warning surfaces: Color, contrast and reflectance* reported[135]:

Subjective Measures
The two contrasts in which the warning surface was safety yellow (ISO 3864) were those most frequently chosen as "most visually detectable,' even though their contrasts were 40% and 62%.

The contrast of safety yellow with concrete was only 40%; nonetheless it was chosen as one of the two most visually detectable contrasts.

The two highest contrasts (80% and 86%) were never chosen as "most visually detectable." Both included yellow detectable warnings of lower light reflectance value than the safety yellow.

The contrast which was chosen as least visually detectable was lowest in light reflectance (a dark red warning adjoining a black Pirelli tile), though the contrast was 67%-highly visually detectable by objective measures.

CONCLUSIONS
Specification of safety yellow (ISO 3864) could result in detectable warnings which are universally recognized as warnings, and which are reliably visually detectable and highly salient to persons having low vision, if a minimum contrast between the warning and adjoining surface is specified.

A 40% contrast between a safety yellow (ISO 3864) detectable warning and an adjoining surface (concrete) provided excellent visual detectability. It is possible that even lower contrasts with safety yellow could still be visually detectable because of the exceptional salience of safety yellow.

[135] http://accessforblind.org/publications/USDOT/DOT-VNTSC-FTA-94-5.pdf

Clearly, making objects in the public transport environment contrast visually is more nuanced than a raw luminance contrast ratio. Aries Arditi in his 2017 article *Rethinking ADA signage standards for low-vision accessibility* makes the point that luminance contrast of text is dependent on factors such as illumination, surface finish, sign placement and viewing distance for its efficacy[136]. Further research is warranted to determine the optimum means of ensuring the visibility of objects and text for people with low vision based on a nationally inclusive co-design process.

Access path surface temperature

Guide and assistance dogs are given rights of free passage in conveyances by Section 28.3 Location of carers, assistants and service animals. This right should extend to infrastructure and premises. These animals are in effect mobility aids, and this should be recognised in the design of the built environment. If the dog cannot pass due to a design flaw, then in most instances neither will its handler.

Guide and assistance dogs traverse access path surfaces without the benefit of foot protection. Certain surfaces—such as dark coloured bitumen or steel service pit covers—can be come uncomfortably hot or even unsafe for these animals after some hours' exposure to strong sunlight. Shading of access paths, or appropriate access path surface colour and texture, in order to keep temperatures within safe limits for assistance and guide dogs is required in DSAPT.

Identifying bus route displays

For people with low vision digital displays must provide optimum contrast. Many new buses have white on black route displays which provide both strong colour and luminance contrast. Unfortunately, older buses and some new buses have amber on black route displays that offer less contrast. This makes bus identification difficult for people with low vision. Field trials conducted by Transport for Brisbane and Vision Australia clients confirmed the superiority of the white on black signs for contrast and legibility.

Colour contrast of amber and white route displays.	Luminance contrast of amber and white route displays.
	

[136] https://jov.arvojournals.org/article.aspx?articleid=2628138

Restraints

Active restraints in WATS and accessible coaches are effective and compliant with AS/NZS 10542.1-2015 *Wheelchair tiedown and occupant-restraint systems Part 1 Requirements and test methods for all systems*. Unfortunately, the passive restraints in route buses fall short of good practice and are almost universally absent on the aisle side of the allocated spaces. The numerous falls and tipping incidents associated with wheelchairs in route buses—sometimes severe and in rare instances fatal—demand route bus compliance with Section 9.11:

> **9.11 Movement of mobility aid in allocated space**
> An allocated space must contain movement of a mobility aid towards the front or sides of a conveyance.

Hearing loops activated only at certain times

Public address system announcements are often not audible to people who are hard of hearing. Behind the ear hearing aids have a telecoil that allows the wearer to pick up PA messages broadcast over a magnetic induction loop. These hearing loops, when installed, are only required to cover 10% of the waiting area. People relying on them are likely to be in the other 90% of the waiting area and therefore miss the announcement. In some locations the loops are only activated during emergencies or activated on request, meaning that general service announcements go unheard. Limitations on spatial coverage and time of use discriminate against people who rely on telecoils and hearing loops.

Sign informing that hearing loops are only activated in emergencies, King George Square bus station, Brisbane.	Sign informing that hearing loops are only activated on request, Yeronga railway Station, Yeronga.
	

Sign informing that hearing loops are only activated in emergencies, RBWH bus station, Herston.	Sign in lift informing that hearing loops are only activated in emergencies, RBWH bus station, Herston.
	

Hearing loops not activated

The issue of hearing loops being turned off or malfunctioning without staff knowledge has been regularly reported. A hearing loop cannot be seen and can only be heard by people with the relevant receivers. In most cases the receivers are 'behind the ear' hearing aids or cochlear implants that have a telecoil.

Without regular maintenance and checks hearing loops may simply be left off for no good reason or malfunction without the knowledge of staff. A regular testing schedule that conforms to AS 1428.5-2021 *Design for access and mobility Part 5 Communication for people who are deaf or hearing impaired* is required.

Help phones with hearing loops

Users of hearing aids that are telecoil equipped rely on hearing loops to hear messages broadcasted in areas with high levels of ambient noise. These messages include communication via platform help and assistance phones. Translink have recognised this and equipped a new model platform help phone with a hearing loop. Hopefully this new help phone will be rolled out across the busway network. Unfortunately the equivalent new unit installed on rail platforms by Queensland Rail lack this essential feature.

Conveyances often also have help phones, but it seems that not even the latest generation of conveyance help phones have hearing loops. There appears to be no technical barrier to help phones being equipped with hearing loops. AS 1735.12-2020 *Lifts, escalators and moving walks Part 12 Facilities for persons with disabilities (EN 81-702018, MOD)* has a recommendation for hearing loops in alarm systems.

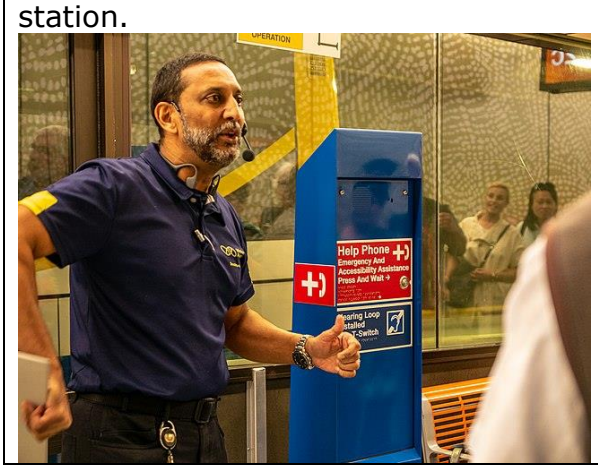
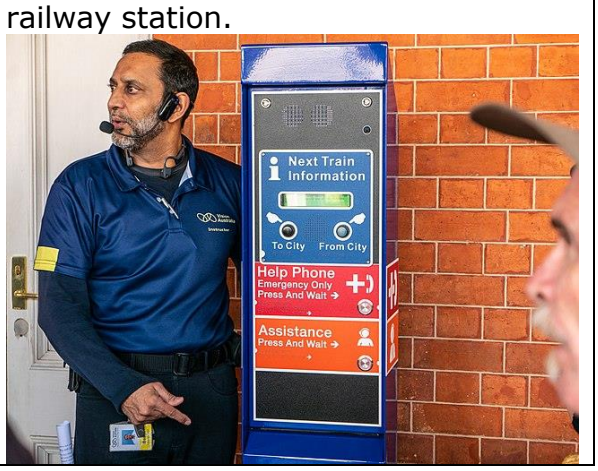
> **5.4.2.5.3** The alarm system shall be equipped with visible and audible signals, integrated in or above the control panel, consisting of:
> a) a yellow graphical symbol in accordance with ISO 4190-5:2006, Table C.1, No. 1, illuminated from initiation of the alarm until the end of the alarm;
> b) an audible signal from initiation of the alarm until the voice communication is established; the audible signal shall comply with 5.1.3;
> c) a green graphical symbol in accordance with ISO 4190-5:2006, Table C.1, No. 8, illuminated during voice communication.
> **5.4.2.5.4** An induction loop according to EN 60118-4:2015 should be provided as hearing assistance for alarm systems (see 0.4). If provided, a symbol according to ISO 4190-5:2006, Table C.1, No. 9 shall be placed close to the microphone. The induction loop should also be used for announcements according to 5.4.2.5.2.

Rather, the barrier to installation seems to be that DSAPT-2002 confines hearing augmentation to public address systems.

> **Part 26 Hearing augmentation–listening systems**
> **26.1 Public address systems — premises and infrastructure**
> If a public address system is installed, it must comply with AS1428.2 (1992) Clause 21.1, *Hearing augmentation*.
> **Premises** except premises to which the Premises Standards apply
> **Infrastructure**

Omission of a requirement in DSAPT does not indicate an omission of a requirement in DDA as Section 1.8 of the Guidelines makes clear. The lack of hearing loops in help phones is clearly discriminatory and probably in breach of DDA. The reformed DSAPT should require that all verbal communication systems be equipped with hearing loops.

> **1.8 Issues not dealt with by Disability Standards**
> If the Disability Standards do not deal with an issue in relation to public transport, the requirements of the Disability Discrimination Act 1992 apply in relation to the issue.

Platform help phone equipped with hearing loop, Queen Street bus station.	Platform help phone not equipped with hearing loop, South Brisbane railway station.
	

Rail car help phone not equipped with hearing loop. 	Rail car help phone not equipped with hearing loop. 
Rail car help phone not equipped with hearing loop. 	Rail car help phone not equipped with hearing loop. 

Accessible adult change facility (AACF)

AACFs are mostly not within the scope of the DSAPT as infrastructure and premises outside the Premiss Standards seldom provide toilets. That said, the Premises Standards in Section F2 now require that they be

installed in airports that 'that accepts domestic and/or international flights that are public transport services as defined in the *Transport Standards.*'

> **F2.9 Accessible adult change facilities**
> (2) One unisex *accessible* adult change facility must be provided in an *accessible* part of a:
> (e) passenger use area of an airport terminal building within an airport that accepts domestic and/or international flights that are public transport services as defined in the *Transport Standards*.

Notably absent from Section F2 are major rail stations and ferry terminals. This is despite expressed need on the part of the disability sector. Department of Industry, Innovation and Science's *Premises Standards Review 2021 A review of the Disability (Access to Premises - Building) Standards 2010 September 2021* [137] notes:

> A point consistently raised in consultations was the lack of adult accessible change facilities, especially at transport hubs, shopping centres and other public buildings.

Justification for excluding all but airports from Section F2 is hard to accept. Internationally, Network Rail have no quals concerning AACFs (Changing Places facilities) at selected stations[138]:

> All our managed stations have toilets, including accessible toilets. Some have Changing Places facilities. Please see our station guides for the location of toilets within the station and the facilities available.

The Department of Industry, Innovation and Science's *Accessible Adult Change Facilities in Public Buildings Final Regulation Impact Statement September 2018*[139] notes:

> As demonstrated above, for railway stations that function as public transport nodes, multiple responses noted this transitory nature as reasoning for excluding them from selection, while a number of disability advocates noted the provision of AACFs at these facilities would increase accessibility for people with complex disability to destinations across transport networks.

This 'transitory nature' begs the question of why railway stations of any size provide public toilets? And what would be the public response to their removal or closure? We are now in a situation where a new or refurbished regional airport serving hundreds of people per week must provide an AACF but a rail station or ferry terminal serving thousands per hour is excluded.

The DSAPT should require AACFs at infrastructure or premises not covered by the premises Standards wherever patronage is heavy and other toilets are provided. This would only cover a handful of large bus

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137 https://www.industry.gov.au/sites/default/files/September%202021/document/premises-standards-review-2021.pdf

138 https://www.networkrail.co.uk/wp-content/uploads/2022/02/Accessible-Travel-Policy.pdf

139 https://www.abcb.gov.au/sites/default/files/resources/2022/Final-RIS-adult-change-facilities-public-buildings.docx

interchanges nationally but would certainly increase the accessibility of bus travel for people with high support needs.

Rideshare

Rideshare has been a mixed blessing for people with disabilities. While many have benefitted from the at-times inexpensive fares and ease of an app booking system others have been excluded from receiving services. It is unclear if any rideshare platform has the equivalent of a wheelchair accessible taxi (WAT) in service—and the DSAPT-2002 does not require that they do. For example, UberASSIST will only carry wheelchairs that can fit into a car boot[140]. UberWAV which claims to have WAT equivalents does not appears be operating in Australia[141]. People who depend on WATs or equivalent vehicles must rely on the dwindling number of WATs in the taxi fleets. Infrastructure Australia in its *Australian Infrastructure Audit 2019*[142] noted disability sector concerns.

> **71. Challenge**
> Emerging point-to-point operators are not subject to the same subsidy schemes and accessibility legislation as taxis, meaning they are not accessible to many people with disability. Without action, people with disability will not share in the benefits of emerging transport modes.
>
> Emerging transport operators, such as UberASSIST, are beginning to introduce fully wheelchair accessible services. However, disability advocates have expressed concern that such operators are not consistently subject to the same subsidy schemes or regulatory obligations as taxis, meaning there are still very few accessible ridesharing options.
>
> Emerging transport operators are expected to play a bigger role in service provision in the next five years. The challenge for governments will be to ensure that benefits of new mobility business models extend to people with disability.

Assistance animals[143] are on occasion refused entry into rideshare vehicles. A similar situation exists with taxis[144]. This breaches the various States and Territories' Assistance Animal Acts and the DDA.

Taxis

The number of WATs on the road appears to be in decline—particularly at off peak times. Competition with rideshare services has made taxis in general far less viable economically. WATs are particularly hard hit as these are the least financially viable taxis. Even prior to rideshare, lift fees and other subsidies were required to maintain the viability of many WAT operators and drivers. We now see WATs sitting idle at times because running them off peak risks a financial loss for drivers and operators.

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[140] https://www.uber.com/au/en/ride/assist/
[141] https://www.uber.com/newsroom/improved-experience-riders-wheelchairs/
[142] https://www.infrastructureaustralia.gov.au/sites/default/files/2019-08/Australian%20Infrastructure%20Audit%202019.pdf
[143] https://www.abc.net.au/news/2023-02-15/brisbane-uber-refuses-blind-man-service-because-of-his-guide-dog/101975254
[144] https://vic.guidedogs.com.au/news/one-in-three-guide-dog-handlers-put-in-danger-when-refused-access-or-service-because-of-their-guide-dog/

The importance of lift fees to WAT viability cannot be underestimated. In December 2022, Translink surveyed a range of people working in personalised transport to understand their needs, behaviours and attitudes about the industry. They reported on matters including accessibility in their April 2023 *Personalised Transport in Queensland Newsletter*:

> **Accessibility:** Consistent with previous years, taxi (25%), ride-booking (8%) and limousine (9%) drivers have refused passengers due to an accessibility issue. This is commonly due to not being able to fit or store a wheelchair or mobility scooter. However,28% of WAT drivers say they avoid wheelchair jobs without a lift fee.

The Physical Disability Council of NSW ran an online survey in 2023 that led to the publication of *Taxi Troubles; The experiences of people with disability and taxis in NSW* which highlighted the issues of unavailable WATs[145]:

> Separate from the issue of the TTSS smartcard, an increasingly concerning issue facing users of WATs has been the unreliability of these services.
>
> This appears to be due to the lack of vehicles and WAT operators within the broader taxi fleet, and the decreasing availability of these vehicles for those who need them. This has become especially prevalent in rural and regional areas where taxi services are an essential mode of transport due to minimal public transport available.
>
> A concerning 30% of those surveyed in the past 12 months had experienced booking a WAT that never turned up, and nearly one quarter of participants had waited more than 2 hours for a booked taxi to arrive.

Without intervention of some kind the availability and reliability of WATs is sure to continue in decline.

Assistance animals are on occasion refused entry into taxis[146],[147]. This breaches the various States and Territories' Assistance Animal Acts and the DDA.

Taxi zones

Taxi zones (ranks) are referred to as infrastructure in DSAPT section 1.18, but DSAPT has no prescriptive requirements for their accessibility. They should have technical standards in the reformed DSAPT.

On-street and off-street taxi zones are often not accessible to wheelchair users who must board or alight from WATS via the rear door. This is due to an unbroken kerb running the length of the zone. Off-street taxi zones are often far more accessible due to kerb ramps in the kerb face or same grade boarding. A consistent regulation for taxi zone accessibility regardless of location on-street or off-street is required in DSAPT.

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[145] https://apo.org.au/node/322005

[146] https://vic.guidedogs.com.au/news/one-in-three-guide-dog-handlers-put-in-danger-when-refused-access-or-service-because-of-their-guide-dog/

[147] https://www.abc.net.au/news/2023-06-09/woman-with-guide-dog-asked-to-leave-toowoomba-hotel-viral-video/102449766

Guidance on taxi zone accessibility exists outside DSAPT but as guidance it need not be followed. This nonconformance with guidance appears to be the majority situation on-street.

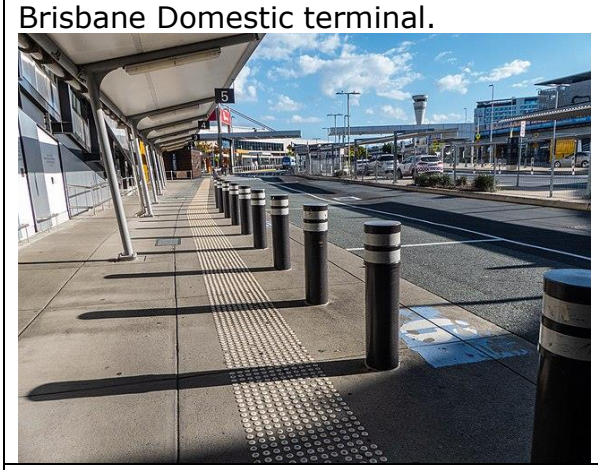
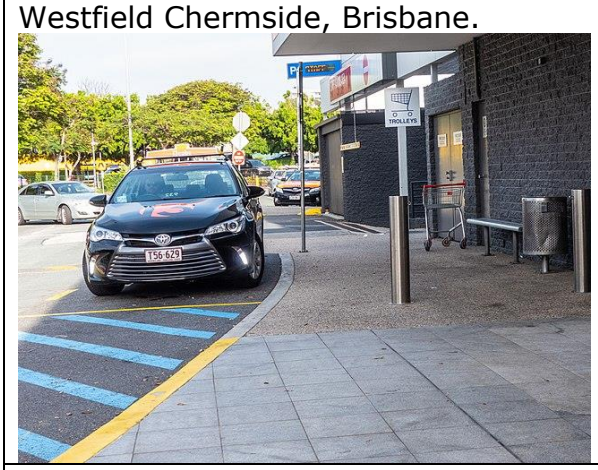
Austroads have various publications and guidelines for taxi ranks zones including:

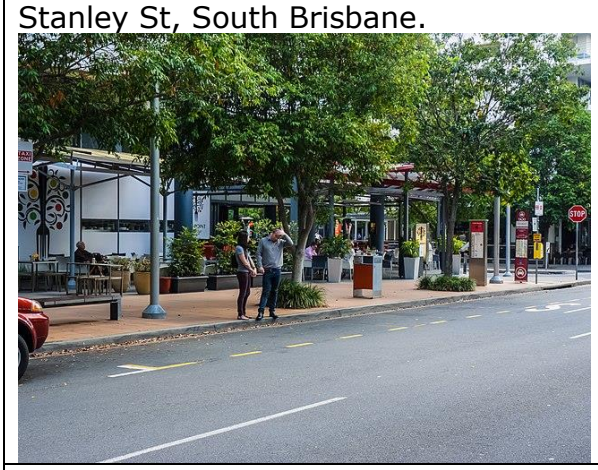
> **Austroads Guide to Traffic Management Part 11: Parking Management Techniques[148]**
> 9.9.8 Taxis
> Taxi parking must be suitable for use by people with disabilities and the dimensions of the first few parking spaces at the head of the queue depending on turnover should be consistent with this requirement.

Queensland's Department of Transport and Main Roads provides technical guidance on the design of an accessible taxi rank:

> **Public Transport Infrastructure Manual, Department of Transport and Main Roads, March 2016, Chapter 7 – Taxi facilities[149]**
> *Provision for disability access*
> Taxi facilities (including access paths, manoeuvring areas, ramps, waiting areas and surfaces) must comply with the requirements of the Disability Standards and relevant Australian Standards.
>
> When designing taxi ranks the following should be applied:
> - space for at least one wheelchair accessible taxi (WAT) located at the front of the queue. The length of WAT spaces is to be 7.8m, with appropriate road line marking and signage to designate this space for a WAT.
> - where a taxi rank is more than four spaces (including the WAT space), an additional WAT space is to be provided at the end of the first four spaces. This pattern should be repeated for every four additional spaces.
> - other functional design elements to be incorporated include:
>   - TGSI to direct vision-impaired passengers to the head of the rank
>   - facilities designed at-grade (no kerb) to eliminate the need for kerb ramps
>   - signage information accessible for people who are blind or have a vision impairment
>   - where kerb ramps are included for wheelchair access requirements, these shall be located at the rear of a designated WAT space
>   - in very high-volume sites, such as airports or sporting venues, where a passenger queuing fence is installed, access to the front of the queue to access the WAT space is to be provided.

[148] https://austroads.com.au/publications/traffic-management/agtm11/media/AGTM11-20-Part-11-Parking-Management-Techniques.pdf
[149] https://www.publications.qld.gov.au/dataset/495a8be2-9658-4965-90c8-de0506b0c886/resource/1689d354-12e2-4695-ac90-e3666cac9584/fs_download/ptim07taxifacilitiesmar2016.pdf

Same grade taxi boarding zone Brisbane Domestic terminal. 	Same grade taxi boarding zone Brisbane Domestic terminal. 
Same grade taxi boarding zone Westfield Chermside, Brisbane. 	Same grade taxi boarding zone Petrie Terrace Barracks, Brisbane. 
Unbroken kerb at taxi zone Adelaide St, Brisbane. 	Unbroken kerb at taxi zone Chatsworth Rd, Greenslopes. 

Unbroken kerb at taxi zone Little Stanley St, South Brisbane. 	Unbroken kerb at taxi zone Biota St, Inala. 
Unbroken kerb at taxi zone Lutwyche Rd, Lutwyche. 	Unbroken kerb at taxi zone Ashgrove Ave, Ashgrove. 

Accessible taxi zones at public transport nodes, whether on-street or off-street are an international good practice. Network Rail[150] is a public sector arm's length body of the Department for Transport of the United Kingdom. Network Rail's policy document *Accessible Travel Policy; Making Rail Accessible—Helping Older and Disabled Passengers*[151] affirms that all their stations have accessible on-street taxi zones:

> At each of our Network Rail managed stations, there are on-street taxi ranks which provide accessible taxis to rail passengers and the general public.
>
> Most of these taxi ranks are managed by local authorities, or in the case of our London Stations, by Transport for London.
>
> At Birmingham New Street Station, Bristol Temple Meads Station and Manchester Piccadilly Station, the taxi ranks are managed by APCOA Parking on behalf of Network Rail.
>
> At all of our managed stations, regardless of who manages them, the ranks are serviced by Hackney carriages, also known as 'black cabs'. These are wheelchair accessible and some of the newer cabs are fitted with induction loops and intercoms for hearing aid users.

[150] https://www.networkrail.co.uk/who-we-are/
[151] https://www.networkrail.co.uk/wp-content/uploads/2022/02/Accessible-Travel-Policy.pdf

More information about the taxi ranks at each station (such as the location) can be found in our station guides, or on our website **Our stations – Network Rail**.

Passenger loading zones

Passenger loading zones are public infrastructure covered by the DDA-1992. For reasons unknown they are not included in the DSAPT-2002. Their inclusion in the reformed DSAPT is vital as they are boarding points for WATs. As per taxi zones, many on-street passenger loading zones are not accessible to wheelchair users who must board or alight from WATS via the rear door. Once again, this is due to an unbroken kerb running the length of the zone. Inclusion of passenger loading zones in the reformed DSAPT is essential.

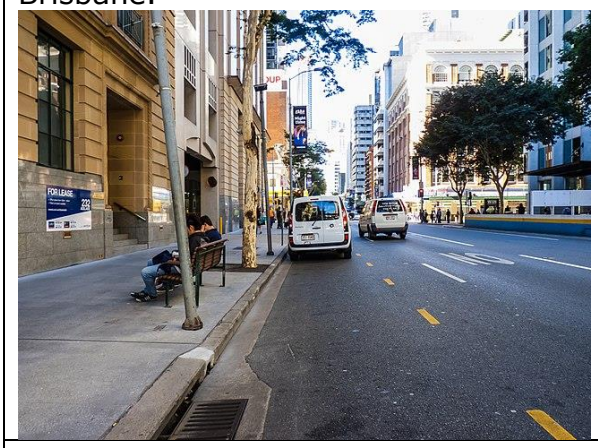
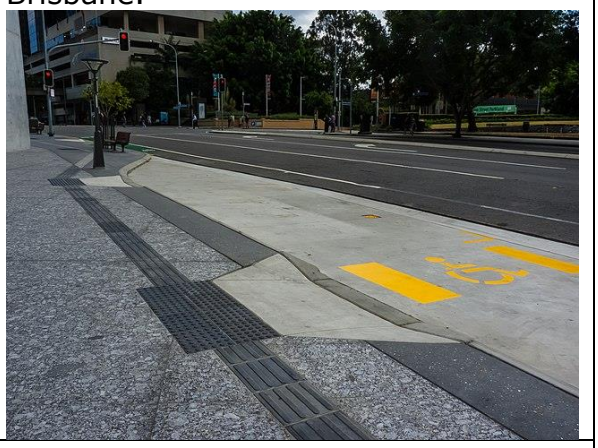
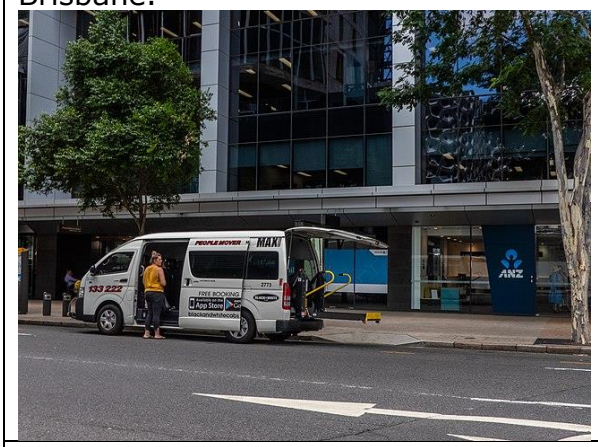
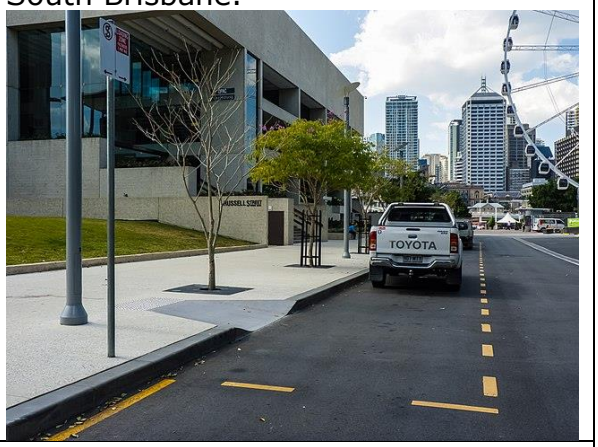
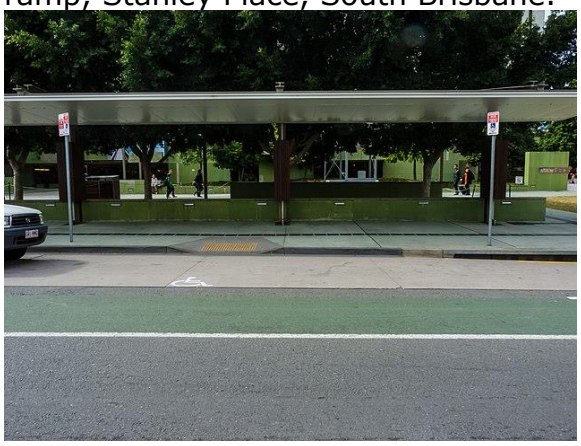
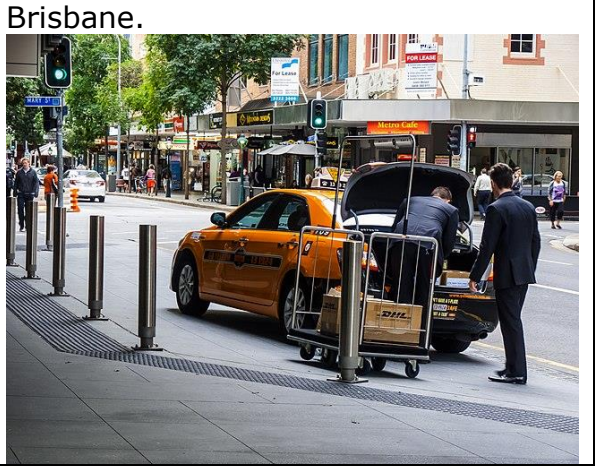
Guidance for accessible passenger loading zones exists but is not enforceable and can be ignored. Specifications for accessible on-street passenger loading zones are available from Brisbane City Council[152].

The Brisbane City Council has voluntarily begun a rolling program to make passenger loading zones accessible. It also allows extended standing times for WATs in passenger loading zones. Designs and policies derive from public consultation by the Brisbane Parking Taskforce, which then published *Citywide On-Street Parking Review Report and Recommendations*[153].

Passenger and commercial loading zone lacking kerb ramps, Little Stanley St, South Brisbane. 	Passenger and commercial loading zone lacking kerb ramps, Little Stanley St, South Brisbane. 

[152] http://docs.brisbane.qld.gov.au/standard-drawings/201609-bsd-3162_b_loading_zone.pdf

[153] https://www.brisbane.qld.gov.au/sites/default/files/20152801_parking_taskforce_recommendation_report.pdf

Passenger and commercial loading zone lacking kerb ramps, Adelaide St, Brisbane. 	Passenger and commercial loading zone with kerb ramps, Roma St, Brisbane. 
Passenger and commercial loading zone with kerb ramp, George St, Brisbane. 	Passenger and commercial loading zone with kerb ramp, Russell St, South Brisbane. 
Passenger loading zone with kerb ramp, Stanley Place, South Brisbane. 	Passenger and commercial loading zone at grade with footpath, Albert St, Brisbane. 

Passenger loading zone at grade with footpath, Powerhouse Theatre, New Farm, Brisbane. 	Passenger loading zone at grade with footpath, Powerhouse Theatre, New Farm, Brisbane. 

Lifts

Lift cars that were in service prior to 2002 will be very difficult to upgrade to larger internal dimensions within an acceptable timeframe. Lifts are housed in shafts which restrict the car dimensions. Only by demolishing the shaft and reconstructing to contemporary dimensions will lift car dimensions be increased. With the significant lag in bringing legacy infrastructure to compliance this is likely to be a long term prospect—meaning barriers to access via unsuitable lifts will be a medium to long term problem.

Further, the older lift cars referred to above usually have little or no capacity to upgrade their communication features. Landing audio announcements, help phones and visual displays are not able to be installed or cannot be upgraded to contemporary standards. Once again, replacement of the lift car and its shaft is the only remedy.

The majority of lifts operating in the public transport environment serve only two levels. As such, DSAPT-2002 does not require spoken identification of landings as it cites AS1735.12-1999 as the technical reference. Clause 8.1 of AS1735.12-1999 deals with audible information.

> **Part 13 Lifts**
> **13.1 Compliance with Australian Standard — premises and infrastructure**
> Lift facilities must comply with **AS1735.12 (1999)**.
> **Premises** except premises to which the Premises Standards apply
> **Infrastructure** except airports that do not accept regular public transport services
>
> **8.1 AUTOMATIC AUDIBLE INFORMATION**
> For lifts serving more than 3 floors, automatic audible information, adjustable between 35dB(A) and 55dB(A), shall be provided in the lift car. Each time the lift stops in response to a car call, the floor shall be orally identified in English.
>
> For lifts serving 3 floors or less, a tone shall sound when the lift passes or arrives at a floor.

While the tone is useful it does not identify to a passenger with vision impairment which platform or facility the car has arrived at. Further, it

provides this passenger no helpful wayfinding information This contrasts with the very useful requirements of AS1735.12-2020 (EN 81-70:2018) Clause 5.4.2.5 which requires verbal announcements at all landings.

> **5.4.2.5 Car signals**
> 5.4.2.5.2 When the car stops, a voice in at least one of the official local languages shall announce the car position. The voice announcement shall comply with 5.1.3.
>
> 5.1.3 When an audible signal or voice announcement is required, the sound level shall be adjustable between 35 dB(A) and at least 65 dB(A) and to suit the site conditions. In noisy environments (e.g. on landings in train stations) the maximum sound level shall be adjustable up to 80 dB(A) (see 0.4). The means of adjustment shall be accessible only to authorized persons.
>
> Variations to EN 81-70:2018 for Australia
>
> Cl 5.1.3 Delete text and replace with the following:
> When an audible signal or voice announcement is required, the sound level shall be adjustable and set at no less than 45 dB (A). The means of adjustment shall be accessible only to authorized persons.

While lift cars conforming to AS1735.12-1999 will have the technical capacity to verbally announce all landings, little effort has been made to upgrade to AS1735.12-2020. Where upgrades have occurred it has only been after protracted advocacy has pushed the operator 'beyond compliance'. This is unfortunate given the simplicity of recording and installing pre-recorded audio messages in lift cars. The reformed DSAPT should require retrospective upgrades of audio messaging in all lift cars compliant with AS1735.12-1999.

Auslan communication

The information needs of the Deaf community are often not satisfactorily met. For those people who depend upon Auslan as their first language audio messages are incomprehensible. Service relate public address system announcements are not understood, leaving people baffled as to any service disruptions or upcoming works. Digital signs that can deliver service announcements in audio, caption and Auslan do exist but are rarely installed. This may hopefully change in future.

While very useful, captioning is no panacea. Literacy skills in English vary. A study by Napier and Kid (2013) found 25% of Deaf people in their sample group rated their English literacy as poor to average[154]. A study by Lee et al. (2021) reach a similar conclusion[155]. Audio visual material, online or on digital screens, that has captions is of assistance to those Deaf people whose literacy is good to excellent but is not so useful to people whose literacy levels are poor. Unfortunately, the bulk of online audio visual material is only compliant to WCAG 2.0 AA or 2.1 AA. This AA material requires captions but lacks an Auslan component. Auslan should be included in all pre-recorded service related audio visual material.

[154] https://www.racgp.org.au/afp/2013/december/auslan-english-literacy/
[155] https://onlinelibrary.wiley.com/doi/full/10.1111/hex.13336

SMS communication

While the DSAPT-2002 has requirements for information in Part 27 it is not specific on the accessibility of communication devices or their accessible alternatives. Most devices provided rely on the passenger's ability to hear, speak and operate the controls. The majority of, but not all, passengers can do this. A requirement for accessible alternatives to speech and hearing based communication devices is needed.

Simple SMS text communication is within scope for most Deaf and hard of hearing people, having been thoroughly researched and recommended[156],[157],[158]. It also greatly benefits people who are non-verbal or who have speech impediments that significantly affect their capacity to be understood.

Queensland Rail have an SMS messaging service advertised in their lifts and on their help and assistance phones for people who have disabilities. While not stated, the same SMS service could be used in the event of difficulties while aboard a train. This SMS service is a lifeline for people not able to communicate verbally.

Unfortunately, Queensland bus and ferry services do not have equivalent SMS services either on platforms / pontoons or aboard buses or ferries. This excludes Deaf, non-verbal and speech impaired passengers from using the communication tools provided for other passengers such as help and emergency phones.

Call centres and customer service centres have for decades had TTY phones. These are useful but bulky, and operable only by trained staff. Also, they are not portable and therefore useless while a person is travelling. SMS is mainstream on mobile phones, highly portable and almost universally understood.

It should be a DSAPT requirement to have SMS as an alternative for all phone or intercom based customer communication systems. As a minimum, operators and providers should promote the National Relay Service SMS relay[159]. Translink currently list the National Relay Service SMS relay number of 0423 677 767 on their website[160]. Far better is to allow direct communication with customers who rely on SMS[161] by incorporating it into mainstream communication channels as per Queensland Rail practice.

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156 https://academic.oup.com/jdsde/article/12/1/80/436033

157 https://research-repository.griffith.edu.au/bitstream/handle/10072/5669/25358_1.pdf?sequence=1

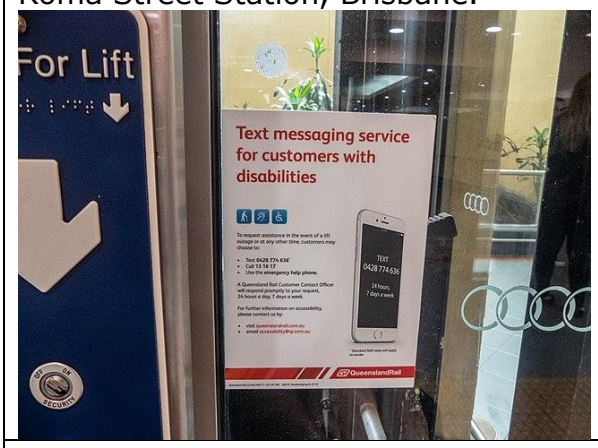
158 https://www.academia.edu/3786335/Deaf_people_communicating_via_SMS_TTY_relay_service_fax_and_computers_in_Australia

159 https://www.infrastructure.gov.au/media-communications-arts/phone/services-people-disability/accesshub/national-relay-service/service-features#smsrelay

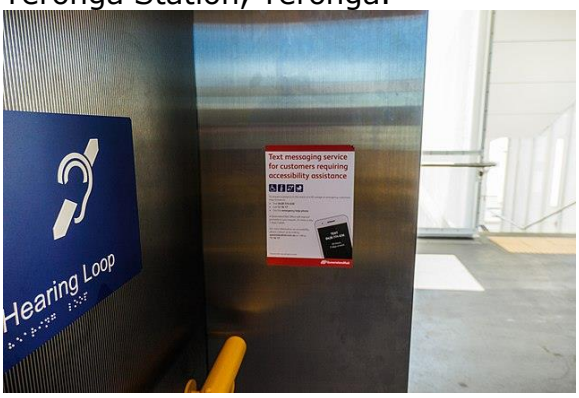
160 https://translink.com.au/contact-us

161 https://www.infrastructure.gov.au/media-communications-arts/phone/services-people-disability/accesshub/other-communication-options#_sms

Qld Rail text messaging service for customers with disabilities on lift, Roma Street Station, Brisbane.



Qld Rail text messaging service for customers with disabilities in lift, Yeronga Station, Yeronga.



Qld Rail text messaging service for customers with disabilities on platform help and assistance phone, Yeronga Station, Yeronga.

Qld Rail text messaging service for customers with disabilities on platform help and assistance phone, Yeronga Station, Yeronga.

Service disruption announcements

When rail platform changes, service failure or conveyance malfunction and so on are announced it is usually in audio format and mostly over PA systems. These announcements are inaudible to people who are Deaf and may not be audible to people who have telecoil hearing aids unless they are within range of a functioning hearing loop. This places these passengers under considerable stress and confusion as to what is occurring and what is expected of them.

This most likely is a breach of Section 27.1 of the DSAPT-2002. The only remedy offered is Section 27.2, though finding the Deaf person on a

crowded train or platform in order to offer direct assistance may be challenging. Service disruption information is essential information and would fall in the 'general information' category. Digital screens are increasingly common and are able to deliver pre-recorded messages in audio, caption and Auslan formats simultaneously. These screens can be mounted in premises, infrastructure and conveyances that have PA systems and would inform people who were Deaf or hard of hearing of service disruptions and changes.

27.1 Access to information about transport services
General information about transport services must be accessible to all passengers.

27.2 Direct assistance to be provided
If information cannot be supplied in a passenger's preferred format, equivalent access must be given by direct assistance.

Airlines and airports

Air travel continues to present major hurdles and challenges to passengers who have a disability. Headlines from some recent media reports capture a few of the many challenges rather well. These media reports are of course only the tip of an iceberg of poor practice and discriminatory practice.

'Second-class citizen': man lifted on to plane as Darwin airport had no ramp for wheelchair users[162]

'This was indignity': passenger with disability left without wheelchair at Sydney Airport[163]

Airports and airlines on notice after people with disability speak out about humiliating treatment[164]

Former disability discrimination commissioner Graeme Innes calls for change after 'humiliating' Adelaide Airport experience[165]

Budget airlines make it hard for people with disabilities to travel, but Australian tourist sights get top marks[166]

Disability discrimination case highlights challenges faced by airline customers travelling with electric wheelchairs[167]

Passenger kept from boarding after Jetstar's refusal to assist with wheelchair makes discrimination complaint[168]

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162 https://www.theguardian.com/society/2022/oct/06/second-class-citizen-man-lifted-on-to-plane-as-darwin-airport-had-no-ramp-for-wheelchair-users
163 https://www.theguardian.com/society/2022/jul/08/this-was-indignity-passenger-with-disability-left-without-wheelchair-at-sydney-airport
164 https://www.abc.net.au/news/2022-05-16/reports-of-disability-discrimination-at-australian-airports/101070802
165 https://www.abc.net.au/news/2022-05-15/sa-adelaide-airport-disability-discrimination-complaint/101068140
166 https://www.abc.net.au/news/2022-10-06/why-people-with-disabilities-stay-home-and-avoid-flying-analysis/101440056
167 https://piac.asn.au/2022/05/16/disability-discrimination-case-highlights-challenges-faced-by-airline-customers-travelling-with-electric-wheelchairs/

Graeme Innes fights to change how disabled people are treated when they fly[169]

Adelaide Airport passenger using mobility scooter says she was treated without 'empathy or compassion'[170]

Some regional Queensland airports still have no Disabled Passenger Lifter (DPL) according to the Rex Airlines website[171]:

WHEELCHAIR DEPENDENT PASSENGERS
Passengers that require the use of wheelchairs should provide at least 48-hours' notice before the flight departure time. Bookings can be made on our website, through the Customer Contact Centre at 13 17 13 or via local travel agents.

Please note that some airports in Queensland cannot cater for passengers who require the use of the Disabled Passenger Lifter (DPL). Mobility disabled passengers who are not capable of ascending the aircraft stairs are asked to call the Customer Contact Centre prior to booking to check. DPLs are currently not installed at Bedourie, Boulia and Burketown.

The lack of DPL at Boulia is particularly disappointing as the Shire Council has recently upgraded the airport terminal to full compliance.

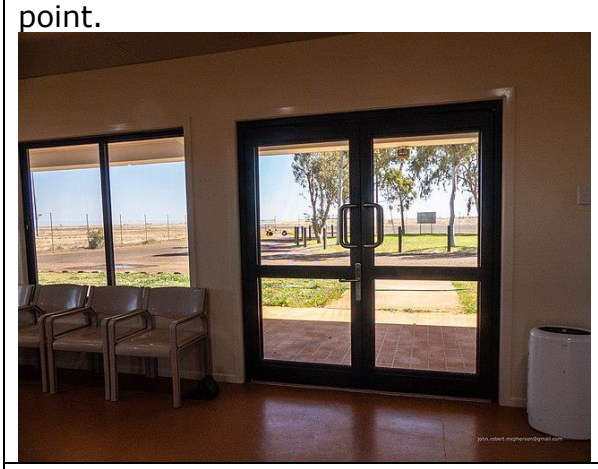
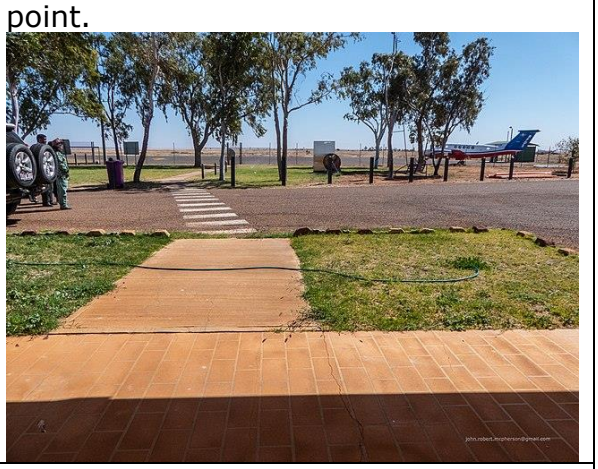
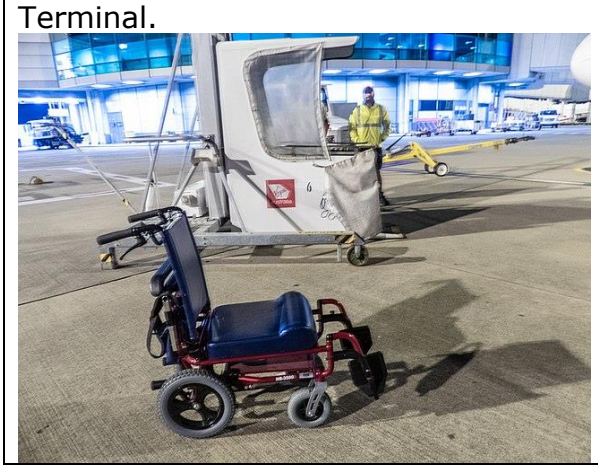
Boulia airport building.

Boulia airport building.

Boulia airport passenger lounge.

Boulia airport passenger lounge.

168 https://www.theguardian.com/law/2022/aug/05/passenger-kept-from-boarding-after-jetstars-refusal-to-assist-with-wheelchair-makes-discrimination-complaint
169 https://www.smh.com.au/national/graeme-innes-fights-to-change-how-disabled-people-are-treated-when-they-fly-20220516-p5alqs.html
170 https://www.abc.net.au/news/2023-05-25/woman-felt-targeted-by-security-at-adelaide-airport/102392000
171 https://www.rex.com.au/FlightInfo/SRC.aspx

Boulia airport access path to boarding point. 	Boulia airport access path to boarding point. 
Boulia airport sanitary facilities. 	Boulia airport sanitary facilities. 
DPL and aisle chair Brisbane Domestic Terminal. 	DPL and aisle chair Brisbane Domestic Terminal. 

Do the Transport Standards need changing?

The DSAPT-2002 is outdated. It is largely unchanged from the draft developed in 1996[172]. Technology, products and attitudes have moved significantly since 1996 leaving the DSAPT as an anachronism.

A reform process is currently underway to update the DSAPT[173]. This is welcome and must be repeated at regular intervals in future. Without

[172] https://www.independentliving.org/docs1/corcoran2000.html

future regular reform the updated DSAPT will also quickly become outdated. The Guiding Principles[174] for the reform process are well crafted and if the reformed DSAPT conforms to them it should be well received by the disability sector.

> Guiding principles for the reform
> The four guiding principles for the reforms are:
> 1. People with disability have a right to access public transport
> 2. Accessibility is a service, not an exercise in compliance
> 3. Solutions should meet the service needs of all stakeholders and be developed through co design
> 4. Reforms should strive for certainty

Five-year reviews are an obligatory component of the DSAPT. Regular mandatory reform projects must be also incorporated into the DSAPT's administration. Without this mandatory, periodic reform the long interval without meaningful updates between 2002 and the present risks being repeated. The current National Accessible Transport Taskforce process—which takes a human rights based approach—offers a workable vehicle for reform that might be followed in future.

Are you aware of the Guidelines to support passengers, operators and providers when interpreting the Transport Standards?

As per the DSAPT, awareness of the Guidelines is mixed, with some parties well aware of them while others are unaware of them.

The Guidelines are useful in the areas they cover but are silent on too many contentious issues. Also, dating from 2004 they are not entirely current and need an update. For example, thinking on what constitutes a waiting area has moved since 2004. The Guidelines only describe large premises as having waiting areas, but the AHRC extended this in 2010 to any area that provides seating[175].

> **DSAPT Guidelines**
> **Part 7 Waiting areas**
> **7.1 General principle**
> The general principle is that operators and providers should make seats and space available to passengers with disabilities wherever waiting areas are provided. Examples of waiting areas are departure lounges in airports or coach terminals.
>
> **AHRC Guideline for promoting compliance of bus stops with the DSAPT – December 2010**
> **5 Additional features and atypical situations**
> 5.2 If, however, a Provider chooses to provide additional infrastructure in the form of a seating area or shelter as a facility for people to wait at a bus stop, this additional infrastructure would form a 'waiting area' under the DSAPT. Where a

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[173] https://www.infrastructure.gov.au/infrastructure-transport-vehicles/transport-accessibility/reform-disability-standards-accessible-public-transport-2002-transport-standards

[174] https://www.infrastructure.gov.au/infrastructure-transport-vehicles/transport-accessibility/reform-disability-standards-accessible-public-transport-2002-transport-standards

[175] https://humanrights.gov.au/our-work/disability-rights/australian-human-rights-commission-accessible-bus-stops-guidelines

'waiting area' is provided, it is required to comply with Parts 7, 9.1 and 23 of the DSAPT. Sections 5.5 to 5.11 below are provided as information for those who elect to provide shelters or seating.

Technologies such as SMS, smartphone apps, digital screens and other information technology may be broadly captured under 'Information' but no specific mention or guidance as to how they may be used in a non-discriminatory manner is available.

1.26 Publicity
Information is an essential component of any public transport system. The Disability Standards assume that information about accessible public transport services will be readily available.

27.1 Assumption of minimum literacy and language standards
(1) The Disability Standards provide that operators or providers will supply all passengers with information necessary to use a transport service.
(2) However, the Disability Standards assume that passengers have a minimum level of literacy and language skills.

27.2 Formats for providing information
(1) Operators and providers should expect requests for information in formats such as standard or large print, Braille, audio, touch-tone telephone, TTY and on-line computer or disks.

Finding information in the Guidelines can be a challenge. Sections in the Guidelines do not match sections in the DSAPT. If Sections in the Guidelines were numbered as per the DSAPT Sections they explained it would be easier to find information. For example, DSAPT Section 2.5 is explained in Section 2.2 of the Guidelines. The explanation is good, but would be easier to locate if both Sections were numbered 2.5.

DSAPT
2.5 Poles and obstacles, etc
(1) Poles, columns, stanchions, bollards and fixtures must not project into an access path.
(2) Obstacles that abut an access path must have a luminance contrast with a background of not less than 30%.
Premises except premises to which the Premises Standards apply
Infrastructure except airports that do not accept regular public transport services

DSAPT Guidelines
2.2 Avoidance of hazards on access paths
Operators should avoid hazards created by poles, columns, stanchions, bollards and fixtures alongside access paths. For example, operators and providers should avoid the use of short posts to prevent delivery vehicles from driving onto parts of pedestrian areas. Similarly, they should avoid having commercial signs projecting from walls or portable 'sandwich' advertising boards.

Tell us about your experience accessing and using public transport

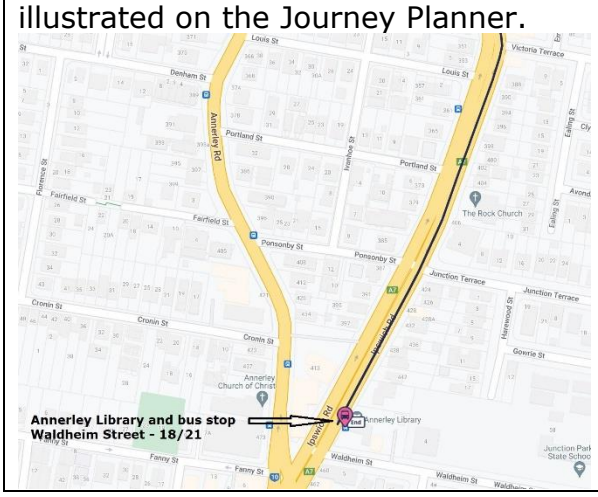
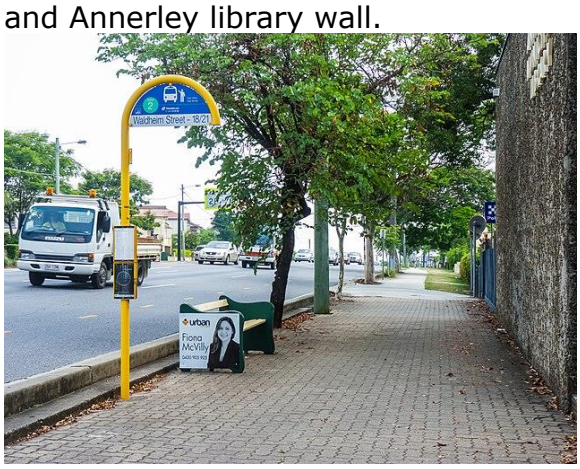
Planning your journey

Mobility data for precincts

Effort mapping[176] is a new technology that determines the amount of effort required to pass along an access path. This is valuable data when planning a journey as it describes the pedestrian environment in the vicinity of a public transport node. While useful data in itself its value would greatly increase if it could be incorporated into any journey planning software provided by transport operators and providers. Journey planners currently do not consider the accessibility of the proposed route and therefore indirectly discriminate against people with a disability.

Inadequate or unavailable accessible infrastructure information.

The TransLink Journey Planner[177] has no information on the accessibility of boarding or alighting points. A bus journey to Annerley Library locates the Waldheim Street – 18/21 bus stop directly adjacent to the library—which appears to be very convenient. Unfortunately, the stop is not accessible due to a raised kerb separating road and footpath preventing a bus's boarding ramp from being deployed. A first-time traveller would discover this on arrival as no public database of bus stop accessibility exists for Queensland.

Annerley library and bus stops as illustrated on the Journey Planner.	Waldheim Street – 18/21 bus stop and Annerley library wall.
	

Passenger loading zones are an essential feature of busy commercial areas. Many, if not most, are not accessible to people in wheelchairs or scooters who are travelling in rear loading wheelchair accessible taxis (WATs). This is due to a continuous kerb face separating footpath and carriageway.

A passenger loading zone on Turbot St in Brisbane directly adjacent to the Queenslanders with Disability Network (QDN) offices and meeting rooms

[176] https://www.tmr.qld.gov.au/Travel-and-transport/Disability-access-and-mobility/Inclusive-mapping-pilot-project
[177] https://jp.translink.com.au/plan-your-journey/journey-planner

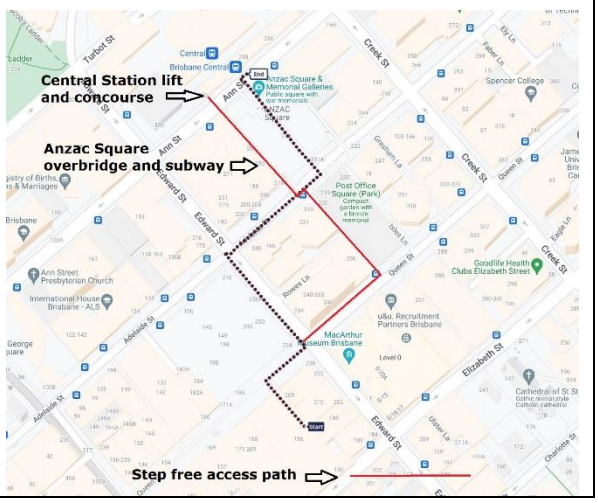
is fully accessible via kerb ramps. This permits easy boarding of, and alighting from, wheelchair accessible taxi (WATs). QDN staff and QDN members who regularly visit are well aware of the facility—as are many WAT drivers. No public database lists the existence of the loading zone or its accessibility. First-time visitors must rely on staff guidance or WAT driver knowledge to be assured of the facility's accessibility. In order to plan WAT journeys to busy commercial areas a database of accessible loading zones is required.

Passenger loading zone at the QDN office, Turbot St, Brisbane.	Passenger loading zone sign at QDN office, Turbot St, Brisbane.
	

Journey planners usually present the shortest route rather than the most accessible route.

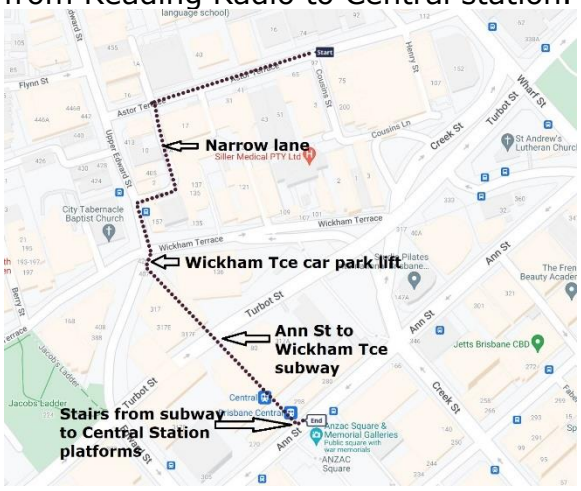
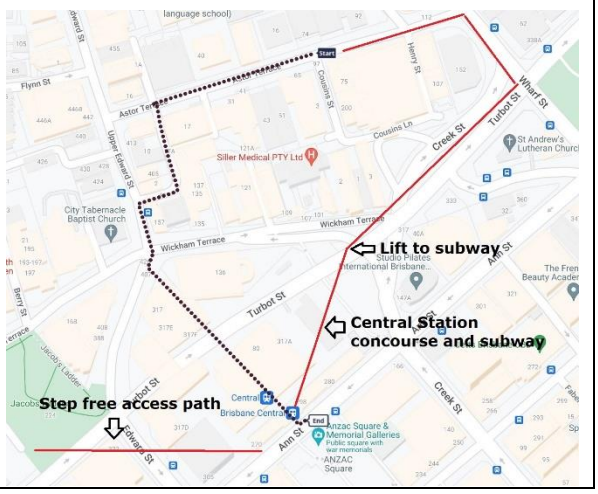
A pedestrian route derived from the TransLink Journey Planner will not always deliver an accessible route. A pedestrian route proposed by the Journey Planner from Brisbane's Wintergarden shopping mall to Central Station is mostly along accessible paths. Unfortunately, it leads to a subway under Ann St that connects to Central Station via stairs only.

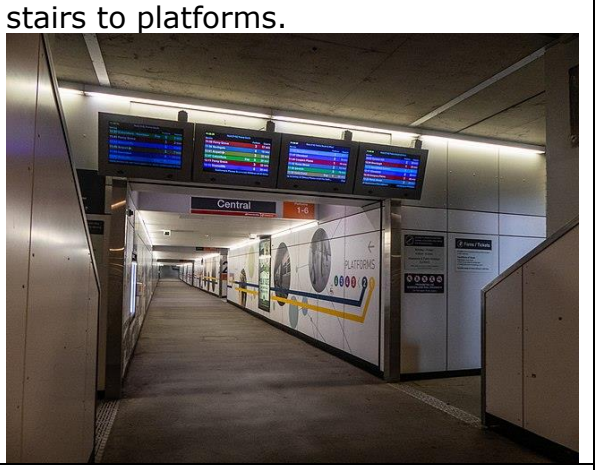
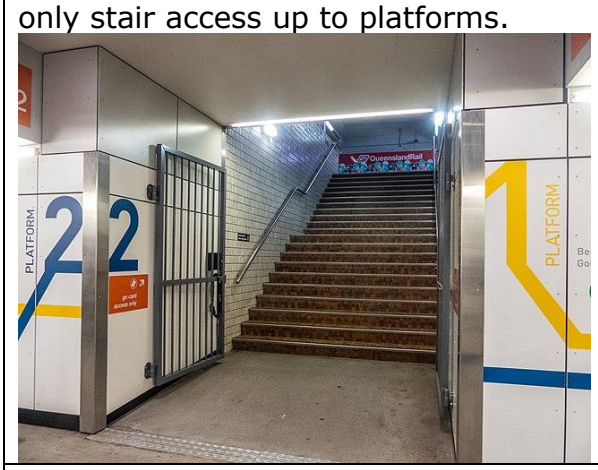
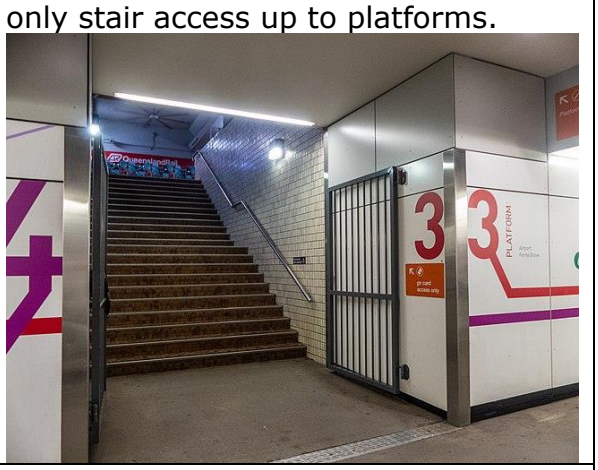
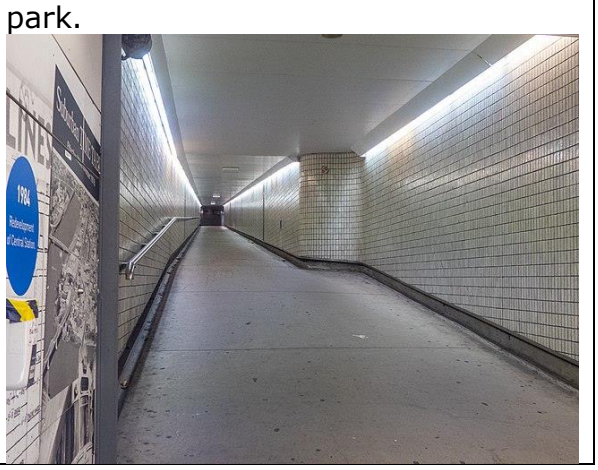
An accessible alternative route exists. The Anzac Square overbridge connects to a subway under Ann St that provides access to Central Station's concourse via lift, escalators or stairs. Regrettably, the Journey Planner has no function to allow selection of an accessible pedestrian route. Rather, it will default to the most direct route regardless of that route's accessibility.

Inaccessible Journey Planner route from Wintergarden to Central station.	Accessible alternative route from Wintergarden to Central station.
	

Similarly, a proposed route from Reading Radio (formerly Radio for Print Handicapped) to Central Station takes a direct but not accessible path. The individual must navigate a narrow lane, find a way into the lift at the Wickham Terrace car park and then transit a subway to the stars leading up to the central Station platforms. This is the same subway that passes under Ann St (illustrated below).

The accessible alternative follows public footpaths to a lift connecting down to the Central Station concourse and subway. Once again, the Journey Planner has no function to allow selection of this accessible pedestrian route.

Inaccessible Journey Planner route from Reading Radio to Central station.	Accessible alternative route from Reading Radio to Central station.
	

Brisbane’s Central Station subway passing under Ann St. 	Brisbane’s Central Station subway and stairs to platforms. 
Brisbane’s Central Station subway has only stair access up to platforms. 	Brisbane’s Central Station subway has only stair access up to platforms. 
Brisbane’s Central Station subway connection to Wickham Terrace car park. 	Brisbane’s Central Station subway connection to Wickham Terrace car park. 

Multiple databases required to journey plan

People must often use several databases to journey plan. This puts them at a disadvantage to do not eed to meticulously research every detail of their journey. For example, Queensland Rail publish a station accessibility

guide[178] that must be referred to in conjunction with the TransLink Journey Planner. Having been given a route and destination station by a Journey Planner people will often have to use software such as Google Street View to estimate the accessibility of infrastructure and access paths leading to their desired destination. This research option does not work for people who have a vision impairment and may not work for some people who have cognitive or intellectual disabilities.

Public transport stops, stations or terminals

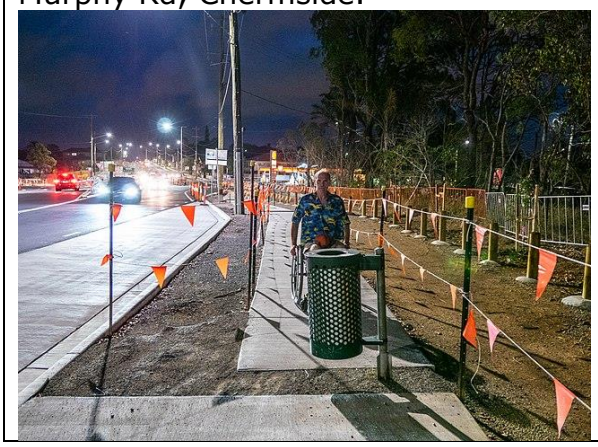
Precinct accessibility

As has been mentioned previously, many accessible public transport facilities are located in precincts that are not accessible to some people with disabilities—particularly those with mobility or vision impairments. Bus stops can be isolated in grassy road verges and inappropriately parked vehicles and objects, or overgrown vegetation can block paths, among many other issues.

The number of compromised access paths is unknown but is likely to be substantial.

Bus stop isolated in grassy road verge and with vehicles blocking the path, Willcott St, Geebung. 	Bus stop isolated in grassy road verge and with street tree blocking the path, Willcott St, Geebung. 

178 https://www.queenslandrail.com.au/Customers/Documents/Station%20Access%20Guide.pdf

Inappropriately placed waste receptacle on access path to bus stop, Murphy Rd, Chermside.	Bus stop slab isolated in the grass verge, Magnetic Island, Townsville.
	

Topographic and space constraints

A significant number of the nation's bus and tram stops are located on topography that makes compliance with Section 8.1 difficult or impossible. The number of stops compromised is unknown, but it is likely to approach 50% in hillier areas of the major cities and towns.

> **8.1 Boarding points and kerbs**
> (1) Operators and providers may assume that passengers will board at a point that has a firm and level surface to which a boarding device can be deployed.
> (2) If a kerb is installed, it must be at least 150 mm higher than the road surface.

While these sites are entirely defensible under Unjustifiable Hardship they nevertheless remain partly or completely inaccessible for many people who have mobility impairments. This unfortunately leaves rather large accessibility gaps in the public transport system that will be difficult to overcome.

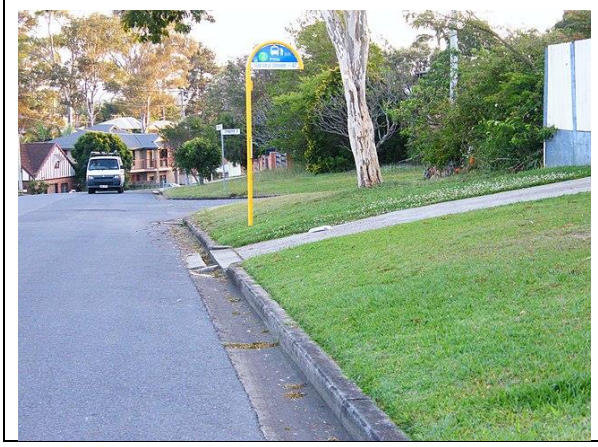
Similarly, some narrow road reserves do not permit sufficiently wide footpaths to permit manoeuvring of mobility aids.

> **3.1 Circulation space for wheelchairs to turn in**
> A manoeuvring area must comply with **AS1428.2 (1992) Clause 6.2,** *Circulation space for a 180 degree wheelchair turn*.

As per topographic constraints there is no easy solution to the constraint of narrow road reserves.

Boarding point constrained by rail reserve fence, Railway Pde, Geebung.  	Boarding point constrained by crossfall, Piccadilly St, Geebung. 
Boarding point constrained by crossfall, Ellison Rd, Geebung. 	Boarding point constrained by road gradient, Newman Rd, Wavell Heights. 

Boarding point unsealed and constrained by crossfall, Piccadilly St, Geebung.



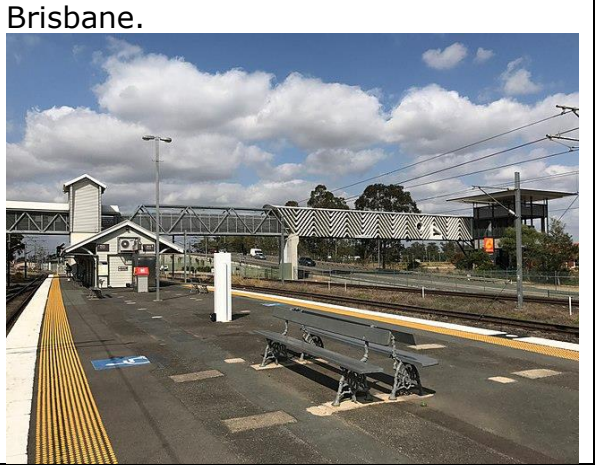
Boarding point constrained by crossfall and road gradient, Edinburgh Castle Rd, Wavell Heights.

Boarding points distant from waiting areas

Boarding points may at times be distant from waiting areas—usually on legacy rail infrastructure. For people who require boarding assistance this means either waiting in the open away from communication and surveillance of moving quickly to the boarding point as the train arrives. Neither is acceptable. Upgrades are steadily eliminating the problem, but the upgrades are badly lagging the Schedule for Compliance.

Boarding point distant from waiting area, Toombul rail station, Brisbane.

Boarding point distant from waiting area, Yeerongpilly rail station, Brisbane.



Information

Audio information

Public address system announcements are often not audible to people who are hard of hearing. Behind the ear hearing aids have a telecoil that allows the wearer to pick up PA messages broadcast over a magnetic induction loop. These hearing loops, when installed, are only required to cover 10% of the waiting area. People relying on them are likely to be in the other 90% of the waiting area and therefore miss the announcement. Also, loops are seldom checked and are often out of order. In some locations the loops are only activated during emergencies or activated on

request, meaning that general service announcements go unheard. Limitations on spatial coverage and time of use discriminate against people who rely on telecoils and hearing loops.

Deaf people who communicate solely in Auslan cannot hear any announcements and so depend on visual alternatives to announcements. These alternatives are seldom provided. Digital signs that feature audio, text and Auslan interpreters have been trialled and when this technology matures the signs should be required by DSAPT.

Auslan

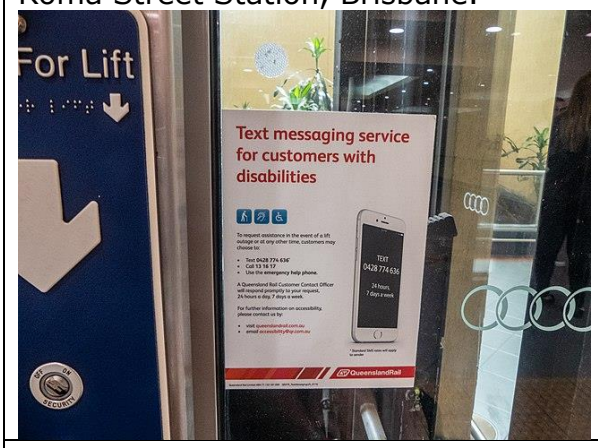
The information needs of the Deaf community are often not satisfactorily met. For those people who depend upon Auslan as their first language audio messages are incomprehensible. Service relate public address system announcements are not understood, leaving people baffled as to any service disruptions or upcoming works. Digital signs that can deliver service announcements in Audio, text and Auslan do exist but are rarely installed. This may hopefully change in future.

Literacy skills in English vary. A study by Napier and Kid (2013) found 25% of Deaf people in their sample group rated their English literacy as poor to average[179]. A study by Lee et al. (2021) reach a similar conclusion[180]. Audio visual material, online or on digital screens, that has captions is of assistance to those Deaf people whose literacy is good to excellent but is not so useful to people whose literacy levels are poor. Unfortunately, the bulk of online audio visual material is only compliant to WCAG 2.0 AA or 2.1 AA. This AA material lacks an Auslan component. Auslan should be included in all service related audio visual material.

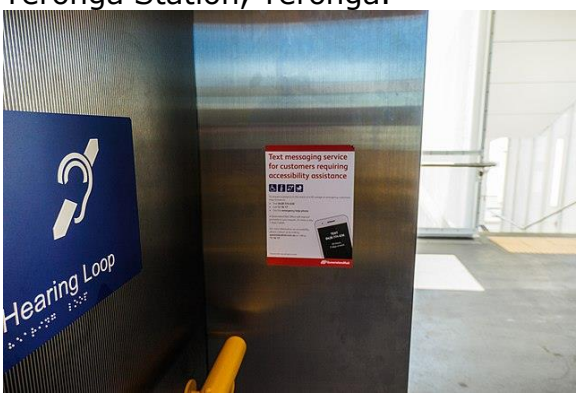
Simple text communication is within scope for most Deaf people. Queensland Rail have a text messaging communication service for people who have disabilities which is appreciated by the Deaf community. Unfortunately, Queensland bus and ferry services do not have equivalent services either on platforms / pontoons or aboard buses or ferries. This excludes Deaf passengers from using the communication tools provided for other passengers such as help and emergency phones. Call centres and customer service centres have for decades had TTY phones. These are useful but bulky, and operable only by trained staff. Texting is mainstream and should be a DSAPT requirement for customer communications.

[179] https://www.racgp.org.au/afp/2013/december/auslan-english-literacy/
[180] https://onlinelibrary.wiley.com/doi/full/10.1111/hex.13336

Qld Rail text messaging service for customers with disabilities on lift, Roma Street Station, Brisbane.



Qld Rail text messaging service for customers with disabilities in lift, Yeronga Station, Yeronga.



Qld Rail text messaging service for customers with disabilities on platform help and assistance phone, Yeronga Station, Yeronga.

Qld Rail text messaging service for customers with disabilities on platform help and assistance phone, Yeronga Station, Yeronga.

On-board the public transport service

Bus

For people with disability able to hail, board and travel independently or receive appropriate support, bus travel is no more challenging than for other bus passengers. Some issues that do arise on occasion can make travel difficult or impossible:

- Bus stops with boarding points that are not accessible
- High floor bus with stair access only
- Insufficient manoeuvring space for larger mobility aids in the aisle
- Mobility aid instability in the allocated space while in transit

- Refusal by other passengers to vacate the allocated space or priority seat
- Next stop announcements not provided in audio and visual format by the bus
- Drivers forget to inform passengers of their stop
- Drivers will not raise fold down seats in allocated spaces
- Over reliance on smartphone apps for locational and service related information
- No audio or visual indication that a request for ramp deployment has been received by the driver when wishing to alight
- Grabrails that lack luminance / colour contrast

Driver attitude can be a major barrier at boarding and in transit. In their study Bonnie Das Neves, Carolyn Unsworth & Colette Browning (2022): 'Being treated like an actual person': attitudinal accessibility on the bus, *Mobilities*, DOI: 10.1080/17450101.2022.2126794[181] found:

> Participants reported that some bus drivers demonstrated ableist attitudes, discriminatory behaviour, and communication methods. Many passengers had reduced or stopped catching buses altogether due to these negative encounters, restricting their community mobility, which further impacted their quality of life. Participants' recommendations for drivers, operators, and transport authorities were thematically integrated into one statement, reinforcing the power of attitudinal access—'treat me like the person I am, who is valid; with a right to time, space and safety; listen to me, and prove you care'.

As has been stated previously, staff training is sorely needed.

Coach

Coach travel can be difficult for people who have mobility impairments. This is mostly the result of a significant level of non-compliance with DSAPT-2002. When inaccessible coaches are used as rail replacement buses this non-compliance also impacts rail travel. Some issues that do arise on occasion can make travel difficult or impossible:

- No lift access to high floor coaches
- Active restraints in allocated spaces not to Australian Standard
- Accessible seats not appropriately located for passengers' individual needs
- Inappropriate locations are chosen for rail bus temporary stops

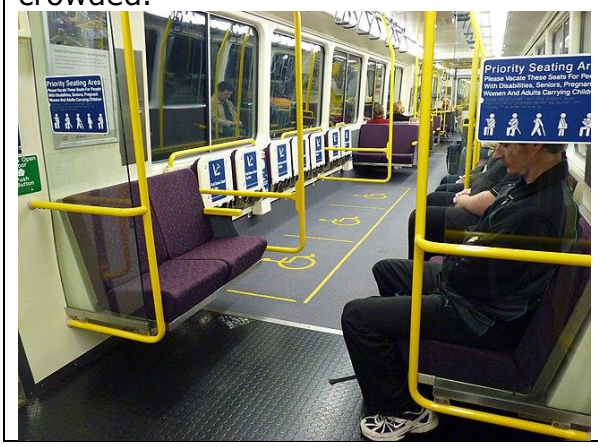
Train

For people with disability able to board and travel independently or receive appropriate support train travel is no more challenging than for other train passengers. Some issues that do arise on occasion can make travel difficult or impossible:

- Boarding assistance may not be readily available at all times
- Staff may forget that a passenger requiring alighting assistance is aboard
- Next stop announcements may not always be functioning

[181] https://doi.org/10.1080/17450101.2022.2126794

- Refusal by other passengers to vacate the allocated space or priority seat
- Allocated spaces located mid car are not accessible when services are crowded
- Deaf passengers unable to use help phones

Allocated spaces located mid car are not accessible when services are crowded. 	

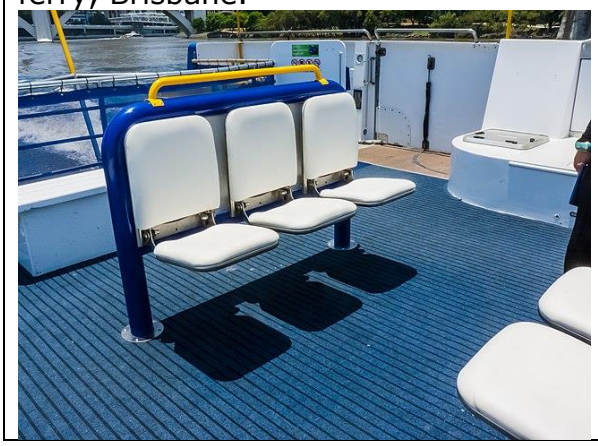
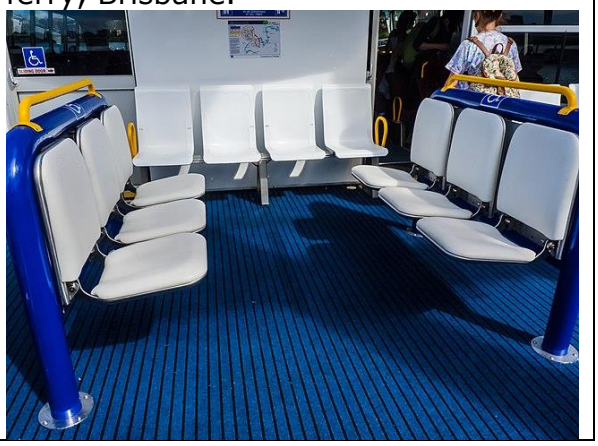
Ferry

Newer ferries appear to be mostly accessible though issues with the fleet include:

- Allocated spaces are not delineated on the deck making them hard to identify and claim—unlike train, bus and tram which delineate allocated spaces on the floor
- Allocated spaces may not be provided on older ferries
- Boarding gangways too steep when deployed at some pontoons
- Next stop announcements not consistently provided
- Hearing loops not provided or not switched on

Ferry allocated spaces are not required to be delineated in DSAPT Section 9.10. It would be useful if they were delineated.

> **9.10 International symbol of accessibility to be displayed**
> (1) The floor area of an allocated space must:
> (a) display the international symbol of accessibility; and
> (b) be outlined in a flush contrasting strip 25 mm wide.
> (2) The colours prescribed in **AS1428.1 (2001) Clause 14.2 (c)** are not mandatory.
> **Conveyances**
> Buses
> Trains
> Trams
> Light rail

Undelineated allocated spaces with grabrail and folding seats, CityCat ferry, Brisbane. 	Undelineated allocated spaces with grabrail and folding seats, CityCat ferry, Brisbane. 

Tram

Newer trams and light rail vehicles are often quite accessible. Older vehicles less so.

- Older trams are not aways accessible for mobility aid users
- Older trams may not have audio visual next stop announcements
- Tram stops may be located on steep inclines

Taxi

The taxi industry is struggling financially due to competition with Rideshare. This is impacting services significantly.

- WATs may be unavailable at certain times of the day
- Drivers may refuse service to passengers who have assistance animals
- Taxi loading zones and passenger loading zones on public streets may not be accessible
- Fares are often prohibitively expensive and subsidy is limited
- Drivers may refuse to accept payment via subsidy scheme cards

Rideshare

Rideshare business models do not accommodate people with significant mobility impairments.

- No equivalent vehicles to WATs are available in the rideshare fleet
- App based booking and payment systems are not accessible to all passengers
- Drivers may refuse service to passengers who have assistance animals
- Passenger loading zones on public streets may not be accessible

Aircraft

The air travel is a challenge for many people who have a disability.

- Disabled persons lifts are not available at all regional airports[182].

[182] https://www.rex.com.au/FlightInfo/SRC.aspx

- Carrying two wheelchairs only per flight discriminates against people who use wheelchairs[183],[184].

The media reports below are of course only the tip of an iceberg of poor practice and discriminatory practice.

> 'Second-class citizen': man lifted on to plane as Darwin airport had no ramp for wheelchair users[185]
>
> 'This was indignity': passenger with disability left without wheelchair at Sydney Airport[186]
>
> Airports and airlines on notice after people with disability speak out about humiliating treatment[187]
>
> Former disability discrimination commissioner Graeme Innes calls for change after 'humiliating' Adelaide Airport experience[188]
>
> Budget airlines make it hard for people with disabilities to travel, but Australian tourist sights get top marks[189]
>
> Disability discrimination case highlights challenges faced by airline customers travelling with electric wheelchairs[190]
>
> Passenger kept from boarding after Jetstar's refusal to assist with wheelchair makes discrimination complaint[191]
>
> Graeme Innes fights to change how disabled people are treated when they fly[192]

Arrival at destination

In all cases the accessibility of the precinct surrounding the arrival infrastructure will determine if the passengers are able to continue their journeys.

Rail

Passengers who need assistance to alight will on occasion be forgotten when arriving at their destination station[193]. At best this is inconvenient

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[183] https://www.infrastructure.gov.au/infrastructure-transport-vehicles/aviation/aviation-access-forum-aaf/two-wheelchair-policies
[184] https://www.jetstar.com/au/en/help/articles/limits-on-assistance-and-mobility-aids
[185] https://www.theguardian.com/society/2022/oct/06/second-class-citizen-man-lifted-on-to-plane-as-darwin-airport-had-no-ramp-for-wheelchair-users
[186] https://www.theguardian.com/society/2022/jul/08/this-was-indignity-passenger-with-disability-left-without-wheelchair-at-sydney-airport
[187] https://www.abc.net.au/news/2022-05-16/reports-of-disability-discrimination-at-australian-airports/101070802
[188] https://www.abc.net.au/news/2022-05-15/sa-adelaide-airport-disability-discrimination-complaint/101068140
[189] https://www.abc.net.au/news/2022-10-06/why-people-with-disabilities-stay-home-and-avoid-flying-analysis/101440056
[190] https://piac.asn.au/2022/05/16/disability-discrimination-case-highlights-challenges-faced-by-airline-customers-travelling-with-electric-wheelchairs/
[191] https://www.theguardian.com/law/2022/aug/05/passenger-kept-from-boarding-after-jetstars-refusal-to-assist-with-wheelchair-makes-discrimination-complaint
[192] https://www.smh.com.au/national/graeme-innes-fights-to-change-how-disabled-people-are-treated-when-they-fly-20220516-p5alqs.html
[193] https://www.abc.net.au/news/2017-05-28/woman-karin-swift-wheelchair-stranded-brisbane-train-apology/8566628

at worst traumatic. Network Rail's policy document *Accessible Travel Policy; Making Rail Accessible—Helping Older and Disabled Passengers*[194] describes a protocol that should be considered for incorporation into DSAPT:

> In line with ORR ATP Guidance, there is now a single handover protocol being implemented across the rail network ensuring that the right information is communicated from the boarding to the alighting station, which will give passengers confidence that they will receive the required assistance at all stages of their journey.

Platform lifts may be out of service on occasion. Passengers may be informed of this at boarding or on arrival but often they find out after their service has departed, leaving them stranded and waiting for the next service.

Bus

Drivers may forget to inform vision impaired passengers that they have reached their destination stop.

Signal devices in allocated spaces may not be functioning, meaning that drivers are unaware that a person in the allocated space wishes to alight at the next stop.

Little or no information is publicly available on the accessibility of the destination bus stop.

The destination bus stop may not be connected to access paths that allow continuation of the journey.

Taxi

There may not be a suitable location near the destination at which a passenger using a mobility aid can alight from a WAT. Few on-street taxi zones or passenger loading zones are accessible. WATS must sometimes block driveways, or the passenger must travel along the carriageway until they find a driveway or kerb ramp that allows them to access the public footpath from the carriageway. This puts the passenger at a degree of risk that passengers able to step over a kerb do not face.

Where accessible taxi zones and passenger loading zones do exist there are no publicly available databases detailing their location.

Airports

Various media reports highlight the experiences of passengers with disabilities as they exit airports.

> 'This was indignity': passenger with disability left without wheelchair at Sydney Airport[195]
>
> Airports and airlines on notice after people with disability speak out about humiliating treatment[196]

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[194] https://www.networkrail.co.uk/wp-content/uploads/2022/02/Accessible-Travel-Policy.pdf

[195] https://www.theguardian.com/society/2022/jul/08/this-was-indignity-passenger-with-disability-left-without-wheelchair-at-sydney-airport

Graeme Innes fights to change how disabled people are treated when they fly[197]

Disruption to your journey

Deaf or hard of hearing passengers cannot hear instructions given as audio announcements over PA systems. Users of telecoil equipped hearing aids cannot hear instructions given as audio announcements if vehicles or vessels have no hearing loop or the hearing loop is not activated.

People with intellectual or cognitive disabilities may not understand audio instructions broadcasted over a PA system.

Aphasia, Deafness or speech impairment may prevent passengers from effectively communicating with staff. This can prevent the exchange of information that staff should understand in order to assist the passenger during the disruption.

People with vision impairments are lost if in a location not familiar to them and if they are expected to find their way to alternative transport. This is particularly an issue when passengers are not advised of their desired stop. Catching a bus, train or tram back to the desired stop is almost impossible without assistance in finding the required boarding point. This assistance is only available at staffed locations.

Network Rail's[198] policy document *Accessible Travel Policy; Making Rail Accessible—Helping Older and Disabled Passengers*[199] commits to timely provision of information during delays caused by 'incidents'. The information is in multiple formats and includes direct assistance by hopefully well trained staff:

> When an incident does happen, we work with Train Operating Companies to get essential travel information out to passengers in the station.
>
> If a delay is expected, our managed stations issue immediate advice for travellers within the station, including via visual and aural station announcements, the National Rail Enquiries website, train crews and Train Operating Company customer service teams.
>
> If the incident is likely to have a severe impact on passengers, we then communicate our core message, highlighting three important pieces of information:
>
> > **The problem:** the details of the incident or infrastructure problem.
> >
> > **The impact:** the impact on trains and contingency plans.
> >
> > **The advice:** alternative routes or transport options.

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196 https://www.abc.net.au/news/2022-05-16/reports-of-disability-discrimination-at-australian-airports/101070802

197 https://www.smh.com.au/national/graeme-innes-fights-to-change-how-disabled-people-are-treated-when-they-fly-20220516-p5alqs.html

198 https://www.networkrail.co.uk/who-we-are/

199 https://www.networkrail.co.uk/wp-content/uploads/2022/02/Accessible-Travel-Policy.pdf

> We aim to review this message every 20 minutes.
>
> Our staff will take the time to ensure they clearly explain what is happening and if needed, provide assistance to leave the station and take onward accessible transport arranged by the relevant Train Operating Company.
>
> We will do everything possible to ensure that passengers are able to continue their journey and are not left stranded.
>
> All of our frontline station staff have specific training on inclusive service, including disability equality training which helps to equip them to communicate with each individual passenger in the way the passenger prefers.

The reformed DSAPT should commit to a firm, nationally consistent policy for informing passengers of public transport systems of delays and alternative means of continuing the journey that covers the spectrum of people's communication needs.

People with mobility impairments may not easily egress from trains, trams, buses or ferries during emergencies. Trains may not be at or near platforms when they come to a halt, which presents challenges to both the operator and passenger[200],[201]. Buses may have the single accessible door blocked or damaged. Ferries may need to transfer passengers while midstream or mid-harbour. In most instances these circumstances mean delay in egress compared to other passengers with risk often increasing as the delay extends.

Rail buses are often inaccessible coaches leaving scarcely available WATs as the only alternative. WATs called as emergency paratransit are sometimes commandeered by other passengers or simply unavailable.

Infrastructure outage or unavailability

The provision of information on planned or unplanned disruptions, maintenance or breakdowns is mixed. Some operators, providers and jurisdictions do well, others not so well. A faulty lift encountered unexpectedly can bring a journey to a halt, cause appointments to be missed and other annoyances. Similarly with other features such as accessible toilets, boarding aids, accessible doors and so on. The risk of unexpectedly finding a temporarily faulty fixture or a fixture unavailable due to maintenance is a strong disincentive to public transport travel.

An ongoing program where information and options regarding temporary impediments, planned and unplanned, are made available through multiple channels is needed. This is an international good practice. Network Rail's[202] policy document *Accessible Travel Policy; Making Rail*

[200] https://www.smh.com.au/national/wheelchair-train-commuters-stranded-20070716-gdqmmn.html
[201] https://www.abc.net.au/news/2007-07-21/harbour-bridge-trains-stopped-for-emergency/2508926
[202] https://www.networkrail.co.uk/who-we-are/

Accessible—Helping Older and Disabled Passengers[203] commits to timely provision of information on 'short term restrictions':

> We always have at least one member of staff in each managed station trained to keep the information about accessibility up to date. This exercise is completed weekly, and additionally within 24 hours of being notified about any short-term restrictions affecting accessibility. This includes any physical constraints to the station, temporary work affecting accessibility, or facilities being out of use; like lifts, escalators or toilets.

The DSAPT should require a similar process.

The need for better communication with all passengers is acknowleged by the findings of an interim review of Sydney Trains[204]:

> Another recommendation was for better dissemination of information during outages, including better delivery of announcements to passengers stuck on trains who are often left in the dark as to why they've stopped.

Complaints

Making complaints about operators and providers not meeting obligations is at times challenging and at other times daunting. Finding the correct complaints channel—if it exists—can be difficult and confusing. Lodging complaints with the AHRC is easy but after the lodgement the process becomes increasingly complex and if conciliation fails leads to the Federal Court.

Court can be a forbidding scenario. A common climbing rattan found in tropical and subtropical rain forests is referred to as 'lawyer cane' or 'wait-a-while'. The names refer to the wickedly barbed tendrils that once embedded in a person make the plant extremely difficult and painful to escape. Such is the legal process.

Unable to directly contact operator

Transport for Brisbane, a Division of Brisbane City Council, has a fleet of over 1200 buses[205]. Counter intuitively, complaints concerning these buses do not go to the Council but to Translink[206]. It seems likely that this confusing situation where complaints must be put through to Translink rather than the operator pertains to most public transport services in Queensland[207]. Rather than allowing a passenger to liaise directly with the operator Translink acts as gatekeeper. This increases the likelihood of miscommunication and passengers being dissatisfied with the process and outcome.

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[203] https://www.networkrail.co.uk/wp-content/uploads/2022/02/Accessible-Travel-Policy.pdf
[204] https://www.theguardian.com/australia-news/2023/may/22/sydney-train-network-plagued-by-almost-40000-defects-and-delays-likely-to-worsen
[205] https://www.brisbane.qld.gov.au/traffic-and-transport/public-transport/buses/your-buses
[206] https://www.brisbane.qld.gov.au/traffic-and-transport/public-transport/lost-property-and-feedback#feedback
[207] https://translink.com.au/contact-us/feedback

A similar scenario exists for Queensland Rail. Customer complaints and feedback are to be lodged via Translink[208].

Cost of legal complaint

It has been said that justice is for those who can afford it. The resources available to operators and providers far exceed those available to complainants. Even with pro bono legal support the emotional and financial toll of the legal system on people who have a disability perpetuates the significant power imbalance between operators and providers and people with disability. The risk of losing, with costs awarded against them, is a further disincentive to complaint.

The Australian Human Rights Commission's 2021 Position Paper *Free & Equal: A reform agenda for federal discrimination laws* [209]is clear on the disadvantage complainants face.

> The costs that may be incurred in unlawful discrimination proceedings in the Federal courts have been identified as a significant deterrent to bringing such proceedings.
>
> Discrimination complainants are often vulnerable or disadvantaged, and will not necessarily have legal representation, so there is greater need for a decision-maker familiar with the law, how it operates, and how best to communicate with vulnerable individuals.

The Federal Attorney General's Department concurs in its 2023 *Consultation paper: Review into an appropriate cost model for Commonwealth anti-discrimination laws*[210]:

> The costs associated with litigation required to assert an individual's rights under discrimination law have long been reported as a disincentive to individuals pursuing such litigation.

Hopefully meaningful reforms that balance the scales of justice will occur. Otherwise we will see a continuation of the current lamentable *status quo*.

In 2013 Mr Graeme Innis—who has a vision impairment—represented by the Public Interest Advocacy Centre (PIAC)[211] lodged a discrimination claim against RailCorp (now known as Sydney Trains) for failing to provide 'next stop' announcements. This court action followed a period of unsuccessful representation to the operator and provider[212].

> Following two years of complaints and unsuccessful representations about this problem to the relevant Minister and Department, Graeme Innes AM, the (then) Disability Discrimination Commissioner, who is blind, commenced action against RailCorp (later to become Sydney Trains). Mr Innes claimed that the failure to

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208 https://www.queenslandrail.com.au/aboutus/contact/contactform

209 https://humanrights.gov.au/sites/default/files/document/publication/ahrc_free_equal_dec_2021.pdf

210 https://consultations.ag.gov.au/rights-and-protections/cost-model-anti-discrimination-laws/user_uploads/discussion-paper-review-appropriate-cost-model-commonwealth-anti-discrimination-laws.pdf

211 https://piac.asn.au/projects/discrimination/graeme-innes-audible-on-train-announcements/

212 https://piac.asn.au/legal-help/public-interest-cases/audible-on-train-announcements/

make audible announcements on 36 train journeys between 28 March 2011 and 9 September 2011 amounted to unlawful discrimination.

PIAC took on the case and was successful, with the Federal Circuit Court finding that Sydney Trains had breached the Disability Discrimination Act. Following the Court's decision, a number of other complaints made against Sydney Trains by Mr Innes also settled through conciliation.

Rail Corp was unconcerned about spending $420,000 of taxpayer dollars defending an indefensible non-compliance[213]. This highlights the imbalance of power and resources between complainants and respondents and contributes to the sense of impunity that many respondents exhibit.

Proceeding to court can at times produce puzzling outcomes such as the Haraksin v Murrays Australia Ltd[214] case. Such outcomes contribute to the sense of futility and disempowerment that people with disability sometimes feel.

Appendix 1 Engineers Australia: Chapter 8 Recommendations

Engineers Australia's Chapter 8 Recommendations in *Engineers Australia 2022 Universal Design for Transport-Transport Australia Society Discussion Paper*[215]:

8. Recommendations

1. Recognise that compliance alone doesn't mean good accessibility - focus on universal access.
2. Support the DSAPT modernisation process.
3. Leverage existing programs (fleet purchasing, major projects) to get universal access outcomes.
4. Need for long term program and state commitment to retrofitting existing infrastructure to achieve DSAPT standards – including a funding commitment.
5. Make more use of state-based accessibility groups in understanding solutions and prioritisation of finite funding- i.e., maximise accessible benefits.
6. Need to make sure there is access to public transport for those who are reliant on public transport for mobility due to their disability, including in regional areas.
7. Leverage technological advances including internet of things (IOT) and artificial intelligence into wayfinding, access to services etc.
8. Engineers and designers (and regulators) need to have agile mindset to new technologies and ways of providing accessible transport options.

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[213] https://www.smh.com.au/national/nsw/disability-case-costs-railcorp-420-000-20130328-2gxn5.html
[214] https://www8.austlii.edu.au/cgi-bin/viewdoc/au/cases/cth/FCA/2013/217.html
[215] https://www.engineersaustralia.org.au/sites/default/files/2022-10/universal-design-for-transport-discussion-paper.pdf

9. Opportunities for new vehicles to be designed for more accessibility-zero emission busses (ZEBs), new trams and trains.
10. Universal access needs to be a guiding principle through the design process not post-design check.
11. Harmonise public transport and active transport infrastructure design standards and best operating practices.
12. Subject matter experts should be engaged at project commencement to identify appropriate standards that lead to good accessibility outcomes.

Appendix 2 Percentage of accessible public transport assets by date and jurisdiction:

Percentage of accessible public transport assets by date and jurisdiction from *Australian Infrastructure Audit 2019*[216].

Table 3: Numerous jurisdictions are unlikely to meet legislated accessibility requirements

Jurisdiction	Mode	Percentage accessible	Year
New South Wales	Railway stations	53.7%	2018
Victoria	Bus stops	52%	2012
	Tram stops	22%	2018
	Trams	24%	2018
Western Australia	Railway stations	53%	2018
South Australia	Buses	80%	2018
Australian Capital Territory	Bus stops	55%	2012
Tasmania	Buses	52%	2017
	Bus stops	37.5%	2017

Note: This is not presented as a comprehensive view, as not all jurisdictions publicly publish their progress.

Source: Transport for NSW (2018), Department of Transport (2012), Victorian Auditor-General's Office (2018), Transperth (2019), Government of South Australia (2018), Transport Canberra (2019), Metro Tasmania (2018)[266]

216 https://www.infrastructureaustralia.gov.au/sites/default/files/2019-08/Australian%20Infrastructure%20Audit%202019.pdf