



Third Review of the Disability Standards for Accessible Public Transport

Transport for NSW Submission

Contents

1	Terms of Reference	4
2	Introduction	5
2.1	Implementation of previous Transport Standards reviews	5
3	Efficacy of the existing Transport Standards	8
4	Heavy rail	9
4.1	Accessibility of train stations	9
4.1.1	Provision of cross corridor access	10
4.1.2	Flange gaps	10
4.1.3	Station standards	11
4.1.4	Roll on roll off access to trains	11
4.1.5	Circulation requirements and access pathways on platforms	12
4.1.6	Tactile Ground Surface Indicators (TGSIs)	12
4.2	Accessibility of train carriages	12
4.2.1	Double-deck design	13
4.2.2	Limitations with retrofitting	13
4.2.3	Exemptions	13
4.3	Recommendations for heavy rail	13
5	Buses	15
5.1	Bus services and fleet	15
5.1.1	Interface with stops	15
5.1.2	Physical constraints	16
5.1.3	Consistency in application of Transport Standards	16
5.1.4	Occupancy safety and securement	16
5.2	Bus stops	16
5.3	Recommendations for buses	17
6	Light rail	18
6.1	Recommendations for light rail	18
7	Ferries	19
7.1	Ferry wharves	19
7.1.1	Landside and waterside ownership	19
7.1.2	Tidal variances	19
7.2	Ferry services and fleet	20
7.3	Recommendations for ferries	20
8	Point to Point services	21
8.1	Recommendations for taxi and point to point services	22
9	Information	23
9.1	Digital information	24
9.2	Touchscreen technology	24
9.3	Future-proofing	24
9.4	Recommendations for information	25
10	Multi-modal issues	26
10.1	Unjustifiable hardship	26
10.1.1	Recommendations	26
10.2	Whole of precinct issues	26
10.2.1	Recommendation	27
10.3	Lighting standards	27

10.3.1	Recommendation.....	27
10.4	Alignment to international standards.....	27
10.4.1	Recommendation.....	27
11	Future of mobility	28
11.1	On Demand Public Transport services	28
11.2	Limitations of standards.....	29
11.3	Connected and automated vehicles.....	29
11.4	Mobility as a Service.....	30

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1 Terms of Reference

The Commonwealth *Disability Discrimination Act 1992* (DDA) prohibits both direct and indirect discrimination on the grounds of disability, both to the person with a disability as well as family members, carers and associates (hereafter referred to as “**discrimination**”).

The DDA allows disability standards to be formulated in a range of areas. The *Disability Standards for Accessible Public Transport 2002* (Transport Standards) were made by the Attorney-General’s Department under the DDA and are administered by the Department of Infrastructure, Regional Development and Cities. The purpose of the Transport Standards is to support public transport operators and providers to remove discrimination from public transport services by providing specific details about the standards they need to meet.

Part 34 of the Transport Standards requires a review of the efficiency and effectiveness of the Transport Standards is every five years. The 2017 review of the Transport Standards was announced by the Commonwealth Department of Infrastructure, Regional Development and Cities in August 2018. The 2017 Review will:

- assess whether discrimination has been removed, as far as possible, according to the requirements for compliance set out in Schedule 1 of the Transport Standards
- advise on any necessary amendments to the Transport Standards.

The Review will focus on:

- reporting public views on progress towards achievement of targets set out in the Transport Standards
- assessing compliance with the requirements set out in Schedule 1 of the Transport Standards, in particular those under Part 3 of Schedule 1
- identifying initiatives and actions with respect to removing discrimination from public transport services undertaken by state and territory governments since the 2012 Review
- assessing the progress of the implementation of the response to the 2012 Review.

2 Introduction

The NSW Government is committed to implementing the *Disability Standards for Accessible Public Transport 2002 (Cth)* (Transport Standards) to the fullest extent possible. Transport enables everyone to get the most out of life, wherever they live and whatever their age, ability or personal circumstances. Access to transport is fundamentally important for the people of NSW. It is a vital service that connects people to their communities and helps them to access jobs, social activities, family, and essential services, such as medical appointments.

Transport for NSW aims to provide public transport vehicles, stops and interchanges that, all customers can use without difficulty, removing barriers to access in accordance with the Transport Standards. Access for all customers, no exceptions, is a core objective of *Future Transport 2056*, an overarching strategy supported by a suite of plans to achieve a 40 year vision of Transport in NSW. The *Transport for NSW Disability Inclusion Action Plan 2018-2022* is one of the supporting plans of Future Transport. It includes over 160 actions to provide accessible infrastructure, services and meet our obligations as employers of choice by people with disability.

NSW has the largest passenger transport operations in Australia, with the Greater Sydney Metropolitan Area having the country's highest percentage of public transport use. NSW maintains Australia's largest rail, bus and ferry networks to meet this demand. To meet future demand, Transport for NSW is delivering the largest transport infrastructure program this nation has ever seen - \$51.2 billion of investment for game-changing projects like Sydney Metro and Sydney Light Rail that will shape our cities, centres and communities for generations to come.

Transport for NSW continues to focus on delivering strong customer outcomes and improved accessibility. The Transport Access Program has delivered upgraded facilities with improved accessibility and benefits to get customers to, from and around public transport interchanges. In the 2018 NSW Budget, the NSW Government confirmed a further \$882 million would be spent on improving access to public transport, boosting NSW's investment in public transport accessibility to \$2 billion since 2011. It is also engaging with people with disability about the opportunities provided by innovation and new technologies to improve access to transport services.

This submission by Transport for NSW on the *Third Review of the Disability Standards for Accessible Public Transport 2002* provides commentary on the implementation of recommendations from previous reviews, information on the current levels of accessibility, implementation issues faced in relation to the current Transport Standards and future recommendations for consideration by the Australian Government.

2.1 Implementation of previous Transport Standards reviews

Transport for NSW is concerned about the lack of progress in implementation of many of the recommendations from the 2007 and 2012 Reviews. The majority of recommendations in the 2007 review did not proceed or were deferred to the 2012 review. Following the 2012 Review, major issues for transport operators and service providers have remained unresolved. Transport for NSW commentary regarding a number of the 2012 Review recommendations is provided below.

Recommendation 1: That the Australian Government, jointly with state and territory governments, commence a process for updating and modernising the Transport Standards. This work should be undertaken in close consultation with industry, local government and the disability sector, and include research on the technical issues raised in this review, the development of options, and assessment of the impact of any proposed changes to the standards, with this work to be completed by 30 June 2017.

Transport for NSW strongly supports this recommendation and proposes that the Australian Government gives greater priority and resources to expedite implementation. Further, Transport for NSW strongly recommends that the modernisation process incorporates a technical review to consider if the standards applied are practically implementable by transport operators. This is most important in the rail environment where a number of the current standards cannot be implemented within the physical constraints of rail conveyances and on legacy stations. Transport for NSW wants to ensure that the revised standards meet the functional requirements for people with disability. As each transport mode has differing limitations and are subject to other industry based standards, including safety, the introduction of modal specific standards and performance requirements for infrastructure and conveyances should be adopted.

The need for modal specific standards will be demonstrated through commentary provided in further sections of this submission.

Recommendation 2: That the Australian Government, jointly with state and territory governments, establish a national framework for reporting on progress against the Transport Standards by 31 December 2016.

This recommendation should be reassessed after the process for modernisation of the existing Transport Standards is completed as outlined in recommendation one. This is due to the expectation that the modernisation process would introduce new standards to report against.

Recommendation 4: That the Australian Government, jointly with state, territory and local governments, develop accessibility guidelines for a whole-of-journey approach to public transport planning by 30 June 2016.

Transport for NSW has welcomed the implementation of this recommendation. The Whole of Journey Guidelines was released by the Australian Government in December 2017. Transport for NSW participated in the development of these guidelines and encouraged consultation with people with disability. Transport for NSW has championed the use of the Guidelines by contractors where appropriate. The principles of whole of journey accessibility are also reflected in Transport for NSW's Disability Inclusion Action Plan 2018-2022.

Recommendation 5: That the Australian Government, in collaboration with state and territory governments, develop and implement a national motorised mobility device labelling scheme.

Transport for NSW acknowledges and supports the work that has been done by the Australian Government in the development of the motorised mobility labelling scheme. The Australian Technical Specification has been finalised and released by Standards Australia in 2018. Transport for NSW is supportive of the labelling scheme, however, understands that the success of the scheme relies heavily on industry and customer education.

Further, the technical specifications will require transport operators to develop new policy around regulation and consideration needs to be given to how existing scooters will be classified, noting that they are a considerable financial investment for many users.

Recommendation 6: That the Australian Government, jointly with industry, state and territory governments, develop consistent national compliance milestones and response times for wheelchair accessible taxis by 31 December 2016.

The point to point industry has undergone significant reform in NSW. Transport for NSW believes that the reporting requirement of response times be examined and adjusted to reflect the changed operating environment. In a deregulated market the target of equivalent response times is almost impossible to measure as the required information is no longer recorded. An alternative approach is to consider the appropriate design standards for a wheelchair accessible vehicle and ensuring that booking and payment platforms are accessible as part of the implementation of Recommendation 1 of the 2012 Review. Further details are provided in Section 8 of this submission.

3 Efficacy of the existing Transport Standards

Transport for NSW strongly recommends that the current review of the Transport Standards not only focuses on assessing compliance with the targets set out in Schedule 1 but also considers any necessary amendments to the Transport Standards. Amendment of the current Transport Standards is needed in order to provide realistic specifications for transport operators and removing standards that are not feasible to comply with due to the nature of transport environments. It is also necessary to take into account technological innovations that are changing the way transport services are delivered and were not anticipated when the Transport Standards were written in 2002 for example the introduction of digital technology and wayfinding.

While it is arguable that areas of non-compliance (particularly in the rail and maritime environments) fall under the “unjustifiable hardship” and “equivalent access” provisions of the *Disability Discrimination Act 1992 (Cth)*, the uncertainty creates significant difficulties for transport operators and service providers. In particular, as competitive tendering and contracting is increasingly used as an instrument of transportation reform, service operators are reluctant to take on the legal risk of seemingly ‘non-compliant’ assets.

Furthermore, the current prescriptive approach of expressing requirements in quantified terms has had the effect of restricting the scope of alternative solutions that may achieve the same or better outcomes for people with disability.

Transport for NSW also supports the widely held view of the disability sector that requirements in the Transport Standards articulate the design functional outcomes without the need to reference specific Australian Standards. This would not only make the requirements of the Transport Standards more accessible for disability stakeholders but also assist transport providers to fully understand and implement requirements. Consideration of changes to relevant standards and their subsequent application to the Transport Standards should be considered as part of the statutory five-yearly reviews undertaken by the Australian Government.

The following sections of this review will:

- demonstrate improvements made to accessibility within Transport for NSW,
- provide commentary on issues in implementing the current Transport Standards,
- provide recommendations on clarification, inclusion or amendments to the Transport Standards as appropriate.

4 Heavy rail

Sydney Trains and NSW Trains are responsible for front line service delivery of the existing heavy rail network in NSW. Their focus is delivering reliable, safe and accessible transport services. The existing rail network in NSW is the oldest and most extensive in Australia. Over 2000 carriages provide services to 370 train stations in the Sydney Trains, Intercity Trains and Regional Trains networks. Regular coaches that replace trains at some junction points in the Regional Trains network are 100 per cent accessible.

In 2017/2018, the annual Opal patronage for Sydney Trains and NSW TrainLink Intercity services was 345.4 million and 41.4 million journeys respectively. During this time, there were also over 1.6 million booked journeys on NSW regional rail services.

Accessibility across station infrastructure continues to improve through initiatives like the Transport Access Program. To date, over \$2 billion has been committed to the Transport Asset Program by the NSW Government with 90 per cent of all journeys now accessible. Upgrades include new lifts, escalators and ramps to stations to make it easier for people with limited mobility and parents with prams.

4.1 Accessibility of train stations

Currently 209 stations on the Sydney Trains and NSW TrainLink network are wheelchair accessible out of a total of 370.

In comparisons to other international networks, NSW compares well in accessibility for people with disability. Other rail networks have advised the following accessibility levels:

- London Underground - 50 accessible stations out of 270 stations
- Paris Metro - 9 accessible stations out of 309 stations
- New York City's Metro - 117 accessible stations out of 472 stations
- Montreal Metro - 13 accessible stations out of 68 stations
- Mumbai Suburban Railway - 16 accessible stations out of 122 stations.

The higher level of accessibility in Australia demonstrates the efficacy in adopting a legislative standards approach that makes transport providers responsible for ensuring programs are in place to address shortfalls. However, further investigation needs to be done in ensuring the appropriateness of the standards being applied.

As complete accessibility cannot be provided immediately, Transport for NSW has been co-ordinating its efforts to upgrade facilities where the greatest number of customers benefit from the investment. Prioritisation for access upgrades is based on a number of factors, including station patronage, local demographics, access to educational and health services, parking, bus services, shopping, tourism and how stations form a network or provide interchange opportunities. As result, 90 per cent of all rail journeys in Sydney are accessible.

Transport for NSW has adopted the underlying principle that whenever major maintenance or upgrade work takes place at stations, the rail operator or Transport for NSW should take the opportunity to ensure the output of that particular work provides for improved accessibility. Many of the constraints in achieving full compliance are a result of the unique operating environment of an existing rail station and the variability of the fleet used.

The age of the rail infrastructure and its configuration means that there will be continued reliance on 'direct assistance' via boarding ramps to move from rail platforms on to the train. Despite a clear preference amongst people with mobility devices for independent access from

platform to train, such access will not be possible whilst there is variability of the fleet used on any given line and while platforms are curved.

The capacity to provide roll-on and roll-off access to trains is also impacted by freight trains operating in some parts of the rail network. Freight trains have a lower floor height and wider body which must be accommodated. If platforms are raised, freight access to the line would be significantly impeded.

Sydney Metro is Australia's largest public transport infrastructure project. In 2024, Sydney will have 31 metro railway stations and a 66km standalone metro railway system, revolutionising the way Australia's biggest city travels. Sydney Metro will provide fully accessible stations with platforms level with train floors to provide minimal gaps between platforms and trains for step free access. In developing station designs, Sydney Metro has undertaken significant stakeholder engagement, including people with disability, to ensure designs not only meet compliance but have the highest degree of functionality for all customers.

The Transport Standards have many requirements that are difficult to deliver in a rail environment. These issues are outlined below.

4.1.1 Provision of cross corridor access

The current Transport Standards require all stations to be brought into full compliance regardless of patronage or demand for accessible services. While all customers benefit from well - designed, accessible stations, some locations with extremely low patronage alternative solutions may need to be considered. It is not clear that the cost of providing a fully accessible station in all locations is justifiable in terms of the number of customers who would directly benefit. Options include:

- Not undertaking access mitigation works due to lack of demand, relying on unjustifiable hardship defences
- Providing compliant, at-grade level crossings and minimal access works including ramps.

Alternatively, the implications for having to make a location accessible may have adverse impacts as agencies may be left with no choice, particularly where costs are prohibitive, to close stations with extremely low patronage causing further social inclusion issues for people in remote and rural areas particularly.

The Transport Standards, in relation to aerial cross corridor access via lifts also impose high costs in more densely populated areas. In particular, the requirement to provide a passing area at least every 6 metres along any two - way access path that is less than 1800 mm wide imposes significantly higher construction costs. This is due in part to the application of rail safety standards in relation to overhead heights on electrified and crash-resistance standards for lift shafts on rail platforms. This is also problematic at locations of heritage significance where unjustifiable hardship provisions may be relied upon in the event of a complaint.

4.1.2 Flange gaps

In many low patronage locations, level crossings form part of the access path to the station. In order to make these stations accessible a solution needs to be developed to address the flange gap for the road/rail interface as they exceed the requirements under the Transport Standards.

The Australasian Centre for Rail Innovation (ACRI) is an independent entity with the aim to provide research and innovation for the Australasian Rail Industry on significant challenges and opportunities we face in the rail sector today. ACRI, of which TfNSW is a participant, comprises of all mainland Australian and New Zealand Transport departments, the Office of

the National Rail Safety Regulator, Rio Tinto, BHP Billiton, Brookfield Rail and the Australian Rail Track Corporation.

Current ACRI research into flange gap fillers concluded that significant entrapment and trip risks exist with the flange gaps at level crossings, particularly for those using wheel chairs, wheeled walkers, walking canes and prams. There are various flange gap fillers available however, these have not been properly evaluated and tested for their effective ability to reduce risks without creating additional hazards.

Should a safe compliant solution not be forthcoming, consideration needs to be made into allowing level crossings built to current Australian Standards to form part of the access path.

4.1.3 Station standards

Currently train stations are classified as Class 9b buildings under the National Construction Code, Australian Building Codes Board and *Disability (Access to Premises-Buildings) Standards 2010* (Premises Standards). There is often ambiguity on the extent that the building classification applies to in the rail environment. It is unclear whether associated facilities, such as platforms (covered or uncovered) are intended to be included under this building classification.

Train stations are complex environments and need to take into consideration a number of overarching standards, industry requirements and legislation such as Rail Safety National Law in conjunction with requirements under the Transport Standards and the Premises Standards.

Some issues that are experienced include:

- The requirement for fire hose reels and other fire life safety systems on platforms due to the extent of open sided canopy/shelter coverage.
- Exceeding the maximum allowable travel distance to an exit because platforms need to be at least 180 metres to allow for the length of the train.

Transport Standards do not allow performance solutions unlike other buildings under the National Construction Code. This inflexibility, when considering factors such as the compounding standards and regulations in this environment and the age of legacy infrastructure, often leads to outcomes that are difficult to design and construct, not cost effective and in some cases impractical, delivering poor outcomes for customers.

Similar building classification issues relate to other modes of transport. It is recommended that a new classification or standard be adopted allowing performance solutions for each transport mode with consideration for both above and below ground facilities.

Transport for NSW supports the development of a separate building class for railway stations when the National Construction Code is next reviewed in 2021.

4.1.4 Roll- on roll- off access to trains

Reducing the gradient on platforms to within the compliant range is a priority from customer safety perspective. However realignment of old platforms is a significant cost necessitating a staged approach. Creating a straight edge along older railway stations may only be achievable through relocations or platform extensions. While this may be desirable at high patronage stations, it is not clear that cost of doing so in all locations is justifiable in terms of the number of customers who would directly benefit.

Furthermore, the capacity to undertake the necessary work to standardise platform heights in order to achieve roll-on roll-off access is limited by the variability of fleet that is used on the rail network. Platform heights built to accommodate freight train requirements will continue to restrict capacity for roll-on roll-off accessibility into the foreseeable future. The platform train

interface is also dependent on varying factors including train suspension wear, track wear and loading and cannot be guaranteed to be within the tolerance specified.

4.1.5 Circulation requirements and access pathways on platforms

The current requirement for access paths of 1200mm is often not possible to achieve along the full length of the station platform when retrofitting older stations. In many locations compliance is restricted by the presence of heritage items on the platforms and where seats can be provided. The capacity to incorporate part of the width of tactile ground surface would assist in these situations.

It is not possible to provide access to every door of the train at some stations with portable boarding ramps. This is due to the narrowing of platforms and insufficient width to deploy ramps. Operationally this would also not be possible. The cost of platform widening is considered to be prohibitive due to the high cost of moving signalling systems.

4.1.6 Tactile Ground Surface Indicators (TGSIs)

Directional TGSIs are utilised by customers with vision impairment however there is no clear guidance on the application of directional TGSIs within the Transport Standards. To assist with their rationalised use and to ensure they are most effective for customers and minimise conflict between disability user groups, clarification regarding the use of directional TGSIs at stations should be provided. Presently, consultation with the accessibility community is required on a case-by-case basis for directional TGSIs as there is no clear guidance.

4.2 Accessibility of train carriages

Like stations, compliance of train carriages has focused on accessibility for people who use wheelchairs or have limited mobility. All trains in used in NSW are accessible for persons using mobility devices with 'direct assistance' using a platform to train boarding ramp.

As at January 2017, 54.7 per cent of the Sydney Trains fleet of 204 sets were fully accessible offering: designated spaces for wheelchair users; priority seats for less mobile passengers; accessible emergency help and communication points; provision of travel information which can be seen as well as heard; and appropriate tonal contrasting of features such as handrails and doors.

Of the eight different electric train sets currently used in NSW, only the A Set (Waratah), M Set (Millennium) and H Set (OSCAR) meet the Transport Standards. The T Set (Tangara) trains are currently being upgraded. While the T Set cars will provide for a much improved level of service compared to the S, C, K or V sets, it is not technically possible to increase the allocated space beyond one accessible space per train car.

Our capacity to provide accessible services is limited by the age of many of the trains. C, K, V and S Sets are non-compliant with Transport Standards. There are no current plans to upgrade these sets and over time they will be replaced by new compliant rolling stock. As some of the older fleet is expected to be phased out and completely replaced over the next 10 years, it is not practical to bring these trains into compliance. New trains are being purchased and some of the existing rolling stock will be refurbished to extend their usable life and meet customer requirements.

All new trains will offer the highest level of accessibility noting that some features are prohibitive in fully complying as a result of the physical constraints in a rail environment such as stair geometry. Design development also includes extensive user testing and customer engagement, including people with disability.

Issues related to rail fleet and the Transport Standards are outlined below.

4.2.1 Double-deck design of trains

Due to the need to move large volumes of passengers with minimal headway between trains, current trains on the Sydney and Intercity networks are double-deck designs. By nature of the design, there is no ability for a person with severe mobility constraints to move to the upper or lower deck saloon as these are accessed by stairs. Clarity around the extent of an access path only to the accessible features on - board the conveyance is required.

The vestibule areas of the train are generally where all the accessible facilities are located and so importance needs to be placed on ensuring equivalency through comfort. Equivalency in all aspects of the Transport Standards for all modes is not clearly defined or guided, particularly in relation to customer amenity and comfort.

The current standards relating to stairs on conveyances have been taken from standards that apply to the built environment. As a result they are not practically applicable for conveyances due to the constraints of fixed infrastructure in the rail corridor and the necessary trade-offs with seating capacity. There are also safety advantages. On a moving train having a smaller stair width provides a functionally safer outcome as there are handrails at both sides to help steady a person when utilising the stairs. The design requirements for stairs on all conveyances should be addressed in the modernisation process.

Other modes of transport that have similar designs, notably buses and ferries, also face these same constraints.

4.2.2 Limitations with retrofitting

Retrofitting of existing rolling stock is particularly difficult given the width of existing medium and narrow train sets. Essential safety and operational equipment on existing medium and narrow train sets is located in the vestibule areas which limits the area available for allocated wheelchair spaces and circulation spaces around them. There are also difficulties in locating information systems. Rectification of these issues cannot be achieved without impacting the body structure of the train with consequential safety risk.

4.2.3 Exemptions

In regard to train conveyances, rail transport operators have relied upon a number of temporary exemptions granted by the Australian Human Rights Commission in relation to elements of the Transport Standards that are not achievable in the rail environment, such as accessible toilets and stairs. This is due in part to the Transport Standards being derived from requirements for premises which do not take into account the constraints arising from train carriage and rail track widths. The Australian Human Rights Commission has indicated that no further exemptions will be granted. Until the modernisation of the Transport Standards is completed, there will be a continued reliance on current exemptions.

4.3 Recommendations for heavy rail

- Commonwealth funding be allocated to conduct a technical review of the current Transport Standards by a suitably qualified engineering consultancy. The aim of the technical review being to strengthen the evidence base for necessary changes by identifying those parts of the current Transport Standards that cannot be adhered to in rail infrastructure or on rail conveyances.
- Modal specific standards should then be developed for train stations and train conveyances.

- Railway Stations are considered for a specific classification in the National Construction Code with definition around the extent to which the building classification applies.
- Clearer standards are developed for the use of at-grade cross-corridor access, including surface treatments and flange gap width.
- Clarification or guidelines are provided on the use of directional TGSIs at stations.
- Clarification or guidelines are provided around the meaning of the term equivalency relating to customer amenity.

5 Buses

5.1 Bus services and fleet

In the 2018-2019 Budget, the NSW Government has committed to improving bus services throughout NSW. An additional investment in the Growth Services Program of \$15.6 million has been allocated to provide more than 2000 extra weekly bus services across NSW. Further, \$1.5 billion has been allocated for bus services throughout NSW, including regional and metropolitan services, school services and funding of new and replacement buses. In 2017/2018, over 286 million Opal trips were by bus.

In NSW, there are currently:

- 14 Sydney Metropolitan Bus Service Contracts
 - Run approximately 90% of timetabled accessible services, not including dedicated school bus services
 - 3686 accessible buses, representing 85% of the fleet
- 12 Outer-metropolitan Bus Service Contracts
 - Runs approximately 91% of timetabled accessible services, not including dedicated school bus services
 - 642 accessible buses, representing 58% of the fleet
 - These contracts have a large portion of school buses that have exemptions to requirements under the Transport Standards
- 657 Rural and Regional Bus Service Contracts
 - Runs approximately 67% of timetabled accessible services, not including dedicated school bus services
 - 346 accessible buses, representing 11% of the fleet (noting most of the Rural and Regional bus fleet is for dedicated school services)
 - These contracts have a large portion of school buses that have exemptions to requirements under the Transport Standards

Buses used as dedicated school buses are currently not required to meet the Transport Standards unless they are also used for public transport services. Bus contract reforms have ensured that rural operators are funded to provide services which meet safety and Transport Standards.

In the case of buses, there are very real physical constraints to implementation of the Transport Standards which are outlined below.

5.1.1 Interface with stops

Transport for NSW is ensuring contracted bus operators meet requirements under the Transport Standards by funding new replacement buses under the service contracts. Bus operators in all regions have identified that while transport operators are making efforts to comply with the Transport Standards' requirements by scheduling accessible services, the inability of local government to supply accessible bus stops and roadside infrastructure compromises these efforts. Going forward it will be important to maximise the benefits of the accessible bus fleet by making stops accessible. This is further explored in the following section of this submission related to bus stops.

In some locations, the camber of the road and hilly environments make it extremely difficult to align a boarding ramps with the kerb.

5.1.2 Physical constraints

Similar to heavy rail, there is difficulty in applying standards that were developed from building requirements for buses, particularly around elements such as stair geometry. As buses are restricted by the dimensions of roadways, this governs the available space for access paths and manoeuvrability to, from and within the allocated spaces for people with mobility devices. Further, some devices are not suitable or safe for use on public transport such as three-wheeled scooters. Policies are in place to restrict the use of these devices on certain conveyance types such as buses. The introduction of a labelling scheme for mobility devices will assist in alleviating some of this constraint but will not remove this in all circumstances.

5.1.3 Consistency in application of Transport Standards

Within the framework of the NSW bus services model, procurement of new buses is provided through the Transport for NSW Bus Panel. Meeting design and legislative requirements, including Australian Design Rules and the Transport Standards, is the responsibility of the bus manufacturer. NSW has observed some requirements in the Transport Standards are open to a level of interpretation by manufacturers and could result in less than optimum outcomes.

The level of understanding of the complex requirements varies between manufacturers and suppliers of equipment. Development of a modal specific, outcome focussed set of Transport Standards would provide greater certainty to the manufacture, procurement, operation and service provision for buses.

5.1.4 Occupancy safety and securement

Bus operators and wheelchair users have previously made comment on the safety requirement for occupants facing rearwards. While this is in line with safety research it is subject to challenge by some customers who prefer to face forward. To assist operators, it is proposed that Transport Standards specify the direction of travel for safe carriage of mobility devices.

Furthermore, securement systems have also been an area of ambiguity for buses. There is no consistency in the mechanism for securement, but most commonly this option is a tethering strap. Current securement systems require assistance by another person to secure wheelchairs in allocated spaces. Bus drivers are unable to provide this assistance for operational and safety reasons. Research is required to develop suitable solutions that can be independently operated, widely adopted by different wheelchairs and test the commercial viability and safety in the Australian context.

As seatbelts are increasingly used on buses that travel in zones at over 80 km/h, equivalency of access to safety restraints for customers seated in wheelchairs will be a significant issue.

5.2 Bus stops

Presently there are approximately 38,000 bus stops located across NSW. Transport for NSW, directly and through its agencies/operators is responsible for signage and information provision at stops used for Transport for NSW contracted bus services. Responsibility for the remaining infrastructure elements currently lies with landowners, which in the majority of cases is local government.

At the time the Transport Standards were endorsed in 1999, it was on the stipulation that the Australian Government should supply sufficient funding to state and local governments for full implementation. To date, implementation of the Transport Standards has been primarily funded by state and local government with no financial assistance from the Australian Government.

Many local governments have advised that they do not have sufficient resources to bring all stops within their jurisdiction into compliance within the timeframes in Schedule 1 of the Transport Standards. While Transport for NSW has been able to assist some rural and regional councils through its Country Passenger Transport Infrastructure Grants, the available funding is insufficient. Transport for NSW continues to advocate for Australian Government funding to support local governments in implementing the requirements. More could be done to encourage local governments to consider providing accessible pathways to and from bus stops. This is a particularly difficult issue in rural and remote bus stops where the roadside infrastructure is inadequate.

Transport for NSW is developing guidelines for bus stops. These guidelines outline best practices for locating, designing and prioritising stop improvements. A key component of these guidelines addresses customer access, including people with disability, both to the bus stop and boarding the bus itself. The guideline sets out the requirements of the Transport Standards as they apply to bus stops.

As the majority of stops are located on third party land, Transport for NSW recognises that there are a wide range of stakeholders and contexts relevant to locating and designing bus stops. One of the objectives of the Bus Stop Guidelines is to provide a document that can be used for engaging with stakeholders to improve the design, management and operation of bus stops. Issues to be addressed in stakeholder engagement include those with respect to compliance.

The majority of issues in relation to bus stop compliance are generated from landform topography constraints that in some cases make strict compliance to the Transport Standards not achievable. For example, a major issue is the camber of the road as it impacts on the angle of the vehicle to the footpath. Access can be limited if the curve of the road is too great, even with an accessible bus stop and accessible bus. This issue is acknowledged in the Australian Human Rights Commission's guideline for promoting compliance of bus stops released in December 2010.

5.3 Recommendations for buses

- Commonwealth funding be allocated to conduct a technical review of the current Transport Standards by a suitably qualified engineering consultancy. The aim of the technical review being to strengthen the evidence base for necessary changes by identifying those parts of the current Transport Standards that cannot be adhered to on bus conveyances.
- Modal specific standards should then be developed for bus stops and bus conveyances, including smaller buses designed for low patronage routes.
- The Australian Government establishes additional funding mechanisms, including grants and interest-free loans to assist local councils to meet their obligations under the Transport Standards. This was previously considered under Recommendation 7 of the 2007 Review.
- The Australian Government undertake research into safety for wheelchair occupancy in allocated spaces and provide guidance on direction of travel and safety restraints.

6 Light rail

Light rail in NSW is shaping our major city centres. Light rail is much more than just a transport system it is set to revitalise more areas through urban renewal. In NSW, the light rail system is currently expanding with new light rail lines planned for Sydney, Parramatta and Newcastle. The light rail solution increases choice of travel options for people with disability who will be able to use the light rail network to connect to other accessible modes in key city and suburban locations. As light rail is a relatively new system in NSW, it has the highest level of accessibility and level of compliance with the Transport Standards.

New and existing light rail stops will provide step free access, accessible real-time passenger information new access paths and facilities. Light rail vehicles include accessible information systems, allocated spaces for wheelchairs and priority seating. New construction enables better alignment between the platform and the vehicle, reducing the horizontal gap.

The Transport Standards outline dimensions for when boarding devices are required. Whilst new light rail systems aim to minimise the gap, it is often impossible to meet in all scenarios. This is due to the vehicles lack of suspension, varying weight due to passenger loading and wear on the vehicle and track. Transport for NSW ensures that when designing new light rail networks that the gap is minimised to the greatest extent possible, taking into consideration expected loadings to allow for the greatest extent of unassisted boarding by customers.

Light rail also has unique operational constraints that often mean a lot of the direct assistance provisions that apply to other modes such as buses and trains are not easily met.

Light rail standards have been derived from requirements based on heavy rail. These heavy rail requirements are often not appropriate as the heavy rail environments often have dedicated corridors whereas light rail operates in public domain and roadways. These light rail corridors have complex ownership and stakeholder arrangements and often have competing and compounding standards to consider in design. Furthermore, as light rail systems are often urban insertion projects, there is often difficulty in meeting compliance due to topography constraints. In addressing all these competing priorities greater emphasis should be placed on achieving a contextual, holistic solution.

Similarly to heavy rail, flange gaps are also an issue in delivering fully compliant solutions for light rail networks. As flange gaps in a light rail environment are not in a defined corridor, unlike heavy rail, the management and mitigation of this issue is difficult and is often managed through ensuring the design of flange gap crossings provide the safest solution possible by encouraging designated, perpendicular crossings. Further information on flange gaps has been provided in Section 4 of this submission.

6.1 Recommendations for light rail

- Clarification is provided regarding the requirements to reduce flange gap width where light rail is operating in an on-road environment.
- Clarification is provided regarding acceptable tolerances for the vertical gap width in the Transport Standards as the floor height of light rail conveyances change when the passenger load is exceptional light or heavy.

7 Ferries

NSW has the most extensive ferry network in Australia. Ferry services are contracted to operators by the NSW Government to operate services on routes. Transport for NSW currently has 10 contracted ferry service operators.

Similar to other modes of transport, issues around conveyances and the suitability of Transport Standards based on building environments continues to be a barrier for ferries. Weather affects maritime services more than any other mode.

7.1 Ferry wharves

Ownership of many of the commuter wharves in Sydney Harbour was transferred to the NSW Government in 2007 when a number of local government authorities conceded that they were unable to maintain and improve their wharf infrastructure. Upgrades to improve accessibility of ferry wharf infrastructure are provided through the Transport Access Program.

Presently 72 per cent of ferry wharves are accessible in the Sydney Ferries network. Both wharf locations in Newcastle are also fully accessible. Transport for NSW acknowledges that further planning for improving accessibility is required for wharves that are managed by Transport cluster agencies but are utilised by private ferry operators.

Transport for NSW has a standardised design for ferry wharf gangways and pontoons to address issues with tidal variances.

7.1.1 Landside and waterside ownership

Similar to buses there are complex ownership arrangements surrounding many ferry interchanges. Landside components generally reside with local government and waterside elements are the responsibility of transport agencies and operators. While Transport for NSW is working to provide entry platforms, gangways and pontoons that are accessible by people with disability, access to wharves continues to be restricted by the steep topography of the landside connections.

Particularly in Sydney Harbour, further restrictions on landside components and solutions occur when wharves are located in areas where visual amenity would be obstructed, part of heritage or culturally sensitive sites or part of a constrained access arrangement. In cases where agreement cannot be achieved with landowners on a solution, accessibility to services remains non-compliant to the Transport Standards leaving operators open to potential legal risk and delivering poor outcomes for people with disability.

Under current Transport Standards a potential defence against discrimination is unjustifiable hardship. To date no legal precedents exist to assist in defining the extent of unjustifiable hardship permitted for government transport operators and providers. This issue will be further explored in Section 10 of this submission.

7.1.2 Tidal variances

The Transport Standards assume a static environment. Unlike any other modes, ferries and wharves exist in a changeable environment which can lead to decreased accessibility.

Primarily this is due to variability of deck heights within the ferry fleet making compliance of ferry boarding gangways onto pontoons difficult in some instances. This is further affected by ferry movements impacted by wave heights and other wash.

Given the environmental constraints special consideration needs to be made on how to address this unique environment when modernising the Transport Standards and include positions that are addressed in the Australian Standard Guidelines for the Design of Maritime Structures (AS4997-2005).

7.2 Ferry services and fleet

Ferry customers report the highest level of customer satisfaction of any public transport mode in Sydney. Harbour City Ferries, operates Sydney Ferries servicing Sydney Harbour and Parramatta River regions. Newcastle Transport provides multimodal services including ferries in Newcastle. Between these operators, Opal trips in 2017/2018 were over 15 million.

Harbour City Ferries and Newcastle Transport currently operates 32 and 2 vessels respectively, all of which are wheelchair accessible via direct assistance. Audio announcements and passenger information displays of stopping patterns have been included on vessels.

Retrofitting the existing fleet is prohibitively expensive to meet compliance to the Transport Standards and difficult to align with marine safety standards and requirements. Accessible toilets and door seals are a particular concern.

In 2017, six new compliant ferries were added to the existing Harbour City Ferries fleet and include customer amenities that have never been available before on ferry services such as bicycle storage and Wi-fi access. Design development of the new fleet involved extensive user testing by people with disability.

7.3 Recommendations for ferries

- Further consideration is given to the extent of an access path to an accessible ferry wharf and the landside constraints.
- Modal specific standards are developed for ferry wharves and ferry conveyances.
- Part 6.5 of the Transport Standards regarding the slope of ramps connected to pontoon wharves is expanded to consider the effect of tidal variability on other dynamic elements of the interface between the wharf and ferry vessels.
- Additional Australian Government funding is provided to local governments to assist with implementation of the Transport Standards to provide an accessible pathway between the wharf and the street where it is feasible to do so.

8 Point to Point services

The NSW point to point market (taxis, hire cars, rideshare and the like) has changed markedly since the 2012 review of the Transport Standards. Following a 2015 review of the sector, significant regulatory reforms have been introduced. Adjustments have also been made to strengthen the arrangements designed to ensure that services for people with disability, especially those who need to travel in a wheelchair, remain available and affordable.

This includes the following changes which took effect from 1 July 2016:

- The maximum Taxi Transport Subsidy Scheme (TTSS) subsidy was increased from \$30 to \$60 per trip.
- The Wheelchair Accessible Taxi Driver Incentive Payment was increased from \$7.70 (ex. GST) to \$15 (ex. GST) per trip.
- The pool of funds available for the Wheelchair Accessible Taxi (WAT) interest-free loan scheme was expanded from \$800,000 to \$5 million. WAT loans became available to cover the full cost of purchase and modification (rather than \$30,000 to cover just the modifications).
- The cost of Zero200, the centralised booking service for WATs in Sydney, was subsidised, saving WAT businesses \$2130 per vehicle per year.
- WAT licence fees were decreased from \$1000 per annum to zero in metro areas, in line with the rest of NSW.

The NSW Government has sought to promote the uptake of WAT licences by offering a number of incentives. In 2013 WATs comprised 11% of the total NSW taxi fleet. By September 2018 this had increased to 16.84% of the fleet, with 1183 WATs operating in NSW, 300 of these in non-metropolitan areas.

The 2015 sector review recommended the TTSS move to a service provider neutral subsidy scheme. Transport for NSW is currently undertaking a review examining how best that can be achieved. The review is also investigating how other WAT incentives can be structured to drive improved service delivery.

The 2015 review resulted in the Point to Point Transport (Taxis and Hire Vehicles) Act 2016, which commenced on 1 November 2017, with an independent regulator, the Point to Point Transport Commissioner.

Safety is the focus of law, which departs from the previous legislation by not prescribing a business model and industry structure. This allows service providers to utilise technology and to shape their services to respond to customer demand, providing greater choice and flexibility and enabling them to compete on service quality and price.

The Point to Point Transport (Taxis and Hire Vehicles) Act 2016 and the Point to Point Transport (Taxis and Hire Vehicles) Regulation 2017 include a number of provisions specific to wheelchair accessible vehicles, for example:

- WATs which are available for hire must accept a hiring for a person in a wheelchair in preference to hiring from a person not using a wheelchair. Compliance monitoring is to be undertaken on a regular basis, to ensure that appropriate priority is given to people in wheelchairs in an ongoing way.
- The driver of a wheelchair accessible vehicle must be competent in loading and unloading wheelchair passengers, equivalent to the competency unit TLIC2040 Provide wheelchair accessible taxi services to passengers with disabilities (Release 1) issued by the Commonwealth.

- Minimum space requirements for all wheelchair accessible vehicles are prescribed. It also requires compliance with Australian Standards for hoists, ramps and tie downs.

The current Transport Standards should be modernised to align to these industry changes to assist operators of point to point services understand the requirements for wheelchair accessible vehicles.

Schedule 1 of the Transport Standards provides that 'radio networks' and 'cooperatives' are responsible for ensuring that response times for 'accessible vehicles' are to be the same as for other taxis. However changes to the structure of the point to point market mean that these terms no longer reflect terms used in the Point to Point Transport (Taxis and Hire Vehicles) Act 2016 and they do not reflect how services are being delivered. Customers are increasingly procuring services through a variety of booking service providers.

Consideration must be given to amendments to the Transport Standards so that it better reflects the structure of the modern industry and the types of services now being provided. The Transport Standards must be revised to ensure that providers of these new services, including wheelchair accessible services provided in vehicles other than taxis are captured.

This view is consistent with the feedback from disability advocacy groups. They have argued that regulation needs to ensure that booking and payment platforms for point to point providers consider accessibility for all customers.

8.1 Recommendations for taxi and point to point services

- The Transport Standards should be reviewed to better reflect the current structures and arrangements in the point to point industry. This should encapsulate the new service types, including services provided in wheelchair accessible vehicles.
- Definitions should be reviewed with prescribed internal dimensional requirements for WAVs, as well as appropriate standards for wheelchair securement systems such as tie-downs and minimum requirements for vehicle hoists and ramps.
- Further guidance should be provided to ensure booking and payment platforms for point to point services (and other public transport) are accessible for all customers.
- The Transport Standards reporting requirement on comparable wait times be examined and adjusted to reflect the changed operating environment.

9 Information

Transport for NSW is committed to making information about transport as accessible as possible to provide the customer with end-to-end journey information.

The customer information website for transport planning and information, transportnsw.info, conforms to Web Content Accessibility Guidelines (WCAG) 2.0. These guidelines explain how to make web content user friendly and accessible to everyone, including people with disabilities or people using assistive technologies such as screen readers.

To ensure this site meets accessibility standards, user-testing is conducted with a wide range of people, covering varied accessibility needs (mobile, cognitive, auditory and visual) which helps to improve the user-experience for everyone. Testing on assistive devices and software such as screen readers and magnifiers is also conducted.

Maps provide a visual representation of trip plan results. Some elements on the map are not keyboard or screen reader accessible, so a text alternative is available elsewhere on the website. The transport.info website also provides critical real time information for service changes and lift outages. Customers can also get information by calling 131 500 which is also accessible to the hearing impaired through a TTY telephone service and via the National Relay Service.

Transport for NSW also provides avenues for customers to access real-time and static transport information through a variety of in-house and third party applications (apps) and websites. Apps are accessed via smartphones and other mobile devices and provide flexibility for customers as they can be tailored to user preferences and use the phones accessibility settings. Third party app developers often do not fully release apps to the open market that would benefit customers with disability due to the perceived lower commercial viability of these products and perceived potential for legal risk of inaccurate information leading to an incident or complaint.

A new wayfinding system has been developed for the transport network to make it easier for customers to plan journeys, navigate the system, interchange and find their destination. Strategic principles and the design and use of access related pictograms and symbols have been assessed by people with disability. Rollout of the system is occurring progressively across all modes of transport.

Transport for NSW has also made significant progress in the information provided on services and at transport precincts with the inclusion of audio-visual messaging to meet the obligations of the Transport Standards. Further, Transport for NSW and cluster agencies are investigating and trialling new products and technology that assist people with disability in receiving information.

All customer information systems are required to comply with standards developed by the Transport for NSW Asset Standards Authority which ensure that requirements under the Transport Standards are followed. All new developments in information provision are subject to extensive user testing.

Technology has evolved since the inception of the Transport Standards in 2002. The modernisation process needs to take into consideration the advancement of technology systems and what this means for information provision today and in future. During the modernisation process, clarification should also be given to the distinction between legislated and discretionary information provision, for example service information versus non-service related spoken messaging. Clarification should also be given on the requirements for information/assistance help points as these are not explicitly addressed in the current Transport Standards.

Some issues for further consideration in information provision are outlined below.

9.1 Digital information

The Transport Standards were developed on the assumption that all signage was small, static, provided limited information content and required external illumination. In today's modern transport systems, operators and service providers are moving to digital, dynamic systems which are often large and display detailed information to multiple users simultaneously.

Whilst static signage continues to be relevant, particularly for persons with vision impairment that utilise Braille or tactile elements, the current Transport Standards do not consider more modern digital displays. Modernisation of the Transport Standards should include provisions and guidance for digital displays that specifically apply in order to meet the requirements for people with disability.

9.2 Touchscreen technology

Similar to digital technology, the application of the Transport Standards is not fully understood for new developments in touch screen technology. Touch screens have benefits for some users, such as those with cognitive disabilities or some restricted movement however, they present barriers for other users such as people with low vision and people with very limited movement or dexterity.

Currently there is no guidance or other industry standards that could be adopted in ensuring equivalency across all types of disability. The development of standards that govern touch screen technology would benefit from the clarification of legislated versus discretionary information as mentioned earlier.

9.3 Future-proofing

As technology continues to change the way customers receive transport information, it will be important for transport operators and providers to identify and demonstrate how these changes meet equivalency in a user's preferred format. Transport for NSW acknowledges that while new technology does eliminate some barriers for certain disability groups, it can adversely impact another.

Consideration also needs to be given to the introduction of new technologies that replace existing systems to ensure that disadvantage is not faced indirectly by users within the same subset. Hearing augmentation is a recent example of this that has been identified by Transport for NSW. New technology in hearing augmentation utilising smart phone applications can deliver information wirelessly to a customer as opposed to through audio frequency induction loops. This solution offers improvements in sound quality which may be beneficial to many users, not just those with a hearing impairment. Despite more and more customers with hearing impairments having access to smart phone devices, there is a population, particularly older people that cannot be expected to use a system reliant solely on this technology.

As a transport operator, it would be expected that grandfathering of existing technologies is required until such a time as new technology is adopted by users and commonly available. Mechanisms should be in place to allow transport operators to discontinue installing legacy technologies currently prescribed by the Transport Standards, providing it is demonstrated through an evidence based approach that an alternate technology is widely available and adopted by users. These changes may assist in achieving compatible systems and encourage investment by industry in system development.

9.4 Recommendations for information

- Modernisation of the Transport Standards takes into consideration the requirements for digital signage, displays and information/assistance help points.
- Greater guidance in the Transport Standards regarding minimal access requirements for touch screen technology.
- The definition of 'general information about transport services' cited in Part 27.1 of the Transport Standards needs clarification to provide guidance between service critical versus discretionary information.

10 Multi-modal issues

There are a number of issues in respect to the Transport Standards that are common across all modes of transport. Some of these items have been discussed in previous sections of this submission. Transport for NSW makes specific recommendations within this section on matters that remain contentious. Additional guidance and/or amendments to the existing Transport Standards are required.

10.1 Unjustifiable hardship

Transport for NSW notes that there is currently no legal precedent to assist in defining the extent of unjustifiable hardship permitted for government transport operators and providers. While efforts are directed to achieving the maximum extent of compliance possible, the lack of certainty over the interpretation of 'unjustifiable hardship' is a hindrance to decision-making on high cost capital works.

Capital works planning to enhance accessibility would also benefit from legal recognition in the Transport Standards of staged works at a single location. While the present legislative arrangements provide for staged implementation of the Transport Standards and allows operators and providers to decide the order in which their conveyances, premises and infrastructure are made accessible, it is implied that full accessibility will be achieved as works are undertaken at each location. Transport for NSW notes that more customers would benefit from an approach that allows for staged works at stations that are more complex (for example, have multiple entries and platforms) and consequentially require greater capital investment.

10.1.1 Recommendations

- Transport Standards allow for staged implementation at locations where the costs of addressing all access issues are unjustifiably high.
- Greater consideration is given to the development of performance requirements rather than prescriptive approaches to allow operators and providers greater flexibility in delivering accessibility outcomes.

10.2 Whole of precinct issues

Transport for NSW adopts a precinct approach to upgrades of stations and major transport interchanges. This ensures a greater level of accessibility for customers with disability and allows customers to interchange between accessible modes of transport more easily. However, the general topography in NSW makes this difficult to achieve in all locations.

Particular issues arise when the local government authority has not made sufficient investment in footpath infrastructure in the surrounding precinct to make functional connections. This is also particularly evident in situations where Transport for NSW provide car parking facilities.

The access specifications regarding mobility parking spaces, lift requirements, ramps and cross falls for the facility are covered in the Premises Standard, however the access pathway between the car park and the interchange is not covered by either the Premises Standards or the Transport Standard. While a change in the Transport Standards to address this anomaly would assist in engaging with councils about providing accessible pathways in the scope of works, many could not make this commitment without Australian Government funding assistance.

10.2.1 Recommendation

- The Australian Government should consider establishment of additional funding mechanisms, including grants and interest-free loans to assist local councils to meet their obligations under the Transport Standards. This was previously considered under Recommendation 7 of the 2007 Review.

10.3 Lighting standards

Lighting levels is another example of where the standards from the building environment are not suitable for transport conveyances and premises. Currently the Transport Standards reference requirements for interior spaces for use in locations with awnings such as light rail platforms, bus stops and rail station platforms. In many of these instances, complying with the existing requirements can result in over-lit spaces that inadvertently create sterile, aggressive environments compared to the surroundings, dark adaptation issues for pedestrians and causes obtrusive lighting issues for neighbouring property owners.

There are also existing requirements which have not taken into consideration operational changes in public transport precincts. For example, the minimum lighting requirement for ticket machines is based on the equivalent requirement for public telephones. Given in NSW and most other jurisdictions ticket machines are now backlit screens rather than physical buttons, this requirement is no longer appropriate. Lighting levels should be determined through research on tasks a customer or staff member is likely to perform taking into account those with low vision or hearing impairments. This should also take into account previous research such as the *WEBB Lighting Report 2004* that has been broadly adopted by transport operators as an interim until modernisation of the Transport Standards is completed.

There is also suggestion that the requirements from the lighting standards are based on old lighting technology. It is understood that visibility achieved by light-emitting diode (LED) lights is greater than that achieved at similar lux levels.

10.3.1 Recommendation

- The Australian Government modernise the Transport Standards in relation to lighting for infrastructure and conveyances and considers the impacts of utilising varying lighting technologies during development.
- The Australian Government considers findings from the *WEBB Lighting Report 2004* to guide modernisation of the Transport Standards for lighting requirements.

10.4 Alignment to international standards

Conveyances across all modes face similar issues in interpretation of the existing Transport Standards especially when the lack of industry capability in Australia requires procurement from the international market. In many instances the application of Australian Standards and Transport Standards do not align to recognised International Standards resulting in retrofitting of off-the-shelf products to meet compliance which can be a costly exercise. Research into this area for all standard products in transport environments during the modernisation process would be beneficial to understand where these inconsistencies lie.

10.4.1 Recommendation

- During the modernisation process research is conducted into international requirements for standardised off-the-shelf products including conveyances.

11 Future of mobility

Transport and technology has been transforming rapidly since the inception of the Transport Standards in 2002. Transport for NSW acknowledges that the standards were developed at a point in time and have achieved much in ensuring people with disability have the same access to services and facilities in order to participate fully in society.

In response to developments in technology and rapidly changing markets, there have been significant changes to the provision of passenger transport services in NSW and across Australia. It is considered that any standards for accessible public transport should be relevant, appropriate and applicable to the services being provided.

As we move to more deregulated markets and changes in traditional service and operational models, Transport for NSW is facing an era of delivering significant change to the way customers interact and utilise public transport. As the existing Transport Standards are no longer able to appropriately regulate accessibility for people with disability in the current transport environment, the modernisation of the Transport Standards should not be further delayed.

The discussion below considers emerging topics that Transport for NSW believes will require future consideration by the Australian Government.

11.1 On Demand Public Transport services

On Demand Public Transport is a new approach to flexible transport in NSW. It allows passengers to book a vehicle to pick them up from a nearby, convenient location and take them to a local transport hub, amenity or place of interest as opposed to the traditional bus and timetable model. Operators are able to respond and adapt to changes in demand by either altering routes and/or frequency and charge fares on a per passenger basis. The complexity with applying the existing Transport Standards to On Demand Public Transport services is the variance in use of low occupancy road vehicles such as small buses, vans or cars. Current On Demand Public Transport services in NSW will inform the NSW Government's approach to these services.

Under the current Transport Standards, flexible and demand responsive services may be covered under the current definition of a conveyance (Division 1.2 Part 1.12 (f)) which includes "any other rolling stock, vehicle or vessel classified as public transport within its jurisdiction by regulation or administrative action of any Government in Australia". It should be noted however that reliance on this clause may lead to different requirements for accessibility depending on state regulation and legislation. Alternately, this type of service may be consistent with the current definition of "Dial-a-ride-services" and are referenced only in respect of requirements for Part 28 Booked Services.

As the main objective of these services is to deliver smarter transport options and to find efficiencies in poorly utilised timetabled route services, it will be important to consider the minimum accessibility requirements for this mode. Potentially, similar to the changes described in Section 8 of this submission, further consideration should be given to defining the term "accessible vehicle".

Equivalency should be measured through ensuring that a vehicle that is booked is fit for purpose with a comparable standard of amenity, availability, comfort, convenience, dignity, price and safety is maintained.

11.2 Limitations of standards

Transport Standards are traditionally formulated on using anthropomorphic data of generalised characteristics of people including people with disability. In today's society more and more customers are requiring tailored solutions for individual needs as opposed to requirements that have been derived from a "standards" based approach. However, there will always be a small minority of people whose needs lie outside the requirements of the "standards". For example, people with bariatric conditions or people who are required to use exceptionally large mobility devices due to the nature of their disability. It will be important for transport agencies to understand the balance of requirements to cater for an individual versus meeting the requirements of the many.

Furthermore, in development and modernisation of the Transport Standards the impacts of a growing bariatric population will be critical. Bariatric conditions, if adopted into the Transport Standards would have significant ramifications for existing infrastructure, conveyances and operational requirements. The most significant impacts are in relation to tare weight tolerances for ramps and the size of allocated spaces.

11.3 Connected and automated vehicles

Connected and automated vehicles (CAVs) have the potential to improve accessibility to mobility for transport-disadvantaged groups, such as people with a disability, older people, people who are unable or unwilling to drive, and those from low-income households. Greater access to mobility would improve social inclusion and further broaden access to basic services, such as health and education, and economic opportunities for these groups. Highly and fully automated, or 'driverless', vehicles, in particular, could facilitate the provision of low-cost, flexible and demand-responsive services that would cater to the specific mobility needs of people with accessibility restrictions.

Transport for NSW is currently trialling CAVs in a number of metropolitan and regional settings, in collaboration with industry, universities and community organisations. Currently, the focus of these trials is exploring customer mobility use cases, identifying benefits for customers and the broader transport network, and assessing the regulatory and infrastructure requirements to ensure safe operations of CAVs on our roads. The trials give us an opportunity to work with industry and researchers to identify the right vehicle systems and design standards and customer service processes (in the case of CAV-based transport services) that would result in the best outcomes for accessibility and inclusion. As CAVs become more and more integrated into the public transport network in the future, we will have to ensure that the design and delivery of these services continue to incorporate the broader principles of accessibility and inclusion.

Our understanding of how CAVs, particularly driverless vehicles, will address the accessibility issues faced by some people with a disability, including people with a severe physical disability or those with a vision impairment, who may need direct assistance (e.g. assistance to board or disembark a vehicle), is still emerging. As the public transport fleet becomes increasingly connected and automated over time, there may be risks around system failures, cyberattacks and privacy breaches that will need to be appropriately managed, particularly if CAVs are used to provide services for people with a disability.

Transport for NSW will continue to rely on ongoing research and trials, and engagement with industry and representative bodies such as the NSW Disability Council, to inform future policies, standards and services.

11.4 Mobility as a Service

Mobility as a Service (MaaS) is a term used to describe the combination of transportation services utilising private and public transport for end-to-end journey decision making for customers. The concept relies on a single interface through which a customer can control and manage their total journey with a payment system from a single source to all providers. MaaS is a significant shift from the traditional service provider model. Transport for NSW will play a key role in enabling the future development of MaaS, including its commercial and contractual frameworks.

Despite the customer benefits in providing more transport options, this poses more complex issues in ensuring payment and booking platforms remain accessible, that vehicles or conveyances meet the needs of people with disability and that this model does not preclude people with disability from access to these service offerings due to socio-economic reasons.

As MaaS moves to a multimodal service offering there is a potential risk that these services will not be defined under the traditional public transport model. It will be important to consider the accessibility of any associated mobility technology alongside the regulation of accessibility of transport. Transport for NSW would welcome guidance from the Australian Government on these issues and consideration of MaaS during the modernisation process.