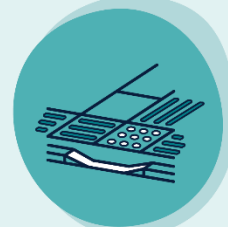
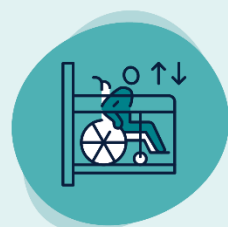
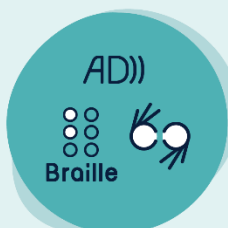
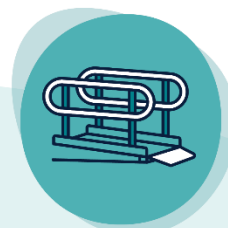




Australian Government

Department of Infrastructure, Transport,
Regional Development, Communications and the Arts

Reform of the Disability Standards for Accessible Public Transport 2002— Stage 2 Decision Regulation Impact Statement



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Table of Contents

Executive Summary	11
Summary of Stage 2 reform areas, preferred options and implementation approach	13
Summary of Stage 1 reform areas, preferred options and implementation approach	17
Glossary of terms and abbreviations	18
Glossary of Australian Standards and other standards references	20
Introduction	21
Background	21
Problem statement	21
The rationale for government action	24
Roles and responsibilities	25
Development of policy options	26
Consultation	27
Summary of the consultation engagement	28
Analysis and development of the preferred policy options	28
Stage 1 and 2 reform proposals interactions	29
Final consideration of options	29
Cost-benefit analysis	29
Approach to CBA	29
CBA framework	30
Understanding the CBA	30
Overview of data inputs for CBA	31
Analysis and preparation of inputs for the Decision RIS CBA	31
Economic benefits and costs categories	31
Economic assessment outcomes	32
Implementation	33
Evaluation	33
Part 1: Transport Standards principles	34
1. Reporting	35
2. Equivalent Access.....	41
3. Rideshare	47
4. Dedicated school buses	52
Part 2: Information, communication and wayfinding	58
5. Better communication of accessibility features.....	59
6. Timely provision of information	64
7. Real time communication	69
8. Passenger location during journey	74
9. Hearing augmentation on conveyances.....	79
10. Hearing augmentation: Infrastructure and premises	83
11. Print size and format.....	87
12. International Symbol for Access and Deafness	90
13. Letter heights and luminance contrast of signs	94
14. Location of signs	97
15. Braille embossed (printed) specifications	100
16. Braille and tactile lettering for signage	105
17. Lifts - Braille and tactile information at lift landings	109
18. Lifts - Audible wayfinding.....	113
19. Lifts - Emergency communication systems in lift cars	118
20. Lifts - Reference for lift car communication and information system.....	122
21. Information and communication technologies (ICT) procurement	127
22. Mobile web systems	134
23. Accessible fare system elements	139
Part 3: Accessibility at stations, stops, wharves and access routes	145
24. Doors on access paths	146
25. Continuous access on access paths	152

26.	Flange gaps within access paths	156
27.	Resting points	162
28.	Requirements for handrails in over bridges and subways	167
29.	Location of fare system elements	171
30.	Allocated spaces and priority seating in waiting areas	176
31.	Accessible toilets with equal proportion of left- and right-hand configurations	180
32.	Emergency call buttons in accessible toilets	184
33.	Ambulant toilets	188
34.	Lift specifications and enhancements	192
35.	Specifications for escalators and inclined travellers	196
36.	Poles, objects and luminance contrast	200
37.	Lighting	204
Part 4: Accessibility of boarding and alighting and egress of infrastructure		209
38.	Signals and process for requesting boarding devices	210
39.	Notification by passenger of need for boarding device	216
40.	Portable boarding ramp edge barriers	221
41.	Boarding ramp and removable gangway definitions	227
42.	Removable gangway design – ferries	231
43.	Nominated assistance boarding points	236
44.	Identification of lead stops	243
45.	Pontoon boarding points on infrastructure	247
46.	Bus, tram and light rail boarding points on infrastructure	252
47.	Hail-and-ride boarding points on infrastructure	257
48.	Accessible taxi ranks	262
49.	Accessible passenger loading zones on-street	268
50.	Accessible parking spaces in infrastructure off-street carparks	273
Part 5: Accessibility in conveyances		278
51.	Grabrails on access paths	279
52.	Grabrails in allocated spaces	285
53.	Mobility aid movement in allocated spaces – passive restraints	291
54.	Mobility aid movement in allocated spaces – active restraints	297
55.	Appropriate seats on booked services	302
56.	Conveyance dwell times at stops	307
57.	Stairs on trains	311
58.	Stairs on ferries	316
59.	Stairs on buses	321
60.	Doorway contrast and height	326
61.	Stage 1 reform areas and preferred options	332
62.	Implementation approach	347
63.	Evaluation	359
Appendix A—Detailed reform options		360
1.	Reporting	360
2.	Equivalent access	363
3.	Rideshare	365
4.	Dedicated school buses	367
5.	Better communication of accessibility features	371
6.	Timely provision of information	373
7.	Real time communication	374
8.	Passenger location during journey	376
9.	Hearing augmentation on conveyances	376
10.	Hearing augmentation: infrastructure and premises	379
11.	Print size and format	381
12.	International symbol for access and deafness	382
13.	Letter heights and luminance contrast of signs	384
14.	Location of signs	386
15.	Braille embossed (printed) specifications	388
16.	Braille and tactile lettering for signage	389

17.	Lifts: braille and tactile information at lift landings	393
18.	Lifts: audible wayfinding	394
19.	Lifts: emergency communication in lift cars	396
20.	Lifts: reference for lift car communication and information systems	398
21.	Information and communication technologies (ICT) procurement	399
22.	Mobile web systems	402
23.	Accessible fare system elements	403
24.	Doors on access paths	407
25.	Continuous accessibility on access paths	410
26.	Flange gaps within access paths	412
27.	Resting points	413
28.	Requirements for handrails in over bridges and subways	415
29.	Location of fare system elements	416
30.	Allocated spaces and priority seating in waiting areas	418
31.	Accessible toilets with equal proportion of left- and right-hand configurations	420
32.	Emergency call buttons in accessible toilets	421
33.	Ambulant toilets	424
34.	Lift specifications and enhancements	425
35.	Specifications for escalators and inclined travellers	426
36.	Poles, objects and luminous contrast	428
37.	Lighting	430
38.	Signals and process for requesting boarding devices	442
39.	Notification by passenger of need for boarding device	444
40.	Portable boarding ramp edge barriers	446
41.	Boarding ramp and removable gangway definitions	447
42.	Removable gangway design – ferries	448
43.	Nominated assistance boarding points	450
44.	Identification of lead stops	453
45.	Pontoon boarding points on infrastructure	454
46.	Bus, tram and light rail boarding points on infrastructure	456
47.	Hail-and-ride boarding points on infrastructure	458
48.	Accessible taxi ranks	459
49.	Accessible passenger loading zones on-street	461
50.	Accessible parking spaces in infrastructure off-street carparks	464
51.	Grabrails on access paths	466
52.	Grabrails in allocated spaces	468
53.	Mobility aid movement in allocated spaces – passive restraints	469
54.	Mobility aid movement in allocated spaces – active restraints	472
55.	Appropriate seats on booked services	474
56.	Conveyance dwell times at stops	476
57.	Stairs on trains	477
58.	Stairs on ferries	479
59.	Stairs on buses	481
60.	Doorway contrast and height	483
61.	Implementation approach	485

List of Figures and Tables

Table 1: Summary of Stage 2 reform areas, preferred options and implementation approach	13
Table 2: Summary of Stage 1 reform areas, confirmed options and implementation approach	17
Table 3: Glossary of terms and abbreviations used in the Decision RIS	18
Table 4: Glossary of Australian Standards and other standard references	20
Table 5: Summary of submissions received by stakeholder group	28
Table 6 Summary of consultation activities and engagement	28

Table 7: Cost benefit analysis results by reform theme	33
Table 8: Reform options for Reporting	35
Table 9: Benefit-cost ratios for Reporting	36
Table 10: Benefit-cost ratios for Equivalent Access	42
Table 11: Qualitative benefits for Equivalent Access	43
Table 12: Reform options for Rideshare	47
Table 13: Benefit-cost ratios for Rideshare	48
Table 14: Qualitative benefits for Rideshare	48
Table 15: Reform options for Dedicated school buses	52
Table 16: Benefit-cost ratios for Dedicated school buses.....	53
Table 17: Qualitative benefits for Dedicated school buses	54
Table 18: Reform options for Better communication of accessibility features	59
Table 19: Benefit-cost ratios for Better communication of accessibility features	60
Table 20: Qualitative benefits for Better communication of accessibility features	61
Table 21 Reform options for Timely provision of information	64
Table 22: Benefit-cost ratios for Timely provision of information.....	65
Table 23: Qualitative benefits for Timely provision of information	65
Table 24: Reform options for Real time communication.....	69
Table 25: Benefit-cost ratios for Real time communication	70
Table 26: Qualitative benefits for Real time communication.....	70
Table 27: Reform options for Passenger location during journey	74
Table 28: Benefit-cost ratios for Passenger location during journey.....	75
Table 29: Qualitative benefits for Passenger location during journey	75
Table 30: Reform options for Hearing augmentation on conveyances	79
Table 31: Benefit-cost ratios for Hearing augmentation on conveyances.....	80
Table 32: Qualitative benefits for Hearing augmentation on conveyances	80
Table 33: Reform options for Hearing augmentation: infrastructure and premises	83
Table 34: Benefit-cost ratios for Hearing augmentation: infrastructure and premises.....	84
Table 35: Qualitative benefits for Hearing augmentation: infrastructure and premises	84
Table 36: Reform options for Print size and format	87
Table 37: Benefit-cost ratios for Print size and format.....	87
Table 38: Qualitative benefits for Print size and format.....	88
Table 39: Reform options for International Symbol for Access and Deafness	90
Table 40: Benefit-cost ratios for International Symbol for Access and Deafness	91
Table 41: Qualitative benefits for International Symbol for Access and Deafness.....	91
Table 42: Reform options for letter heights and luminance contrast of signs	94
Table 43: Reform options for Location of signs	97
Table 44: Reform options for Braille embossed (printed) specifications	100
Table 45: Benefit-cost ratios for Braille embossed (printed) specifications	101
Table 46: Qualitative benefits for Braille embossed (printed) specifications.....	101
Table 47: Reform options for Braille and tactile lettering for signage.....	105
Table 48: Benefit-cost ratios for Braille and tactile lettering for signage	105
Table 49: Qualitative benefits for braille and tactile lettering for signage	106

Table 50: Reform options for Lifts - Braille and tactile information at lift landings.....	109
Table 51: Benefit-cost ratios for Lifts - Braille and tactile information at lift landings	109
Table 52: Qualitative benefits for Lifts - Braille and tactile information at lift landings.....	110
Table 53: Reform options for Lifts - Audible wayfinding	113
Table 54: Benefit-cost ratios for Lifts - Audible wayfinding.....	114
Table 55: Qualitative benefits for Lifts - Audible wayfinding	115
Table 56: Reform options for Lifts - Emergency communication systems in lift cars	118
Table 57: Benefit-cost ratios for Lifts - Emergency communication systems in lift cars.....	119
Table 58: Qualitative benefits for Lifts - Emergency communication systems in lift cars	119
Table 59: Reform options for Lifts - Reference for lift car communication and information systems.....	122
Table 60: Benefit-cost ratios for Lifts - Reference for lift car communication and information systems	123
Table 61: Qualitative benefits for Lifts - Reference for lift car communication and information systems	124
Table 62: Reform options for ICT procurement	127
Table 63: Benefit-cost ratios for ICT procurement.....	128
Table 64: Qualitative benefits for ICT procurement	129
Table 65: Reform options for accessible fare system elements	139
Table 66: Benefit-cost ratios for accessible fare system elements.....	140
Table 67: Qualitative benefits for accessible fare system elements.....	141
Table 68: Reform options for Doors on access paths	146
Table 69: Benefit-cost ratios for Doors on access paths.....	147
Table 70: Qualitative benefits for Doors on access paths	148
Table 71: Reform options for continuous accessibility on access paths.....	152
Table 72: Reform options for flange gaps within access paths	156
Table 73: Benefit-cost ratios for flange gaps within access paths	157
Table 74: Qualitative benefits for flange gaps within access paths.....	157
Table 75: Reform options for Resting points	162
Table 76: Benefit-cost ratios for Resting points.....	163
Table 77: Qualitative benefits for resting points	163
Table 78: Reform options for requirements for handrails in overbridges and subways	167
Table 79: Benefit-cost ratios for requirements for handrails in overbridges and subways	168
Table 80: Qualitative benefits for requirements for handrails in overbridges and subways.....	168
Table 81: Reform options for location of fare system elements	171
Table 82: Benefit-cost ratios for location of fare system elements	172
Table 83: Qualitative benefits for location of fare system elements.....	172
Table 84: Reform options for allocated spaces and priority seating in waiting areas	176
Table 85: Benefit-cost ratios for allocated spaces and priority seating in waiting areas.....	177
Table 86: Qualitative benefits for allocated spaces and priority seating in waiting areas	177
Table 87: Reform options for accessible toilets with equal proportion of left- and right-hand configurations	180
Table 88: Benefit-cost ratios for accessible toilets with equal proportion of left- and right-hand configurations.....	181
Table 89: Qualitative benefits for accessible toilets with equal proportion of left- and right-hand configurations	181
Table 90: Reform options for emergency call buttons in accessible toilets	184
Table 91: Benefit-cost ratios for emergency call buttons in accessible toilets.....	185
Table 92: Qualitative benefits for emergency call buttons in accessible toilets.....	185

Table 93: Reform options for ambulant toilets	188
Table 94: Benefit-cost ratios for ambulant toilets	189
Table 95: Qualitative benefits for ambulant toilets.....	189
Table 96: Reform options for lift specifications and enhancements	192
Table 97: Benefit-cost ratios for lift specifications and enhancements.....	193
Table 98: Qualitative benefits for lift specifications and enhancements	194
Table 99: Reform options for specifications for escalators and inclined travellers	196
Table 100: Benefit-cost ratios for specifications for escalators and inclined travellers	197
Table 101: Qualitative benefits for specifications for escalators and inclined travellers	197
Table 102: Reform options for poles, objects and luminance contrast	200
Table 103: Reform options for lighting.....	204
Table 104: Benefit-cost ratios for lighting	205
Table 105: Qualitative benefits for lighting	206
Table 106: Reform options for signals and process for requesting boarding devices	210
Table 107: Benefit-cost ratios for signals and process for requesting boarding devices.....	211
Table 108: Qualitative benefits for signals and process for requesting boarding devices	212
Table 109: Reform options for notification by passenger of need for boarding device	216
Table 110: Benefit-cost ratios for notification by passenger of need for boarding device.....	217
Table 111: Qualitative benefits for notification by passenger of need for boarding device	218
Table 112: Reform options for portable boarding ramp edge barriers	221
Table 113: Benefit-cost ratios for portable boarding ramp edge barriers.....	222
Table 114: Qualitative benefits for portable boarding ramp edge barriers	223
Table 115: Reform options for Boarding ramp and removable gangway definitions	227
Table 116: Reform options for removable gangway design – ferries	231
Table 117: Benefit-cost ratios for removable gangway design – ferries.....	232
Table 118: Qualitative benefits for removable gangway design – ferries	232
Table 119: Reform options for nominated assistance boarding points.....	236
Table 120: Benefit-cost ratios for nominated assistance boarding points	237
Table 121: Qualitative benefits for nominated assistance boarding points	238
Table 122: Reform options for identification of lead stops	243
Table 123: Benefit-cost ratios for identification of lead stops.....	244
Table 124: Qualitative benefits for identification of lead stops	245
Table 125: Reform options for pontoon boarding points on infrastructure.....	247
Table 126: Benefit-cost ratios for pontoon boarding points on infrastructure	248
Table 127: Qualitative benefits for pontoon boarding points on infrastructure	248
Table 128: Reform options for bus, tram and light rail boarding points on infrastructure	252
Table 129: Benefit-cost ratios for bus, tram and light rail boarding points on infrastructure	253
Table 130: Qualitative benefits for bus, tram and light rail boarding points on infrastructure.....	254
Table 131: Reform options for hail-and-ride boarding points on infrastructure.....	257
Table 132: Reform options for accessible taxi ranks	262
Table 133: Benefit-cost ratios for accessible taxi ranks	263
Table 134: Qualitative benefits for accessible taxi ranks.....	264
Table 135: Interactions with Stage 1 for Accessible taxi ranks.....	267

Table 136: Reform options for accessible passenger loading zones on-street.....	268
Table 137: Benefit-cost ratios for accessible passenger loading zones on-street	269
Table 138: Qualitative benefits for accessible passenger loading zones on-street.....	270
Table 139: Interactions with Stage 1 for Accessible passenger loading zones on-street	272
Table 140: Reform options for accessible parking spaces in infrastructure off-street carparks.....	273
Table 141: Benefit-cost ratios for accessible parking spaces in infrastructure off-street carparks	274
Table 142: Qualitative benefits for accessible parking spaces in infrastructure off-street carparks.....	275
Table 143: Reform options for grabrails on access paths.....	279
Table 144: Benefit-cost ratios for grabrails on access paths	280
Table 145: Qualitative benefits for grabrails on access paths	281
Table 146: Reform options for grabrails in allocated spaces.....	285
Table 147: Benefit-cost ratios for grabrails in allocated spaces	286
Table 148: Qualitative benefits for grabrails in allocated spaces	287
Table 149: Reform options for mobility aid movement in allocated spaces – passive restraints.....	291
Table 150: Benefit-cost ratios for mobility aid movement in allocated spaces – passive restraints	292
Table 151: Qualitative benefits for mobility aid movement in allocated spaces – passive restraints.....	293
Table 152: Reform options for mobility aid movement in allocated spaces – active restraints.....	297
Table 153: Benefit-cost ratios for mobility aid movement in allocated spaces – active restraints	298
Table 154: Qualitative benefits for mobility aid movement in allocated spaces – active restraints.....	299
Table 155: Reform options for appropriate seats on booked services.....	302
Table 156: Benefit-cost ratios for appropriate seats on booked services	303
Table 157: Qualitative benefits for appropriate seats on booked services	304
Table 158: Reform options for conveyance dwell times at stops.....	307
Table 159: Qualitative benefits for conveyance dwell times at stops	308
Table 160: Reform options for stairs on trains	311
Table 161: Benefit-cost ratios for stairs on trains.....	312
Table 162: Qualitative benefits for stairs on trains	313
Table 163: Reform options for stairs on ferries	316
Table 164: Benefit-cost ratios for stairs on ferries.....	317
Table 165: Qualitative benefits for stairs on ferries	318
Table 166: Reform options for stairs on buses	321
Table 167: Benefit-cost ratios for stairs on buses.....	322
Table 168: Qualitative benefits for stairs on buses	323
Table 169: Reform options for Doorway contrast and height	326
Table 170: Benefit-cost ratios for doorway contrast and height	327
Table 171: Qualitative benefits for doorway contrast and height.....	328
Table 172: Preferred option for Staff Training and Communication	332
Table 173: Preferred option for Mobility aid safety	333
Table 174: Preferred option for Priority seating.....	334
Table 175: Preferred option for Allocated spaces	335
Table 176: Preferred option for Digital information screens.....	336
Table 177: Preferred option for Lifts	336
Table 178: Preferred option for Website accessibility.....	337

Table 179: Preferred option for Communication during service disruption	338
Table 180: Preferred option for Gangways.....	339
Table 181: Preferred option for Assistance animal toileting facilities	340
Table 182: Preferred option for Emergency egress	340
Table 183: Preferred option for Fit for purpose accessways	341
Table 184: Preferred option for Wayfinding.....	342
Table 185: Preferred option for Tactile ground surface indicators (TGSIs).....	343
Table 186: Preferred option for Passenger loading areas	344
Table 187: Preferred option for Provision of information in multiple formats	345
Table 188: Preferred option for Australian Standards and definitional amendments	346
Table 189: Reform options for implementation	347

Executive Summary

There are more than four million people with disability in Australia, or around 18% of Australia's population.¹



1 in 5 (22%) people aged 15 and over with disability experience some form of discrimination (including disability discrimination).²

Discrimination happens when a person, or group of people, are treated less favourably than others because of their background or personal characteristics. Experiencing discrimination makes participating in everyday activities more difficult, affects education and employment opportunities, and limits social interactions. People who are not able to participate in everyday activities can be at higher risk of adverse outcomes, including social isolation, unemployment and poor health.

The *Disability Discrimination Act 1992* (DDA) makes discrimination on the basis of disability unlawful in key areas of public life, including in the provision of public transport services, employment and education.

The Disability Standards for Accessible Public Transport 2002 (Transport Standards) were introduced to provide certainty to operators and providers of public transport services about their responsibilities under the DDA.

One in six people aged 15 years and over with disability have difficulty using public transport. Challenges people with disability may face when using public transport include:

- poor access to stations, stops and terminals
- difficulty in accessing information suitable to their needs
- safety challenges in planning and completing a public transport journey³.

A person with disability only needs to encounter one of these barriers for their journey to be disrupted. Over time, this can erode the confidence of people with disability, undermine their independence, and impact their ability to travel to work or study, connect with their community and access essential services such as healthcare and education.

Every five years, the Minister for Infrastructure, Transport and Regional Development, in consultation with the Attorney-General, is required to review the efficiency and effectiveness of the Transport Standards. Previous Reviews of the Transport Standards have recognised the Transport Standards should be updated to reflect current and future needs of people with disability, and to provide sufficient flexibility or guidance to operators and providers to fulfil their obligations under the DDA.

Government action is needed to implement regulation where consultation and analysis identified guidance would not be sufficient to address the discriminatory outcomes. Government action is also needed to help simplify the regulatory landscape by harmonizing requirements between the Transport Standards and the Disability (Access to Premises – Buildings) Standards 2010 (also known as the Premises Standards).

¹ Australian Government Australian Bureau of Statistics (ABS), *Disability, ageing and carers, Australia: summary of findings* (2018), <https://www.abs.gov.au/statistics/health/disability/disability-ageing-and-carers-australia-summary-findings/latest-release>, 5 December 2022

² ABS, *General Social Survey: summary results*, Australia (2019), <https://www.abs.gov.au/statistics/people/people-and-communities/general-social-survey-summary-results-australia/latest-release>, 5 December 2022

³ Australian Government Australian Institute of Health and Welfare, *People with Disability in Australia 2020*, <https://www.aihw.gov.au/getmedia/ee5ee3c2-152d-4b5f-9901-71d483b47f03/aihw-dis-72.pdf.aspx?inline=true>, 15 November 2021

Executive Summary

There have been significant innovations in public transport provisions and usage since the Transport Standards came into effect twenty years ago, including the use of rideshare services, electronic ticketing, and greater availability of passenger information delivered online and in real-time. Many Australian Standards referenced within the Transport Standards have also been updated to include innovations from industry, such as new technology and improved safety and accessibility provisions. Modernisation of the Transport Standards is necessary to reflect these changes and ensure contemporary Australian Standards are referenced.

In August 2019, Transport Ministers agreed to reform the Transport Standards. These reforms aim to eliminate discrimination, as far as possible, against people with disability and provide greater certainty to operators and providers regarding their responsibilities under the Transport Standards. In addition, the reforms assist the Australian Government to deliver on the objectives of Australia's National Disability Strategy 2021-2031 (ADS). The Strategy recognises the role accessible public transport systems play in achieving an inclusive Australian society and ensures people with disability can fulfil their potential, as equal members of the community⁴.

The reform process was jointly led by the Australian and Queensland Governments and undertaken in two stages:

- Stage 1 – This stage identified 16 reform areas. A Decision Regulation Impact Statement (RIS) was provided to Transport Ministers on 11 February 2022, where the first 16 areas of reform were confirmed.
- Stage 2 – This stage identified 54 reform areas, detailed in 60 chapters in a Consultation RIS open for public consultation from 15 March to 9 August 2022.

More than 400 people with disability, their families and carers, disability stakeholders, transport operators and government representatives participated in public consultation events between 17 June and 21 July 2022 to have their say on Stage 2 reform areas. 84 stakeholders also provided written submissions in response to the Stage 2 Consultation RIS.

The results of the cost-benefit analysis (CBA) indicate the package of Stage 2 reforms produces overall positive economic outcomes and a net benefit for the Australian community, with a BCR of 1.81 and NPV of \$3.280 billion (at a 7% discount rate over a 20-year implementation period and 15-year appraisal period).

This Decision RIS examines the 54 reforms areas across 61 chapters, and provides an impact analysis for each reform area considering:

- the viability of three proposed policy options: status quo, non-regulatory and regulatory
- quantitative and qualitative costs and benefits for each policy option
- stakeholder feedback from people with disability, their families, carers and advocates, public transport operators and providers and state and territory governments, gathered through national consultations events and submissions.

Following analysis of all available evidence, a preferred option has been identified for each reform area. The rationale for each preferred option is intended to inform a decision by governments, balancing the regulatory impacts of new or updated requirements against the overarching goal of the DDA and the Transport Standards.

A recommended implementation approach for the entire package of reforms (Stage 1 and 2) is provided in this Decision RIS. The recommended implementation approach details whether new regulatory requirements should be applied retrospectively or prospectively, and details how new guidance material will be provided for non-regulatory options.

⁴ Australia's Disability Strategy 2021-2031, 12 January 2022, <https://www.disabilitygateway.gov.au/ads>

Consistent with the structure of the Stage 2 Consultation RIS, the 61 chapters are grouped into the following Parts within this Decision RIS:

- **Part 1: Transport Standards principles** – reforms that may result in a change to the legislative framework.
- **Part 2: Information, communication and wayfinding** – reforms that may improve the way information is provided in a consistent, timely and accessible format across the public transport journey and improve wayfinding.
- **Part 3: Accessibility at stations, stops, wharves and access routes** – reforms that may improve accessibility of any facility provided for use as part of a public transport service.
- **Part 4: Accessibility of boarding and alighting and egress of infrastructure** – reforms that may improve accessibility within immediate boarding or alighting of a public transport vehicle.
- **Part 5: Accessibility in conveyance** – reforms that may improve accessibility inside a public transport vehicle.
- **Part 6: Implementation approach** – implementation approach for the whole package of reforms, including Stages 1 and 2.

Summary of Stage 2 reform areas, preferred options and implementation approach

Table 1 (below) lists each reform area, the preferred option for Transport Ministers consideration and a preferred implementation approach. The proposed implementation approaches require reforms to be implemented prospectively or retrospectively over a given time period. Prospective requirements apply to new or substantially refurbished public transport assets only. Retrospective requirements require all relevant public transport assets to be made compliant within the proposed time frame.

In total, this Decision RIS recommends 44 regulatory, 13 non-regulatory and 3 status quo options for consideration by Transport Ministers.

Table 1: Summary of Stage 2 reform areas, preferred options and implementation approach

Reform area	Preferred option	Implementation approach
Part 1: Transport Standards principles		
1. Reporting	Non-regulatory	Standalone guidance (refer to chapter)
2. Equivalent access	Non-regulatory	Standalone guidance (refer to chapter)
3. Rideshare	Regulatory	Retrospective – 5 years (raised registration number and response times) Prospective – requirements that apply to accessible taxis
4. Dedicated school buses	Status quo	N/A
Part 2: Information, communication and wayfinding		
5. Better communication of accessibility features	Regulatory with revisions	Retrospective – 5 years
6. Timely provision of information	Regulatory with additional guidance	Retrospective – 5 years
7. Real time communication	Non-regulatory	The Whole Journey Guide

Executive Summary

Reform area	Preferred option	Implementation approach
8. Passenger location during journey	Regulatory with revisions, sub-option 1 (see Appendix A, page 381 for full details)	Prospective
9. Hearing augmentation on conveyances	Status quo	N/A
10. Hearing augmentation: Infrastructure and premises	Status quo	N/A
11. Print size and format	Regulatory with additional guidance	Prospective
12. International symbol for access and deafness	Regulatory, sub-option 2 (see Appendix A, page 389 for full details)	Prospective
13. Letter heights and luminance contrast of signs	Regulatory, option 2, sub-option 2 (see Appendix A, page 390 for full details)	Prospective
14. Location of signs	Regulatory with additional guidance, sub-option 2 (see Appendix A, page 392 for full details)	Prospective
15. Braille specifications	Regulatory in-principle	Other (refer to chapter)
16. Braille and tactile lettering for signage	Regulatory in-principle	Other (refer to chapter)
17. Lifts: Braille and tactile information at lift landings	Regulatory	Retrospective – 5 years
18. Lifts: Audible wayfinding	Regulatory, option 2 (see Appendix A, page 402 for full details)	Prospective
19. Lifts: Emergency communication systems in lift cars	Regulatory	Prospective
20. Lifts: Reference for lift car communication and information systems	Non-regulatory	The Whole Journey Guide
21. Information and communication technologies (ICT) procurement	Regulatory, option 1 (see Appendix A, page 407 for full details)	Prospective
22. Mobile web systems	Regulatory, option 1 (see Appendix A, page 411 for full details)	Prospective
23. Accessible fare system elements	Regulatory, option 2, sub-option 2 (see Appendix A, page 412 for full details)	Prospective

Part 3: Accessibility at stations, stops, wharves and access routes

Executive Summary

Reform area	Preferred option	Implementation approach
24. Doors on access paths	Regulatory with revisions, option 2 (see Appendix A, page 417 for full details)	Prospective
25. Continuous accessibility on access paths	Regulatory with additional guidance	On commencement
26. Flange Gaps	Non-regulatory with revisions	The Whole Journey Guide
27. Resting points	Regulatory with additional guidance	Retrospective – 5 years
28. Requirement for handrails in over bridges and subways	Regulatory	Prospective
29. Location of fare system elements	Regulatory	Prospective
30. Allocated Spaces and priority seating in waiting areas	Regulatory with revisions	Retrospective – 5 years
31. Accessible toilets with equal proportion of left- and right-hand configurations	Regulatory with revisions	Prospective
32. Emergency call buttons in accessible toilets	Non-regulatory	The Whole Journey Guide
33. Ambulant toilets	Non-regulatory	The Whole Journey Guide
34. Lift specifications and enhancements	Regulatory	Prospective
35. Specifications for escalators and inclined travellers	Regulatory	Prospective
36. Poles, objects and luminance contrast	Regulatory, option 1, sub-option 1 (see Appendix A, page 438 for full details)	Prospective
37. Lighting	Regulatory, option 1 (see Appendix A, page 441 for full details)	On commencement
Part 4: Accessibility of boarding and alighting and egress of infrastructure		
38. Signals and process for requesting boarding devices	Regulatory with additional guidance, sub-option 2 (see Appendix A, page 452 for full details)	Prospective
39. Notification by passenger of need for boarding device	Non-regulatory, sub-option 1 (see Appendix A, page 454 for full details)	Transport Standards Guidelines
40. Portable boarding ramp edge barriers	Regulatory, option 2 (see Appendix A, page 456 for full details)	Prospective
41. Boarding ramp and removable gangway definitions	Regulatory	On commencement

Reform area	Preferred option	Implementation approach
42. Removable gangway design - ferries	Regulatory in-principle	Other (refer to chapter)
43. Nominated assistance boarding points	Regulatory with revisions, option 1, sub-option 5 (see Appendix A, page 461 for full details)	Prospective
44. Identification of lead stops	Regulatory with additional guidance	Retrospective – 5 years
45. Pontoon boarding points on infrastructure	Non-regulatory	The Whole Journey Guide
46. Bus, tram and light rail boarding points on infrastructure	Regulatory, option 2 (see Appendix A, page 466 for full details)	Prospective
47. Hail-and-ride boarding points on infrastructure	Regulatory with additional guidance	On commencement
48. Accessible taxi ranks	Regulatory with revisions, sub-option 1 (see Appendix A, page 469 for full details)	Retrospective – 10 years
49. Accessible passenger loading zones on-street	Regulatory with revisions, sub-option 1 (see Appendix A, page 471 for full details)	Retrospective – 10 years
50. Accessible parking spaces in infrastructure off-street carparks	Regulatory with additional guidance, sub-option 1 (see Appendix A, page 474 for full details)	Retrospective – 10 years
Part 5: Accessibility in conveyance		
51. Grab-rails on access paths	Regulatory with revisions	Prospective
52. Grab-rails in allocated spaces	Regulatory with revisions	Prospective
53. Mobility aid movement in allocated spaces: Passive restraints	Non-regulatory	The Whole Journey Guide
54. Mobility aid movement in allocated spaces: Active restraints	Non-regulatory	The Whole Journey Guide
55. Appropriate seats on booked services	Regulatory with additional guidance	Retrospective – 5 years
56. Conveyance dwell times at stops	Non-regulatory	The Whole Journey Guide
57. Stairs on trains	Regulatory with revisions, sub-option 2 (see Appendix A, page 486 for full details)	Prospective
58. Stairs on ferries	Regulatory with revisions	Prospective
59. Stairs on buses	Regulatory with revisions	Prospective
60. Doorway contrast and height	Regulatory with revisions	Retrospective – 5 years

Summary of Stage 1 reform areas, preferred options and implementation approach

Table 2 (below) lists each reform area in Stage 1 of the reform process, the preferred option for Transport Ministers consideration and a preferred implementation approach for the preferred option. The proposed implementation approaches require reforms to be implemented prospectively or retrospectively over a given time period. Prospective requirements apply to new or substantially refurbished public transport assets only. Retrospective requirements require all relevant public transport assets to be made compliant within the proposed time frame.

Ministers agreed to 12 regulatory and 4 non-regulatory options in Stage 1 of the reform process.

Table 2: Summary of Stage 1 reform areas, confirmed options and implementation approach

Reform area	Confirmed option	Implementation approach
1. Staff training and communication	Regulatory with revisions	Retrospective – 5 years
2. Mobility aid safety	Non-regulatory	The Whole Journey Guide
3. Priority seating	Regulatory with revisions	Retrospective – 5 years
4. Allocated spaces	Regulatory with revisions, sub-option 3	Prospective
5. Digital information screens	Regulatory	Prospective
6. Lifts	N/A – covered in Stage 2	N/A
7. Website accessibility	Regulatory, sub-option 3	Prospective
8. Communication during service disruption	Regulatory with revisions	Retrospective – 5 years
9. Gangways	Regulatory with revisions	Prospective
10. Assistance animal toileting facilities	Non-regulatory	The Whole Journey Guide
11. Emergency egress	Non-regulatory	The Whole Journey Guide
12. Fit for purpose accessways	Non-regulatory	The Whole Journey Guide
13. Wayfinding	Regulatory with revisions	Retrospective – 10 years
14. Tactile ground surface indicators (TGSIs)	Regulatory with revisions	Retrospective – 10 years
15. Passenger loading zones	Regulatory with revisions, sub-option 2	Retrospective – 10 years
16. Provision of information in multiple formats	Regulatory with revisions	Retrospective – 5 years
17. Australian Standards and definitional amendments	Support all 32 regulatory amendments	Other (refer to implementation chapter)

Glossary of terms and abbreviations

Table 3: Glossary of terms and abbreviations used in the Decision RIS

Term / abbreviation	Description
ABS	Australian Bureau of Statistics
ADS (the Strategy)	Australia's Disability Strategy 2021 to 2031. Refer to https://www.disabilitygateway.gov.au/ads
AHRC	Australian Human Rights Commission
AMSA	Australian Maritime Safety Authority
AS	Australian Standard
Conveyance	As per Transport Standards section 1.12, Conveyance: a conveyance includes any of the following, to the extent that they are used to provide a public transport service: aircraft, buses or coaches, ferries, taxis, trains, trams, light rail, monorails, rack railways, any other rolling stock, vehicle or vessel classified as public transport within its jurisdiction by regulation or administrative action of any Government in Australia. A conveyance does not include charter boats (including water taxis), limousines (including chauffeured hire cars) or self-drive rental cars.
Department	Australian Government Department of Infrastructure, Transport, Regional Development Communications and the Arts.
DISER	Australian Government Department of Industry, Science, Energy and Resources
Disability Standards	Refers to the legislative instruments developed under the <i>Disability Discrimination Act 1992</i> , including the Disability Standards for Education 2005, Disability (Access to Premises—Buildings) Standards 2010 and the Disability Standards for Accessible Public Transport 2002.
DDA	<i>Disability Discrimination Act 1992</i>
DSAPT	Disability Standards for Accessible Public Transport 2002
Education Standards	Disability Standards for Education 2005
Infrastructure	As per Transport Standards section 1.18, Infrastructure: infrastructure is any structure or facility that is used by passengers in conjunction with travelling on a public transport service. Infrastructure does not include any area beyond immediate boarding points (for example, bus stops, wharves, ranks, rail stations, terminals).
ITMM	Infrastructure and Transport Ministers Meeting
ITSOC	Infrastructure and Transport Senior Officials Committee
NSCV	National Standard for Commercial Vessels
NZ	New Zealand
Operators	As per Transport Standards section 1.20, Operator: an operator is a person or organisation (including the staff of the organisation) that provides a public transport services to the public or to section of the public. A public transport service may have more than one operator.
Passengers	For the purpose of this document, passengers refers to members of the public that may potentially or actually use a public transport service. Refer to public transport services for further information.
Premises Standards	Disability (Access to Premises—Buildings) Standards 2010

Executive Summary

Term / abbreviation	Description
Premises	As per Transport Standards section 1.21, Premises: premises are structures, buildings or attached facilities that an operator provides for passengers to use as part of a public transport service.
Prospective implementation	Applies to all new public transport assets and will only apply to public transport assets that are currently in service if the asset is substantially upgraded.
Providers	As per Transport Standards section 1.22, Provider: a provider is a person or organisation that is responsible for the supply or maintenance of public transport infrastructure. A provider need not be an operator.
Public transport service	As per Transport Standards section 1.23, Public transport service: a public transport service is an enterprise that conveys members of the public by land, water or air. A public transport service includes: community transport conveyances that are funded or subsidised by charity or public money and that offer services to the public; and foreign aircraft and vessels that carry passengers to, from or in Australia and that offer services to the public. A public transport service does not include a service that provides adventure travel (for example, white water rafting, ballooning or amusement park rides), except to the extent that the service operates to move the public from one location to another distant location.
Retrospective implementation	Applies to all new public transport assets and all public transport assets that are currently in service in accordance with the dates in the compliance schedule.
RIS	Regulation Impact Statement
Steering Committee	National Accessible Transport Steering Committee
Taskforce	National Accessible Transport Taskforce
TGSI	Tactile ground surface indicator
The Whole Journey Guide	The Whole Journey Guide: A guide for thinking beyond compliance to create accessible public transport journeys
Transport Standards Guidelines	Guidelines: Equivalent Access under the Disability Standards for Accessible Public Transport 2002 (Cth)
Transport Standards	Disability Standards for Accessible Public Transport 2002
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities

Glossary of Australian Standards and other standards references

Table 4: Glossary of Australian Standards and other standard references

Australian Standard	Title
AS1428.1 (2001)	Design for access and mobility—General requirements for access—new building work
AS1428.1 (2009)	Design for access and mobility—General requirements for access—new building work
AS1428.1 (2021)	Design for access and mobility—General requirements for access—new building work
AS1428.2 (1992)	Design for access and mobility. Part 2: Enhanced and additional requirements—Buildings and facilities
AS1428.4.2 (2018)	Design for Access and Mobility, Part 4.2: Means to assist the orientation of people with vision impairment—Wayfinding signs
AS1428.5 (2010)	Design for access and mobility, Part 5: Communication for people who are deaf or hearing impaired
AS1428.5 (2021)	Design for access and mobility, Part 5: Communication for people who are deaf or hearing impaired
AS1735.12 (1999)	Lifts, escalators and moving walkways
AS1735.12 (2020)	Lifts, escalators and moving walkways
AS1742.11 (2016)	Manual of uniform traffic control devices, Part 11: Parking controls (MUTCD)
AS1742.7 (2016)	Manual of uniform traffic control devices, Part 7: Railway crossings
AS2890.5 (2020)	Parking facilities, Part 5: On-street parking
AS3856.1 (2021)	Hoists and ramps for people with disabilities—Vehicle mounted, Part 1: Product requirements
AS3962 (2020)	Marina Design
AS/EN301549 (2016)	Accessibility requirements suitable for public procurement of ICT products and services
AS/EN301549 (2020)	Accessibility requirements suitable for public procurement of ICT products and services
AS/NZS1158.3.1 (2020)	Lighting for roads and public spaces, Part 3.1: Pedestrian area (Category P) lighting—Performance and design requirements for unenclosed zones
AS/NZS1680.2.1 (2008)	Interior and workplace lighting, Part 2.1: Specific applications—Circulation spaces and other general areas, and outlines specific lux levels for various contexts and elements
AS/NZS3856.1 (1998)	Hoists and ramps for people with disabilities—Vehicle-mounted, Part 1: Product requirements
AS/NZS4282 (2019)	Control of the obtrusive effects of outdoor lighting
AS/NZS10542.1 (2015)	Technical systems and aids for people with disability—Wheelchair tiedown and occupant-restraint systems, Part 1: Requirements and test methods for all systems

Introduction

Background

The Disability Standards for Accessible Public Transport 2002 (Transport Standards) are formulated by the Attorney-General under subsection 31(1) of the DDA. The Transport Standards seek to remove discrimination for people with disability to ensure equality and independence when accessing public transport.

The Transport Standards prescribe how public transport is to be made accessible and acknowledge the rights of passengers, operators and providers. The Transport Standards impose responsibilities on public transport operators and providers and prescribe accessibility requirements for conveyances, public transport infrastructure and certain premises.

The DDA makes it unlawful to discriminate against a person in the provision of services such as public transport, as well as other areas of public life, such as employment and education. Discrimination occurs when a person is treated less favourably, or not given the same opportunities as others because of their background or personal characteristics, such as age, sex, race or disability.

The Transport Standards apply to train, tram and light rail, bus and coach, ferry, taxi and aviation services and are designed to provide certainty to providers and operators of public transport services and infrastructure about their responsibilities under the DDA. The Transport Standards require all of Australia's public transport networks and associated infrastructure to be fully accessible by the end of 2022 (except for trains and trams, which have until the end of 2032).

In August 2019, Commonwealth, State and Territory Transport Ministers agreed to reform the Transport Standards to modernise them and address identified shortcomings. Ministers endorsed guiding principles for the reform process to ensure people with disability and their needs were at the centre of the reform process.

The guiding principles of the reform process

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.

Problem statement

Overview

Access to public transport is critical for people to participate fully in the community and the economy. Many people use public transport to travel to work or study, connect them to family, friends and their community, or help them access support and services, such as healthcare and education. However, 1 in 6 (17%) people aged 15 and over with disability have difficulty using public transport.⁵

The prevalence of disability increases with age and more than doubles between the ages of 65 and 85. One in 3 people living with disability (32 per cent) have a severe or profound disability. Three in four (77 per cent) of these people live with a physical disability and one in four (23 per cent) live with mental or behavioural disability.

People living with disability have reported the barriers they face when accessing public transport compared to other commuters to the Australian Government. For example: wheelchair-users highlighted issues when they

⁵ Australian Government Australian Institute of Health and Welfare, People with Disability in Australia 2020, <https://www.aihw.gov.au/getmedia/ee5ee3c2-152d-4b5f-9901-71d483b47f03/aihw-dis-72.pdf.aspx?inline=true>, 15 November 2021

Introduction

encounter stairs with no equivalent access solution, broken or poorly maintained footpaths, lifts out of order, or staff who were not trained to assist them or absent.

Public transport networks are complex and often involve utilisation of different modes of transport to complete a journey. The whole-of-journey concept is critical in understanding how barriers encountered by people with disability can impact their ability to travel. For many users of public transport, what may be a reasonable commuting experience is not equivalent to the experience encountered by a person with disability.

A person with disability only needs to encounter one of these barriers for their entire journey to be inaccessible. This can erode the confidence of people with disability in using public transport and reduce their independence, participation in society, employment opportunities and educational outcomes.

Independence and participation in society

Discrimination in the provision of public transport services contributes to social isolation of people living with disability.

Around 458,000 of people living with disability need help or supervision to use public transport. A further 1 in 14 can use public transport without help or supervision, but have difficulty.⁶

About 4 in 9 people aged 15–64 with disability avoided situations because of their disability in the previous year. Of those who avoided at least one situation because of their disability, 24 per cent of people avoided using public transport.⁷

Employment opportunities

Barriers to accessing public transport is a factor in limiting employment opportunities for those people living with disability. Only 53.4 per cent of working-aged people with disability participate in the labour force,⁸ and they are twice as likely as those without disability to be unemployed.⁹

Most (88 per cent) employed (salary or wage earning) working-age people with disability do not require specific arrangements from their employer to work. Of those who do, 50 per cent need special equipment or modified buildings/fittings, or to be provided special/free transport or parking.¹⁰

Access issues with transport and distance are encountered by 36 per cent of unemployed Aboriginal and Torres Strait Islander people with disability aged 15– 64 who report at least one difficulty in finding employment.

The Willing to Work: National Inquiry into Employment Discrimination Against Older Australians and Australians with Disability report, published by the AHRC in 2016, estimated the economic benefits of employing people with disability would add over \$50 billion to GDP by 2050. However, this contribution to GDP by addressing discrimination against people living with a disability was premised on Australia moving up into the top eight Organisation for Economic Co-operation and Development (OECD) countries for

⁶ ABS (2019b) *Microdata: disability, ageing and carers, Australia, 2018*, ABS cat. no. 4430.0.30.002, ABS, AIHW analysis of TableBuilder data, accessed 14 July 2021.

⁷ Australian Institute of Health and Welfare (AIHW), People with disability in Australia 2022: in brief, [People with disability in Australia, Disability discrimination - Australian Institute of Health and Welfare \(aihw.gov.au\)](#)

⁸ Australian Institute of Health and Welfare (AIHW), People with disability in Australia 2020: in brief <https://www.aihw.gov.au/reports/disability/people-with-disability-in-australia-2020-in-brief/contents/employment-external-site>, last updated 02 October 2020

⁹ Australian Institute of Health and Welfare (AIHW), People with disability in Australia 2020: in brief <https://www.aihw.gov.au/reports/disability/people-with-disability-in-australia-2020-in-brief/contents/employment-external-site>, last updated 02 October 2020

¹⁰ Australian Institute of Health and Welfare (AIHW), People with disability in Australia 2022, [People with disability in Australia 2022 \(aihw.gov.au\)](#), p.343.

Introduction

employment of people with disability.¹¹ The most recent OECD ranking placed Australia 21st out of 29 OECD countries for employment participation of people with disability.¹²

Educational opportunities

Discrimination in the provision of public transport can limit access to educational opportunities. Around 4 in 5 school students with disability aged 5–18 have one or more schooling restrictions. Students may receive multiple support arrangements, but of those receiving support 14.7 per cent require special access or transport arrangements to attend school.¹³

Access to education and the level of education attained can affect participation in other key areas of life, including employment and ability to achieve economic independence. People with disability are more likely to leave school at a younger age and to have a lower level of educational attainment.

Data gaps

The impact of discrimination in the provision of accessible public transport are likely understated due to data gaps. Access to accurate information on public transport assets, modes of travel and the accessibility of transport and associated services is limited. The Australian Institute of Health and Welfare (AIHW), *People with disability in Australia 2022*¹⁴ report noted this issue. Throughout the development of reforms, attempts were made to overcome data limitations using bespoke surveys.

Statutory reviews of the Disability Transport Standard

Since 2002, the effectiveness and efficiency of the Transport Standards has been reviewed every five years by the Minister responsible for the *National Land Transport Act 2014*, in consultation with the Attorney-General. The reviews must include whether discrimination has been removed, as far as possible, according to the requirement for compliance set out in Schedule 1 of the Transport Standards, and any necessary amendments to the Transport Standards.

These reviews identified the Transport Standards are not meeting the current and future needs of people with disability. These reviews said the Transport Standards need to provide more flexibility and guidance to transport operators and providers to practically fulfil their obligations under the DDA. People with disability continue to encounter access issues at various points in their whole of journey travel. When a barrier is encountered, the disruption often results in people with disability making less use of public transport, or ceasing to use public transport altogether.

Compliance targets for the Transport Standards were established in 2002 and provided a twenty-year period for transport operators and providers to achieve compliance with those requirements. Certain transport assets (trains and trams) had an additional 10 years to achieve compliance. The 2017 Review of the Transport Standards found that transport operators and providers have not met existing compliance requirements in the Transport Standards and were unlikely to do so by 2022. Comprehensive compliance data is not available due to identified data gaps and the absence of reporting requirements in the existing Transport Standards.

¹¹ Australian Human Rights Commission, *Willing to Work, National Inquiry into Employment Discrimination Against Older Australians and Australians with Disability* https://humanrights.gov.au/sites/default/files/document/publication/WTW_2016_Full_Report_AHRC_ac.pdf-external_site, pg 12, 2016

¹² pwc, *Disability expectations – Investing in a better life, a stronger Australia*, November 2011, pwc, <http://www.pwc.com/gx/en/industries/government-public-services/public-sector-research-centre/australia/investing-in-a-better-life-a-stronger-australia.html>

¹³ Australian Institute of Health and Welfare (AIHW), *People with disability in Australia 2022: in brief*, [People with disability in Australia, Education participation needs and challenges - Australian Institute of Health and Welfare \(aihw.gov.au\)](https://www.aihw.gov.au/reports/100/people-with-disability-in-australia-2022-in-brief)

¹⁴ Australian Institute of Health and Welfare (AIHW), *People with disability in Australia 2022*, [People with disability in Australia 2022 \(aihw.gov.au\)](https://www.aihw.gov.au/reports/100/people-with-disability-in-australia-2022), p. 507.

Introduction

Collectively the reviews identified barriers impacting the effectiveness and efficiency of the Transport Standards, including:

- a lack of clarity in how some provisions are written or where there are inconsistencies with other regulations.
- a need to reflect the current and future needs of Australian society, including:
 - ensuring new and emerging forms of transport and technologies are adequately captured.
 - review references to older Australian Standards which may be outdated, not fit-for-purpose or inconsistent with modern standards.
 - the prescriptive nature of some provisions reduces the ability of public transport operators and providers to implement innovative solutions.
 - a lack of funding arrangements to support upgrades to existing assets.
 - inconsistency in providing accessible public transport between states and territories, urban and rural areas, and modes of transport.
 - a lack of reporting provisions in the Transport Standards.
 - certain provisions place further barriers or fail to remove barriers to independent travel.

These barriers reduce the ability of people with disability to fully participate in the community, gain employment and access the services they need. Industry stakeholders' capacity to comply with the Transport Standards is also affected and, in some instances, resulted in expensive rectification costs and misalignment with other disability standards, such as the Premises Standards.

Issues for public transport operators and providers

Public transport operators and providers face a number of issues that impact their ability to comply with their requirements under the Transport Standards. Some issues relate to specific sections and others relate to the framework of the Transport Standards.

Specific sections of the Transport Standards may no longer be fit for purpose, with outdated requirements, references to antiquated Australian Standards, or they may not provide operators and providers legal certainty they have met their obligations. It may be impractical or unfeasible for public transport operators and providers to comply with specific provisions, reducing the efficiency of those provisions and increasing the risk of unintentionally purchasing or funding non-compliant conveyances or infrastructure. This results in inconsistent outcomes, or errors in interpreting the Transport Standards.

More broadly, there are several issues with the framework of the Transport Standards. The requirements for rideshare providers are unclear. It is challenging to monitor compliance with the Transport Standards and measure the accessibility of Australia's public transport networks. Many operators and providers are hesitant to use the equivalent access provisions.

Retrofitting existing assets to improve accessibility often comes at a significant cost to operators and providers. Many operators and providers have been unable to fund necessary upgrades to meet existing requirements.

These problems increase the regulatory burden on operators and providers beyond the cost of compliance, and can only be rectified through government action to amend the Transport Standards.

The rationale for government action

The DDA and Transport Standards apply to the widest possible range of people with disabilities within Australia and apply to all operators and the conveyances they use to provide public transport services. They also apply to providers of supporting premises and infrastructure. Amendments to the Transport Standards can directly address accessibility barriers and reduce regulatory burden on operators and providers.

The Australian Government is responsible for ensuring the Transport Standards remain up-to-date, efficient, effective and achieve their objective to eliminate discrimination as far as possible against people with disability. State and territory governments are responsible for ensuring their contracted public transport services do not discriminate against people with disability as far as possible. This requirement is shared by all

Introduction

public transport operators and providers, as well as local governments and private land owners who provide public transport infrastructure.

Despite the introduction of the DDA in 1992 and the Transport Standards in 2002, and substantial improvements to the accessibility of public transport services, people with disability still encounter barriers and face discrimination in accessing public transport. Collective government action is required to address these barriers and eliminate discrimination. Without collective government action, the public transport industry is unlikely to ensure public transport is accessible by updating and implementing modern accessibility requirements.

Working in coordination, collective action between the Australian Government and state and territory governments will:

- reduce discrimination against people with disability concerning public transport services, in line with the purpose of the DDA and the Transport Standards.
- improve the accessibility of Australia's public transport services to contribute to an inclusive Australian society, in line with the commitments of the Strategy.
- modernise the Transport Standards to meet Australians' current and future needs by incorporating technological advances and emerging technologies.
- harmonise requirements between the Transport and Premises Standards to promote alignment and consistency and simplify regulatory requirements where the two standards intersect.
- improve compliance with the Transport Standards by improving regulatory clarity and flexibility regarding how operators and providers can meet their obligations under the DDA.

Further, without collective government action, the Australian Government may not meet its domestic and international obligations. In 2008, Australia ratified the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD). The UNCRPD is a human rights treaty establishing normative standards and principles for the treatment of people with disability under international human rights law. Australia implements the UNCRPD through a range of programs, policies and legislation, including the DDA.

In line with Australia's commitments under the UNCRPD, Australia's Disability Strategy 2021-2031 (the Strategy), Australia's national disability policy framework, plays an important role in protecting, promoting and realising the human rights of people with disability. The Strategy also helps governments to develop and implement policies, programs, services and systems which protect and realise the human rights of people with disability to facilitate an inclusive Australian society. The Strategy identified accessibility of transport systems as a policy priority area, necessary to ensure people with disability have economic security and enabling them to plan for the future and exercise choice and control over their lives.

Roles and responsibilities

The reforms were developed in collaboration with the Attorney-General's Department, state and territory governments, people with disability and public transport industry at the direction of the Infrastructure and Transport Ministers Meeting (ITMM).

- ITMM facilitates work between the Australian Government, state, territory and local governments to drive national reforms improving the safety and productivity of Australia's transport and infrastructure systems. ITMM will consider preferred options for all proposed reforms.
- The Infrastructure and Transport Senior Officials Committee (ITSOC) supports ITMM and provides a forum for senior officials to negotiate issues prior to ITMM's consideration and provide advice on the implementation of ITMM decisions.
- The National Accessible Transport Steering Committee (Steering Committee) oversaw the reform process. The Steering Committee is comprised of senior officials from the Commonwealth (chair), state and territory governments and the AHRC. The Steering Committee reports to ITSOC and provides oversight and direction to the National Accessible Transport Taskforce (the Taskforce).

Introduction

- The Taskforce, chaired by the Queensland Government, comprises representatives from the disability community, the public transport industry, technical subject matter experts and governments and was responsible for the development of policy options.
- The Attorney-General is responsible for the DDA and the Transport Standards. The Minister for Infrastructure works in conjunction with the Attorney General to undertake statutory reviews of the Transport Standards and to recommend any necessary amendments to improve their efficiency and effectiveness.

ITMM

- Agreed to modernisation of the Transport Standards and set guiding principles for the reforms.
- Will consider the final Decision Regulation Impact Statement for Stage 1 and Stage 2.

ITSOC

- Considered and approved the proposed areas of reform.

The Steering Committee

- Oversaw the development of areas of reform.
- Endorsed areas of reform to be considered by ITSOC.

The Taskforce

- Developed policy options for areas of reform through working groups and focus groups.

Development of policy options

The Taskforce developed policy options between 2019 and 2021 which reflect the guiding principles endorsed by Ministers and the issues raised in previous statutory reviews of the Transport Standards.

The policy options aim to remove discrimination against people with disability and provide greater certainty to operators and providers regarding their responsibilities under the Transport Standards. The options developed were intended to reflect modern best practice and promote harmonisation and regulatory consistency.

The Taskforce identified issues to be addressed in two stages, in mid-2019 and early-2021. These issues were identified by the disability community, governments or the operators and providers of public transport, and ranged from barriers to accessing public transport to requirements that are not feasible to comply with. Working groups under the Taskforce consulted with relevant stakeholders to further develop an understanding of the issue to be addressed. These issues were considered by the Taskforce and recommended to the Steering Committee for endorsement.

Following endorsement from the Steering Committee of the issues to be addressed, working groups under the Taskforce developed policy options to address each issue. This process involved further consultation with relevant stakeholders and targeted information gathering intended to ensure policy options were fit for purpose and viable. The Taskforce considered the proposed policy options making any necessary amendments, and recommended them to the Steering Committee for endorsement to be presented for public consultation.

Before ITMM can consider reforms to modernise the Transport Standards, a Regulation Impact Statement (RIS) is required. The RIS process is designed to ensure regulatory decisions are consistent with the Principles of Best Practice Regulation agreed upon by the National Cabinet. Intergovernmental decision-making bodies, including ITMM, must subject all proposed regulatory amendments to this process.

Introduction

The reform proposals have been subject to broad public consultation, consistent with the Office of Impact Analysis' Regulatory Impact Analysis framework.

Consultation

The Stage 2 Consultation RIS was published on 15 March 2022. The Consultation RIS included status quo, non-regulatory and regulatory options for 60 reform areas, and options for the implementation of all reform proposals. The purpose of public consultation was to learn more about the contexts in which discrimination is likely to occur for people with disability and gather a broad range of stakeholder views on the merits of the proposed policy options, including associated impacts, costs and benefits, and the extent to which each option would achieve the intended outcome.

The Australian federal election was held on 21 May 2022. The Department's engagement in the consultation process was deferred for a short period between 11 April and 23 May 2022 while Caretaker Conventions were observed.

During the consultation period, a broad range of stakeholders were invited to respond to the Stage 2 Consultation RIS, including:

- people with disability, their families and carers
- disability organisations and advocacy groups
- operators and providers of public transport, including peak industry bodies
- state, territory and local governments
- Australian Government departments and agencies
- other interested people or organisations.

Stakeholders could provide feedback in written form via surveys and emails or verbally through a phone line. Public written submissions are available on the Department's website:

<https://www.infrastructure.gov.au/have-your-say/stage-2-reform-disability-standards-accessible-public-transport-2002>.

The Australian Government also contracted strategic communications and engagement consultancy, The Social Deck Pty Ltd, to design, deliver and facilitate national consultation events. Consultation events were led by people with disability and delivered in partnership with disability organisations. Stakeholder engagement was designed to accommodate the needs of people across a range of disabilities. The consultation process sought to prioritise the lived experience of people with disability and leverage the expert knowledge of various stakeholder groups.

Various online consultation sessions were held from 17 June to 21 July 2022. Activities were designed to allow people with disability, the disability sector, and the transport industry to have open and transparent opportunities to engage and have their say. Where necessary, targeted engagements were conducted to allow deeper investigation into issues for diverse groups. During the consultation period, consultation activities were adjusted in response to feedback to support public engagement to the greatest extent possible. For example, the workshop structure was altered to facilitate group discussion on critical issues relevant to participants.

To address the needs of people living with disability, supporting documentation packages were prepared in various formats, including factsheets, summary documents and translations, to support the consultation and engagement process.

Standards Australia also provided viewing access to referenced standards listed in the 'Glossary of Australian Standards and other standards references' to ensure the broader community had the opportunity to review the standards as part of the consultation process.

The Australian Government thanks everyone who engaged in the consultation process.

Summary of the consultation engagement

A summary of submissions received by stakeholder group and a summary of the consultation activities and engagement are below.

Table 5: Summary of submissions received by stakeholder group

Submission origin	Number of submissions received
Disability organisations and advocacy groups	18
Individuals	18
Public transport industry	5
State and territory government	3
Local government	4
Other	5
Confidential – individuals	11
Confidential – industry and government	20
Total number of submissions received	84

Table 6 Summary of consultation activities and engagement

Method of public consultation	Events held	Number of participants
Webinar	2	165
Community workshop	4	75
Focus group	6	47
Stakeholder roundtable	3	95
Discussion Board	2	39
Total	17	421

A report summarising the key findings of the consultation activities is provided in **Appendix B**.

Analysis and development of the preferred policy options

The role of the Decision RIS in this process has been to collate feedback from the Consultation RIS, conduct a cost-benefit analysis (CBA) on plausible options and identify, refine and validate preferred options based on consultation and the CBA. To identify the Decision RIS preferred package of policy options, the Department considered a body of evidence from: consultation findings, a CBA developed by PricewaterhouseCoopers (PwC) and findings from previous reviews of the Transport Standards.

In considering this body of evidence, the Department considered:

- Whether there was evidence of an issue that needed to be solved and the scale of this issue.
- If the proposed options for reform would address this issue.
- Whether implementing an option was support by stakeholders.
- What the cost of each option would be to stakeholders.
- What the benefits of each option would be for stakeholders.
- Whether the option met the purpose of the Transport Standards to eliminate discrimination as far as possible.

Based on this analysis the Department has identified a preferred package of options in the Decision RIS, including 44 regulatory, 13 non-regulatory and 3 status quo policy options.

Stage 1 and 2 reform proposals interactions

Options for 16 reform areas were confirmed by Transport Ministers at the Infrastructure and Transport Ministers Meeting (ITMM) on 11 February 2022 as part of Stage 1 of the reforms. Interactions between proposals in Stage 1 and Stage 2 of the reform process have been identified. Some of these reforms are complementary and do not involve duplication between stages.

However, some Stage 2 reform areas contradict requirements addressed in some of the Stage 1 reform areas due to updated Australian Standards, superseded or more detailed requirements. Where applicable, any interactions between Stage 1 and 2 requirements have been addressed in the corresponding reform area chapter of the Decision RIS.

Final consideration of options

Decisions on the reform options are made through consideration of a Decision RIS, which is presented to ministers through the ITMM process. Ministers will also decide on the implementation approach for the whole package of reforms (Stages 1 and 2), including whether they should be applied retrospectively (to all assets regardless of age) or prospectively (new assets acquired after a specific date), as part of their decision on the final scope of the reforms in mid-2023. Implementation is discussed further in chapter 62.

Cost-benefit analysis

The Stage 2 reforms to the Transport Standards aim to provide a pathway to improve the accessibility of public transport, including an equivalent standard of amenity, availability, comfort, convenience, dignity, cost and safety for people with disability. These will result in a range of economic benefits for people with disability and flow-on impacts to the rest of the community, public transport operators, providers and government.

The Department commissioned PwC to undertake a CBA of the Stage 2 reforms of the Transport Standards. The CBA assists stakeholders understand the impacts, including economic costs and benefits, of the preferred regulatory reforms on a national basis. The purpose of the CBA is to assess whether a proposal delivers a net gain to society as a whole.

The use of CBA to assess regulatory reform is an important tool for better decision-making because it:

- enables consideration of the gains and losses of all members of society.
- enables the valuation of impacts in terms of a single, familiar measurement scale (\$ dollars). It can therefore assist in showing if implementing an option is worthwhile relative to the status quo.
- quantifies the impact of regulatory proposals in a standard way, promoting comparability, assessing relative priorities, and encouraging consistent decision-making.

The costs and benefits represent indicative figures and are illustrative estimates based on survey responses and a range of simplifying assumptions. The Decision RIS presents a quantitative and qualitative assessment where applicable for each reform area. This information is presented to help readers understand the specific costs and benefits of each reform. The Decision RIS recommends these costs and benefits be viewed collectively, due to the interdependencies between reforms.

Approach to CBA

To understand the extent to which the Stage 2 reforms to the Transport Standards will impact Australians, two economic assessment approaches have been developed to assess the economic costs and benefits associated with the reform's options.

- **Definitional assessment** which applies to reforms involving changes to wording of the Transport Standards only. This assessment includes a high-level summary of the definitional reforms and potential impacts.
- **Cost-benefit analysis** sets out both qualitative and quantitative assessment to articulate the reform areas' economic benefits and costs and a monetised assessment used to estimate economic outcomes using discounted cashflow analysis to calculate a net present value (NPV) and benefit-cost ratio (BCR).

These economic assessments have been conducted for 60 reform areas (the implementation approaches were not costed separately). Six reform areas were identified as changes in definition and, therefore, subject only to the definitional assessment, and 1 reform area was assessed qualitatively only as it was not possible to monetise costs for this reform. These have been identified in the respective chapters in this Decision RIS.

The remaining 53 reforms were taken through a CBA, including a qualitative, quantitative and monetised assessment. The results of the economic assessment are reported on a thematic basis.

CBA framework

An overarching CBA framework was developed to define the principles guiding the assessment, the guidelines used, the key parameters and assumptions and the summary metrics used to inform decision-making. The key steps which support the CBA monetised assessment are listed below.

1. CBA framework definition
 - Define the purpose and considerations for the Decision RIS CBA
 - Investigate national CBA guidelines and literature
 - Define CBA assumptions/parameters, including appraisal period, discount rate and others.
2. Input collation and scenario definition
 - Collate inputs from surveys and other sources to inform analysis
 - Specify Stage 2 reform areas using available data
3. Understand benefits and beneficiaries
 - Identify the range of benefits associated with the Stage 2 reforms
 - Understand users/beneficiaries of the reform areas
4. Quantification of economic costs and benefits
 - Economic costs represent the opportunity cost of the investment provided through the surveys or estimated by technical advisors.
 - Economic benefits are estimated for the Stage 2 reforms using methodologies based on CBA guidelines and available literature.
5. CBA modelling
 - Costs and benefits are converted into present values using discounted cash flow analysis.
 - Estimate key appraisal measures, including the benefit-cost-ratio and the net present value
 - Conduct sensitivity analysis to test the sensitivity of the results to changes in the underlying appraisal parameters and assumptions

Understanding the CBA

A CBA is a way to compare the costs and benefits of a policy option, where both costs and benefits are expressed in monetary units. The monetary units, dollars in this case, are reported at their value currently, this is known as present value.

Converting benefits and costs of a reform option into monetary units at their present value is a method to determine the net benefits (benefits minus costs) of a policy option. A CBA reports in the form of a benefit-cost ratio (BCR). A BCR greater than 1.0 suggests the benefits of a policy option are higher than the costs. A BCR less than 1.0 suggests the benefits are lower than the costs. Each reform in the DRIS has a BCR figure.

In addition to the BCR figure, a net present value (NPV) figure is provided for the preferred options as a group. The net present value assumes money today is worth more than an identical amount of money in the future,

Introduction

because inflation could reduce the value of the money, or the money could be invested and be worth more in the future.

The difference between money today and an identical amount of money in the future is known as the discount rate. For this CBA, a discount rate of 7% was used, meaning a dollar in the present is worth 7% more than a dollar in one year's time. The NPV enables the implementation of all preferred option for the Stage 2 reforms to be compared against a base case, or the status-quo, to articulate the benefits and costs to society overtime.

Detailed information on the cost-benefit metrics are at **Appendix C**.

Overview of data inputs for CBA

PwC undertook a consultation process to inform the development of the CBA supporting the Consultation and Decision RIS. The consultation on the CBA occurred between October 2021 and September 2022, and involved several consultation activities:

- A detailed survey on each of the 60 reform areas being costed was distributed to transport departments of State and Territory Governments, the Australian Local Government Association and industry bodies (such as airline, ferry, bus, taxi and rideshare representatives) to capture the quantity of assets and compliance of assets associated with each reform area by mode, jurisdiction and locality (metro or regional). This provided the core data used to inform the CBA.
- A survey was sent to a broad range of disability organisations and individuals to understand their experience using public transport and how the reforms could improve their use of public transport. This provided insights into the development of the economic benefits framework supporting the CBA.
- Workshops with transport departments of State and Territory Governments, Australian Local Government Association, industry bodies, and disability representative organisations. These workshops were held in November and December 2021 to discuss the Stage 2 Transport Standards – Public Transport Survey, and inputs used to inform the CBA.
- The Consultation RIS was published on 15 March 2022 and open for public consultation until 9 August 2022. The feedback from this consultation process supported the development of the evidence-base supporting refinement of the Decision RIS CBA and recommendations within the Decision RIS.
- In addition to the survey data discussed above, a range of additional data sources was used to supplement the inputs received through the consultations to plug gaps, including public transport patronage data and population projections.
- 57 survey responses were received across six jurisdictions with varying degrees of completion.

Analysis and preparation of inputs for the Decision RIS CBA

The inputs described in the section above were synthesised to estimate the economic benefits and costs associated with the reforms. The process involved consolidating data inputs into a single dataset. Once consolidated, a series of rules were used to cleanse the data. Where data gaps were identified, an assumptions-based approach was used to address those data gaps. For example, in cases where data was not received for certain jurisdictions, data was extrapolated using existing conveyances and/or infrastructure.

Economic benefits and costs categories

The potential benefits and costs were categorised, which allows the decision RIS to articulate which categories drive the cost and benefit of each reform. Economic benefit categories, which were monetised, were consolidated into the following areas:

- **Improved safety** - Increased accessibility of public transport will enhance safety, in terms of feeling safer and improved physical safety, for people with disability and, more broadly, to society overall.
- **Improved amenity** - Improvements in the condition and appearance of public transport will improve the overall experience of public transport users. Improved amenity can be delivered through the reforms to physical infrastructure and are beneficial for people with disability and society.

Introduction

- **Increased accessibility** - Increased accessibility of public transport will encourage existing public transport users to take more trips and encourage new users to take public transport for specific cohorts targeted by the reforms.

The qualitative assessments were consolidated into the following areas:

- **Increased opportunities for education and employment** - Improved access to public transport will allow people with disability to access education and employment more efficiently and increase the quantity and variability of opportunities.
- **Increased optionality** - Improved accessibility of public transport will provide an alternative transport option to people with disability, which can improve engagement and accessibility of other services and reduce costs to the user.
- **Enhanced independence and inclusion** - Improved accessibility of public transport will increase the likelihood of using public transport, increasing confidence and independence and improving mental health and wellbeing.
- **Improved health outcomes** - Improved accessibility of public transport will enable better access to health services and facilities, contributing to improved health outcomes for individuals with disability.
- **Improved access to services** - With more equitable access to public transport, people with disability will have greater access to government and non-government services.
- **Greater sense of connection to community and place** - A higher uptake of public transport usage will lead to a range of flow on outcomes for the community. Individuals may develop a greater sense of connection to their community and participation in activities – social, cultural, leisure, sports, events, volunteering, etc.

Economic cost categories, which were monetised, were consolidated into the following areas:

- **Compliance costs (administrative)** - Administrative costs reflect the cost incurred by regulated entities primarily to demonstrate compliance with the regulation, such as record keeping, etc. and the initial audit cost to understand the existing asset base to comply with regulatory options.
- **Compliance costs (substantive)** - These costs reflect the costs incurred to deliver the regulated outcomes being sought, such as capital, operations and maintenance costs, client costs and contingency.
- **Costs of delay** - Delay costs relate to expenses and loss of income incurred by a regulated entity through an application or approval delay.

Economic assessment outcomes

The Decision RIS CBA has been prepared to reflect the preferred package of Stage 2 reform policy options. The CBA sets out the NPV and BCR for the package of preferred reform options.

The results of the CBA indicate the package of Stage 2 reforms produces overall positive economic outcomes, and there is a net benefit for the Australian community with a BCR of 1.81 and NPV of \$3.280 billion (at a 7 per cent discount rate over a 20-year implementation period and 15-year appraisal period).

The NPV and BCR must be considered in the context of qualitative impacts. There were nine categories of qualitative benefits for people with disability identified during consultation; however, only three of those categories could be monetised for the purpose of the CBA. It is important to acknowledge the Decision RIS provides information on those non-monetised benefits for people with disability. The Decision RIS includes these additional benefit categories to ensure decision makers are aware of the additional benefits that the package of preferred options would have for people with disability.

Disability stakeholders consistently emphasised the importance of the intangible benefits associated with the removal of discrimination in accessing public transport. The increased independence, inclusion, dignity, participation in the community and access to health care, education and other services were all cited as key benefits from these reforms.

Several reforms had high BCRs and are key enablers of other reforms. The preferred options presented consider these interdependencies to produce optimal outcomes for stakeholders. For example, Reform 5:

Introduction

Better communication of accessibility features, has a BCR of 31.33 and the preferred option is an enabler of benefits across all modes of public transport.

Individual reforms figures are detailed in each reform chapter. The BCR and NPV of reforms themes used during the consultation RIS are provided in Table 7.

Table 7: Cost benefit analysis results by reform theme

Reform Part	Total benefits (\$ mil)	Total costs (\$ mil)	NPV (\$ mil)	BCR
Part 1: Transport Standards principles	69	183	114	0.37
Part 2: Information, communication and wayfinding	3,806	1,932	1,874	1.97
Part 3: Accessibility at stations, stops, wharves and access routes	1,065	502	563	2.12
Part 4: Accessibility of boarding and alighting and egress of infrastructure	2,060	1,284	776	1.60
Part 5: Accessibility in conveyances	351	170	181	2.06
Total	7,351	4,071	3,280	1.81

Note: The CBA does not consider definitional reforms, including reform 13, 14, 25, 36, 41 and 47. In addition, only a qualitative assessment has been undertaken for reform 56.

Implementation

Public transport operators and providers across all jurisdictions are responsible for compliance with the Transport Standards. Where preferred options are agreed by Ministers and legislative amendments to the Transport Standards are required, an implementation approach must be considered for the reform process (including both Stage 1 and 2 reform areas).

Chapter 62: Implementation, analyses feedback provided during the Consultation RIS process and address the preferred implementation approach for the whole package of reforms (including both stages 1 and 2). The recommended implementation approach details whether new regulatory requirements should be applied retrospectively or prospectively, and how new guidance material will be provided for non-regulatory options.

Evaluation

The preferred options will be evaluated following implementation to test their effectiveness and ongoing relevance. Chapter 63 Evaluation sets out how the evaluation arrangements for the preferred options.

Part 1: Transport Standards principles

This Part includes the following reform areas:

1. Reporting
2. Equivalent Access
3. Rideshare
4. Dedicated school buses

1. Reporting

Issue

There are no provisions for operators and providers to report compliance with the Transport Standards and therefore no nationally consistent compliance data currently exists. Without this data it is challenging for the Australian Government to measure the effectiveness and efficiency of the Transport Standards.

The Australian Government has obligations to report data on public transport accessibility under the Strategy and obligations under Article 31 of the UNCRPD. Currently, the Government is unable to effectively report this data. There are also challenges with measuring compliance due to varying interpretations of the Transport Standards, particularly where requirements are performance based and specify an outcome rather than particular measurements for operators and providers to comply with.

Nationally consistent and effective reporting would ensure the Australian Government can measure, track and report outcomes on progress being made on compliance with the Transport Standards.

This reform does not include how accessibility information is communicated to the public for the purpose of journey planning. This issue is covered in Reform 5: Better communication of accessibility features.

Collective government action is necessary to effectively and consistently measure operator and provider compliance with the Transport Standards and to address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option are provided at Appendix A.

Table 8: Reform options for Reporting

Option	Description
Status Quo	<p>There would continue to be no provisions in the Transport Standards for reporting compliance with the Transport Standards.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-Regulatory	<p>Guidance would be developed to encourage operators and providers to develop and publish individual plans on how they are meeting, and progress towards compliance with the Transport Standards.</p>
Regulatory	<p>A national reporting framework and database would be developed to facilitate mandatory reporting on public transport assets. Consultation with all stakeholders would be undertaken to develop the reporting framework, including but not limited to, the purpose, methodology, responsibilities of data collection and collation, how data will be stored and used, frequency of reporting and scope.</p> <p>Guidance would be provided to reflect any new requirements.</p> <p>There are three regulatory options that were consulted on:</p> <p>Option 1</p> <p>Public transport operators and providers would be required to report data for all new or substantially refurbished / upgraded conveyances, infrastructure and premises only.</p> <p>Option 2</p> <p>Public transport operators and providers would be required to report data for all new or substantially refurbished / upgraded conveyances, infrastructure and premises AND all assets for select sections of the Transport Standards (with the scope of the Transport Standards sections to be determined in consultation with stakeholders).</p>

Option 3

Public transport operators and providers would be required to report data for all new or substantially refurbished / upgraded conveyances, infrastructure and premises AND specific transport assets (with the scope of transport assets to be determined in consultation with stakeholders).

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 9: Benefit-cost ratios for Reporting

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs	BCR
Status Quo	-	-	-	-	-
Non-regulatory	-	-	5.0	5.0 ⁱ	-
Regulatory option 1	-	-	33.2	33.2	-
Regulatory option 2	-	-	74.1	74.1	-
Regulatory option 3	-	-	74.1	74.1	-

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs associated with this non-regulatory reform are lower than its regulatory counterpart, regulatory option 1, reflecting an assumed lower rate of compliance with the reform and lower cost implications for government. An estimated uptake rate of 15% was applied to the option. The compliance rate is assumption-based and has been estimated by the Department through insights gained from the Consultation RIS rather than observed behaviour or direct consultation responses. This implies that costs quantified for the non-regulatory reform may not reflect future take-up of this reform.

Regulatory

There are no quantified benefits associated with the regulatory options. It reflects the regulatory reporting requirements borne by providers, operators and government on new or substantially refurbished assets associated with the preferred package of reforms.

Compliance costs reflect initial audit and administrative costs received from two respondents and were proxied at a national level. This implies that costs may not be fully reflective of the regulatory burden experienced by public transport operators / providers and government.

The cost for a central repository is an estimate, and was provided by the Department based on market research and previous experience. This cost may not be reflective of future costs.

Reporting

Interdependencies

Non-regulatory

This is an enabling reform providing guidance to support the modernisation of the Transport Standards allowing the Department to understand compliance nationally. This reform is important for enabling the suite of Transport Standards reforms in achieving desired outcomes for the community.

Regulatory options

This is an enabling reform required to support the modernisation of the Transport Standards. It allows the Department to understand compliance nationally through mandatory reporting requirements. This reform is important for enabling the suite of Transport Standards reforms in achieving desired outcomes for the community.

Qualitative assessment

The CBA qualitative benefits categories are not applicable to the reporting reform. However, consultations with stakeholders did identify qualitative benefits, such as accountability, transparency and reporting data that would inform future regulatory reforms and reviews of the Transport Standards.

Analysis of submissions

Status quo

The Australian Government will continue to be unable to accurately measure the effectiveness and efficiency of the Transport Standards. In the absence of consistent national data, the Australian Government will be unable to effectively report data on public transport accessibility to support the Government's obligations under the UNCRPD obligations and the Strategy.

Individual operators and providers may choose to measure compliance within their organisation, and may choose to provide this data to the Australian Government or the public. This will lead to a lack of comparable, complete and consistent compliance data across Australia's public transport networks.

There will continue to be no objective tools to measure compliance that can be used by operators and providers across different modes of transport and states and territories. There will continue to be challenges with measuring compliance due to varying interpretations of the Transport Standards, particularly where requirements are performance based.

The status quo would not impose additional regulatory or cost burden on operators and providers as they will have the flexibility to measure compliance and report in a way that suits to their operational / administrative needs. Some operators and providers supported the status quo for this reason and noted existing assets are particularly costly to audit and report on. Several submissions also supported the status quo because they did not support redirecting resources away from accessibility upgrades towards an issue they did not consider to be beneficial to the public, as the funding will not be used to directly improve accessibility and the data may not be available to the public. Submissions supporting the status quo broadly indicated they already have substantial reporting requirements, including gathering data on the Transport Standards. Overall there was very little support to maintain the status quo, with more than 90% of submissions supporting reform to reporting, including the development of a reporting framework.

The status quo would not impose any economic costs, or create any economic benefits.

Non-regulatory

The non-regulatory option would see a non-mandatory reporting framework developed in consultation with stakeholders. The non-regulatory option was supported by a mix of public transport operators and providers and state and territory governments. These submissions were not opposed to reporting their data to the Australian Government; however, were concerned about being required to report against a framework they had not yet been seen or consulted on. The non-regulatory option will offer the opportunity to develop and refine a reporting framework in consultation with all stakeholders.

Reporting

Submissions raised several uses for reporting beyond those set out in the Consultation RIS. The non-regulatory option provides an opportunity to develop a framework that captures all these additional uses. These ideas included: reporting information to assist with planning transport services, reporting complaints made to an organisation, reporting data useful to assist journey planning, and reporting data for the purpose of enabling innovation.

If the purpose of publishing compliance data is to provide information to providers of public transport, then this could be a useful tool to identify accessible bus stops and subsequent planning and provision of new (or updated) public transport services.

Bus Industry Confederation

The non-regulatory option will also provide the opportunity to scale the reporting requirements, in terms of the volume of assets reported on, the detail reported and the size of the organisation reporting. It may be prudent for larger organisations to report data at a macro level across their assets, sooner than smaller organisations, prior to more detailed reporting. Consultation with stakeholders may also identify data sources that can be reported without a significant auditing burden imposed on operators and providers.

State governments raised concerns about requiring reporting of 'strict compliance', warning this may not be a true indicator of positive or functional outcomes for passengers. This feedback urges flexibility in a reporting framework to allow reporting of all compliance activities, including direct assistance or equivalent access in a measured manner.

Submissions from governments and operators and providers also noted concerns that cases of non-compliance could be seen as discriminatory, which may impact their willingness to report. The non-regulatory option would offer this flexibility and allow operators and providers to report data and would not impose significant cost burden on operators and providers. Submissions indicated the level of data being gathered at a state or operator level varies between jurisdictions and organisations, with some not collecting data on compliance at all.

The non-regulatory option was not preferred by any disability organisations. Submissions from disability organisations argued that data reported under a voluntary framework may not be consistent. These submissions also argued that without a regulatory requirement there will not be certainty that operators and providers will report data on their compliance. While a reporting framework may improve transparency of data reporting compared to the status quo, disability stakeholders argued it would not improve transparency to the level that may be achieved by a regulatory option. The non-regulatory option may also fail to highlight areas for improvement if organisations chose not to report where they are not compliant.

It is more likely that providers and operators will provide data if they are mandated to do so. A legislated compliance framework would ensure that public transport systems are required to be accessible and that operators/providers can be held accountable for not following the Standards.

Disability Rights Advocacy Service

Two submissions from governments noted the impact of implementing other reforms to the Transport Standards should be considered and argued a non-regulatory approach would allow flexibility to changes to the Transport Standards in the development of a reporting framework. This would ensure a reporting framework is appropriate for how the reforms are implemented.

The non-regulatory option, where followed by operators and providers, would impose administrative and substantive costs, and would benefit the Australian Government's administration of the Transport Standards. In the short term, no economic or social benefits are expected for people with disability.

Regulatory

Submissions from the disability community strongly support development of a reporting framework and argued only mandated reporting requirements would ensure data is reported. Submissions from disability stakeholders primarily supported option 2, reporting on all assets for section of the Transport Standards. Disability stakeholders argued option 2 would be the most effective approach to deliver a reporting

Reporting

framework and metrics to measure compliance. However, some submissions argued the regulatory options did not go far enough to require comprehensive reporting on all assets and without this level of data available reporting arrangements would not be effective. Submissions from the disability community raised concerns that a lack of reporting requirements may hide discrimination on public transport services.

We have learnt from evidence to the Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability (Royal Commission) that reporting processes that are not mandatory or sufficiently independent perpetuate and cover-up discrimination and harm.

Spinal Cord Injuries Australia

It was well supported by submissions from state governments that mandated reporting would most likely produce sufficient data to support future reviews of the Transport Standards. These submissions also argued mandatory reporting was a necessary safeguard to ensure transport accessibility is improved and without mandatory reporting, it will be challenging or impossible to evaluate progress or lack of progress against the Transport Standards.

Submissions strongly supported the co-design of a reporting framework with people with disability. Many submissions from the disability community argued reporting should be made publicly available to ensure effective reporting. However, state governments noted concerns about the high cost to audit and report on significant amounts of data in a short time period. While submissions from state governments and operators and providers broadly supported the principle of reporting data against the Transport Standards, they did not indicate an overall willingness to report data if it was not mandated.

Three submissions from operators and providers and state governments raised concerns the regulatory options do not contain sufficient information to support a mandate to report, but supported a reporting framework and mandatory requirement to report against this framework in principle, pending the development of a reporting framework. Submissions from operators and providers that did not support a regulatory option cited concerns about the cost to implement a full reporting requirement, particularly if a new reporting regime required the collection of data across all public transport assets. Flexibility in reporting would reduce the cost to operators and providers and may allow data already reported to be used, rather than requiring new reporting procedures. One submission was concerned they may be required to report existing data not intended to be made available to the public. For these reasons, many submissions from industry and government did not support the regulatory option.

Regulatory options would impose administrative and substantive costs for the Australian Government and operators and providers to implement and deliver reporting requirements. Economic and social benefits would be realised for people with disability.

Preferred option

Informed by the outcomes of public consultation, stakeholder impacts, costs and outcomes analysis, the preferred option for this reform is **non-regulatory**.

Stakeholders broadly agreed mandatory reporting is required to improve public transport accessibility and accountability in the future. Without a formal compliance framework, it will be challenging to evaluate progress and / or compliance against the Transport Standards. No specific regulatory option was preferred across stakeholders. Stakeholders identified a number of matters during consultation which require further work before a mandatory framework can be implemented. In recognition of the complexity of developing and implementing reporting requirements, the non-regulatory option is recommended as a pathway towards developing a robust reporting framework.

A regulatory option would likely impose significant administrative and economic burden on operators and providers. Additionally, stakeholder feedback noted the regulatory option does not present a fully developed reporting framework, which may result in the agreement of a solution that is not fit-for-purpose and may impact the potential benefits of reform. In the interim, the proposed non-regulatory option will allow the Australian Government to develop guidance to encourage operators and providers to publish plans on

Reporting

compliance with the Transport Standards, publish progress reports based on their compliance against these plans, and support operators and providers when developing new solutions.

This Decision RIS recommends the Australian Government establish a working group made up of representatives of people with disability, state and territory governments, and operators and providers of public transport to co-design the reporting framework.

The working group would report its findings to the National Accessible Transport Steering Committee (NATSC). The NATSC would agree the reporting framework for implementation by public transport operators and providers. Evaluation of the reporting framework would occur as part of the 2027 statutory review of the Transport Standards.

2. Equivalent Access

Issue

Equivalent access provides people with disability with equivalent safety, amenity, availability, comfort, convenience dignity and affordability. While equivalent access provides operators and providers with flexibility to use innovative solutions to achieve an equivalent level of accessibility, operators and providers do not have certainty the solutions comply with the Transport Standards, and can consequently be reluctant to use equivalent access provisions prescribed in the Transport Standards. As a result, equivalent access solutions may not be fit for purpose and non-discriminatory, and / or public transport services may be non-compliant with the Transport Standards.

Collective government action may provide greater legal assurance and flexibility to develop solutions that are fit for purpose and non-discriminatory.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option are provided at Appendix A.

Table 2: Reform options for Equivalent Access

Option	Description
Status Quo	Equivalent access provisions in the Transport Standards would remain. These provisions provide flexibility for operators and providers to use innovative solutions in situations where compliance with technical requirements are difficult, while ensuring people with disability are provided with equivalent safety, amenity, availability, comfort, convenience, dignity and affordability. The Transport Standards would remain unchanged and no additional guidance would be issued.
Non-regulatory	The Australian Government would develop a web-based centralised repository of equivalent access solutions (i.e. examples) to assist operators and providers of equivalent access applications in their own settings. The use and navigation of the repository would be supported by guidance.
Regulatory	<p>The Transport Standards would be amended to include an alternative approach for equivalent access, such as a performance solution process. An alternative process may include the establishment of appropriate peer review processes, certification mechanisms and a certification body.</p> <p>This process would include co-design and consultation with the disability community and set out certification methods to provide certainty that an equivalent access solution is fit for purpose and not discriminatory.</p> <p>This option would be further developed in consultation with the disability community, state and territory governments and the transport industry.</p> <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 10: Benefit-cost ratios for Equivalent Access

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs	BCR
Status Quo	-	-	-	-	-
Non-regulatory	47.4	-	158.0	158.0 ⁱ	0.30
Regulatory option	352.0	22.9	444.6	467.5	0.75

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart. Through the provision of guidance and best practice examples it is assumed there would be a lower rate of compliance and lower costs to government. An estimated uptake rate of 15 per cent was applied to this option. The compliance rate is assumption-based and has been estimated by the Department through insights gained from the Consultation RIS rather than observed behaviour or direct consultation responses. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory

The benefits and costs for this reform reflect the provision of equivalent access. Without an indication of the types of equivalent access potentially implemented through this reform, an assumptions-based approach has been taken which may not be reflective of future compliance or the types of equivalent access provided.

The benefits and costs reflect equivalent access associated with the preferred package of reforms and are over and above the quantified impacts reported for the other reforms.

The cost and time implications of setting up a Legal Certification Body are estimates, and were provided by the Department based on market research and previous experience. The costs may not be reflective of future costs.

Interdependencies

The costs and benefits associated with this reform is a function of all other quantified costs and benefits for the preferred package of reforms.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 11: Qualitative benefits for Equivalent Access

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	-	Yes	-	Yes	Yes	-
Regulatory	-	Yes	-	Yes	Yes	-

Analysis of submissions

Status quo

The value of equivalent access solutions in delivering accessible outcomes where full compliance with the Transport Standards is not feasible was well supported across submissions from all stakeholder groups. Submissions primarily from operators and providers provided examples where equivalent access solutions have been developed through co-design with passengers, including people with disability, to address areas where Transport Standards provisions are either outdated or the operating conditions of public transport services require an alternate accessibility solution.

Divisions within TMR have been involved in co-design solutions and equivalent access processes and consider the outcomes successful. These solutions have been identified as successful where the Australian Standards referenced in the Transport Standards are outdated, and the adoption of newer versions of the Australian Standards or other solutions have resulted in improved accessibility outcomes.

Queensland Government - Department of Transport and Main Roads

However, feedback from operator and provider submissions identified a reluctance to develop and employ equivalent access solutions due to the lack of assurance the process fulfils their obligations under the Transport Standards. This is supported by stakeholder feedback through reviews of the Transport Standards.

Feedback received from all stakeholder groups noted the success of equivalent access solutions is dependent on the process used to develop the solution. Importantly, it is integral that consultation with people with disability must precede the design of a solution. In recognition of this, the majority of submissions from industry and government noted that equivalent access requirements in the Transport Standards do not provide sufficient clarity regarding community consultation.

Our experience has been that the way equivalent access works well is where it is codesigned. When it is not codesigned but imposed, it does not work well.

Stakeholder roundtable participant

Operators and providers also consistently identified issues relating to legal uncertainty when developing equivalent access solutions, particularly regarding what constitutes an acceptable level of equivalency. This was noted as a flaw of the status quo, and submissions suggested that people may avoid pursuing equivalent access provisions if they are seen as onerous or lack certainty. For this reason, a more systematic approach to implementing equivalent access solutions, including a nationally consistent process that would minimize risk for operators and providers and benefit people with disability, was well supported during consultations.

One individual’s submission preferred the status quo option to preserve current regulatory requirements, and suggested the proposed certification body would be unlikely operate effectively. As an alternative, the submission suggested citing the *AHRC Guidelines: Equivalent Access under the Disability Standards for*

Accessible Public Transport 2002 (Cth) in new guidance material, to support operators and providers by providing useful definitions of amenity, availability, comfort, convenience, dignity, price and safety, and the criteria for ensuring the equivalency of a solution. One submission from a disability organisation suggested the removal of equivalent access provisions entirely from the Transport Standards, instead advocating for upgrade of assets to meet compliance.

Along with the aforementioned 'unjustifiable hardship' and 'temporary exemption' provisions, so-called 'equivalent access' arrangements segregate people with disability, deny them guaranteed scheduled arrival, and often provide a delayed journey when, with the example above, a taxi is called and takes a while to turn up.

Physical Disability Australia

People with disability will be negatively impacted if equivalent access is not used effectively under the Transport Standards, which will lead to reduced confidence to use public transport.

Maintaining status quo will continue to provide operators and providers the flexibility to develop, design and implement equivalent access solutions that meet their operational needs, but will not address the lack of assurance or legal certainty for operators and providers that is a current barrier to their use.

Non-regulatory

There was agreement across all submissions that a robust process must be in place to support operators and providers to deliver accessible outcomes where prescriptive requirements included in the Transport Standards cannot be met. Feedback provided by the disability community noted that equivalent access solutions should be used and encouraged where full compliance with the Transport Standards is not possible or practical, rather than settling for non-compliance.

The majority of submissions from government and operators and providers supported the non-regulatory option. One of the eight submissions from the disability sector supported the non-regulatory option.

Submissions from industry and government largely supported a non-regulatory approach as an interim measure, while a more robust framework is developed and tested prior to making regulatory amendments. Some submissions, however, raised concerns that an oversight and certification body may add unnecessary complexity to an already working solution, and potentially remove personable interactive aspects provided through the Transport Standards requirements.

Who would accredit the independent authority? How would their accreditation be maintained?
Would there be a number of service providers available to enable operator choice? Is an expiry date requiring re-certification on the equivalent access options?

Stakeholder roundtable participant

The development of a central repository of examples of successful equivalent access solutions was well supported by industry and government, and submissions highlighted the benefit of the repository as a resource to support the development of new solutions. An important factor that would strengthen a repository of examples would be the inclusion of guidance to articulate the responsibility of all parties for the development and implementation of equivalent access solutions. One submission from government noted, however, that without guidance and a robust framework to guide the development of equivalent access solutions, operators and providers of published 'successful' solutions would still lack legal certainty. Additionally, if the repository is unmoderated, the publishing of solutions may result in promotion of poor examples and potentially poor outcomes for people with disability using public transport.

Regulatory

Although reform was well supported in-principle, the majority of submissions from industry and government noted they could not support the proposed regulatory option due to the lack of detail provided, and instead opted to support the non-regulatory option. These submissions noted the need for a more robust co-designed framework to be developed and trialed before being incorporated into legislation.

Equivalent Access

Submissions generally agreed a certification body would be beneficial to address uncertainty, in particular the additional protection it would provide operators and providers. However, concerns were noted around the level of resourcing and time that development of a certification body would require.

There was general agreement among all stakeholders that a co-designed understanding of the required outcome must be reached prior to the design and procurement of an equivalent access solution. Likewise, submissions noted that while co-designed solutions can support accessibility, the effectiveness of processes is significantly impacted by the availability of technical expertise and experience, and capacity of participants.

The majority of submissions from individuals, people with disability and disability organisations supported the regulatory option. There was some support for the regulatory option by industry and government. There was broad acknowledgement by industry and government that if requirements set for equivalent access is followed, equivalent access solutions can produce significant and tangible benefits for people with disability using public transport. Submissions from the disability community noted, however, that equivalent access solutions are generally bespoke and site specific, resulting in outcomes that can lead to inconsistent customer experience within and across different public transport modes, networks and jurisdictions.

Submissions from the disability sector widely recognised the regulatory option was seen as the most effective way of providing confidence to people with disability that operators and providers will follow best-practice, while providing a greater level of confidence to all parties. Submissions in support of the regulatory option suggested that neither the status quo or non-regulatory options would deliver effective equivalent access solutions that provide certainty.

Mechanisms need to exist to track whether a proposed alternative constitutes a satisfactory alternative to prescriptive requirements under the DSAPT. At the same time, it must be established that any alternatives explored to achieve equivalent access are determined in Codesign with the disability community and are safe for use.

Physical Disability Council of NSW

Five submissions from industry and government noted that while they support regulatory amendments in-principle, the conceptual nature of the proposal lacks critical detail which will determine how certification mechanisms would operate, the level of legal assurance their oversight would provide to operators and providers, and how to determine whether an equivalent access solution actually provides equivalence.

Another factor which submissions from industry and government raised requiring further exploration is the nature of the certification body – including the roles and membership (qualifications and experience of certifiers working with people with disability), the independence of any peer-review mechanisms and overall governance arrangements. This was noted as particularly important in relation to the implications of a certified equivalent access solution for a transport network. For this reason, safeguard mechanisms must also be considered through ongoing consultation with all stakeholders.

The Commission also supports amending the equivalent access defence to provide greater certainty to all stakeholders but is concerned that privately engaged consultants may act as de facto decision-makers with little oversight. Particularly where a decision may have implications for a transport network, it is important there are strict safeguards in place. Any consultation mechanism should also expressly consider traditionally unrepresented groups, such as individuals with an intellectual disability.

Australian Human Rights Commission

Submissions in support of the regulatory option noted the importance of equivalent access outcomes being endorsed as compliant and non-discriminatory, despite the potentially strenuous nature of the process. This could alleviate concerns with the status quo relating to legal certainty, and provide a greater level of transparency to all stakeholders.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **non-regulatory option**.

Stakeholders shared a broad range of views regarding reforms to Equivalent Access provisions. The majority of submissions from industry and government supported the non-regulatory option, whilst the majority of submissions from individuals, people with disability and disability organisations supported regulatory reform.

Stakeholders who have been involved in the development of equivalent access solutions shared a range of examples of the strengths and weaknesses of the status quo in ensuring accessible outcomes in circumstances where full compliance with the Transport Standards is not feasible. Overall, a more systematic and nationally consistent approach was identified as an important mechanism in addressing current issues of inconsistency and legal uncertainty.

In recognition of the complexity of developing and implementing equivalent access solutions, the non-regulatory option has been recommended as a pathway towards developing a robust framework. Stakeholders from all stakeholder groups emphasised the importance of a reformed equivalent access framework having clarity – in terms of both the consultation process and certification mechanism. Although the regulatory option may deliver a greater level of certainty to people with disability, feedback received has highlighted that further work is required to ensure a new approach to equivalent access is fit-for-purpose. In the interim, the proposed repository of successful equivalent access solutions included in the non-regulatory option will support operators and providers when developing new solutions.

This Decision RIS recommends the Australian Government establish an online repository of equivalent access solution examples, which will be hosted on the Department's website. The repository will be accompanied by additional guidance regarding the usage and purpose of the repository. The Department will be responsible for managing and updating the repository and accompanying guidance material with additional content as appropriate. The examples included in the repository will be provided by public transport operators and providers. The guidance material would focus on the process undertaken to develop the solution, and lessons learnt from all involved stakeholders.

The effectiveness of the non-regulatory option in enabling the development of effective equivalent access solutions will be evaluated in a future statutory review of the Transport Standards.

3. Rideshare

Issue

The Transport Standards are not clear whether rideshare is a public transport service as defined in the Transport Standards. This leads to ambiguity in the obligations of rideshare operators and providers and expectations of passengers. Rideshare passengers may face discrimination and barriers when accessing rideshare services, including using booking and payment services, accessibility and safety of rideshare services, availability of assistance and amenity.

Collective government action could clarify the requirements of rideshare operators and providers under the Transport Standards and remove accessibility barriers discrimination for people with disability in relation to rideshare services, in line with the objectives of the DDA and the Transport Standards.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 12: Reform options for Rideshare

Option	Description
Status Quo	<p>It would continue to be unclear in the Transport Standards if rideshare is defined as a public transport services and conveyance, and the obligations and responsibilities of operators and providers in relation to rideshare.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-Regulatory	<p>Guidance would be developed to encourage future transport modes to consider accessibility requirements to ensure these services meet the Transport Standards.</p> <p>An education campaign would be developed targeted at the rideshare sector, providing advice on their responsibilities under the DDA.</p>
Regulatory	<p>The Transport Standards would be amended to ensure rideshare services are explicitly identified in the Transport Standards and applicable Transport Standards requirements for taxi-travel are fit for purpose in application to rideshare conveyances.</p> <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 13: Benefit-cost ratios for Rideshare

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	3.0	-	2.9	2.9 ⁱ	1.04
Regulatory	21.5	0.03	20.0	20.0	1.07

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

ⁱNon-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

An estimated rate of uptake of 15 per cent was applied to the non-regulatory option based on disability community submissions and the lack of engagement by the rideshare sector with the Transport Standards modernisation project. This implies that the costs and benefits quantified for this non-regulatory reform may not reflect future take-up.

The costs for an education campaign are estimated, and were provided by the Department based on market research and previous national campaigns. This estimate may not be reflective of future costs.

Regulatory

The costs and benefits for this reform were estimated based on publicly available information on the rideshare industry in Australia implying that the benefits may not reflect the future compliance or changes to the market behaviour.

Interdependencies

The accessibility benefits associated with the reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as accessible taxi ranks and accessible passenger loading zones.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 14: Qualitative benefits for Rideshare

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	Yes	Yes	Yes	Yes
Regulatory	Yes	Yes	Yes	Yes	Yes	Yes

Analysis of submissions

Status quo

Ambiguity in relation to obligations of rideshare operators and providers would remain and there would be a lost opportunity to provide clarity regarding their requirements under the Transport Standards.

Consultation findings indicated people with disability face barriers when accessing rideshare services, including:

- requirement to use smartphones to book rideshare services and credit card or smartphone payment options to pay for booked services
- refusal of service for passengers traveling with a mobility device or assistance animal
- lack of staff training or available staff to assist people with disability to access rideshare services.

This feedback indicates rideshare services are not meeting the varying needs of people with disability. Two submissions from the disability community strongly argued the status quo results in highly discriminatory outcomes.

Consequently, people who struggle with digital booking, digital payments, and those whose mobility aids such as wheelchairs, and particularly power wheelchairs do not have access to vehicles that are accessible for them to travel in and therefore cannot access a service. This is highly discriminatory and not in keeping with requirements under the Disability Discrimination Act 1992.

Queenslanders with Disability Network

One submission supported the status quo, citing concerns the definition of rideshare may capture specific segments of the bus and coach industry that would not be appropriate to regulate like taxis.

On Demand public transport, or Demand Responsive public transport is defined as a form of public transport characterised by flexible routing of small to medium vans, or buses operating in shared ride mode between virtual pick up and drop off locations within a service area, according to the passenger needs. On Demand public transport can offer a “door-to-door” service for passengers with disabilities. This aids in a safer journey for passengers not having to traverse to a designated stop for travel.

Bus Industry Confederation

The status quo does not support the objective of the Transport Standards to enable public transport operators and providers to remove discrimination from public transport services. Maintaining the status quo has no on-going costs for public transports operators and providers, however, there are negative impacts on community safety, amenity, and accessibility, and the regulatory requirements for rideshare will remain unclear.

Non-regulatory

The non-regulatory option was supported by some state governments. These submissions argued there are differences between the taxi industry and rideshare industry that mean requirements for taxis are not fit-for-purpose to be applied to rideshare, but also the proposed changes would not address all barriers faced by people with disability.

There is also concern from these governments that the proposed requirements for rideshare will impose costs on the rideshare industry which may reduce the supply of rideshare vehicles and so preferred the non-regulatory option. These submissions did not justify why rideshare services should have a competitive advantage over their competition, whom bare additional costs to comply with the Transport Standards. These submissions did not argue that rideshare services were not public transport and did not offer an alternative solution to address the barriers faced by people with disability. The rideshare industry did not provide submissions or feedback during consultation.

The disability community did not support the non-regulatory option, arguing additional guidance that does not address the regulatory uncertainty for rideshare services would not address barriers faced by people with disability.

Regulatory

Feedback from public transport operators and providers, the disability community and government consistently indicated there is uncertainty about the requirements on the rideshare industry.

All feedback from individuals, people with disability and disability organisations supported the regulatory option on the grounds that regulation resolves the uncertainty about the requirements for rideshare providers, and will address some barriers to using rideshare. Their feedback suggested this would improve people with disability's confidence to use rideshare services, safety while using rideshare, ability to access rideshare vehicles and use rideshare booking services. Some submissions from industry and governments supported these arguments, and supported the clarity the regulatory option provides to the industry.

This amendment is necessary to align the standards with the current landscape and the available options for people to travel, create certainty for operators and increase confidence in all forms of public transport for people with disability.

Public Transport Ombudsman of Victoria

One public transport operator argued the regulatory requirement to have raised lettering on passenger doors was essential to ensure people who are low vision can identify the rideshare vehicle; however, a submission from the disability community noted rideshare services can use alternative methods to allow people to identify a rideshare vehicle. Overall submissions indicated more work is required to address all accessibility barriers.

One state government strongly argued it was necessary to align the Transport Standards requirements with the current requirements for taxis, because they provide very similar services. It was strongly supported in submissions from state governments that proposed changes would not address the full range of rideshare accessibility issues, such as supply of wheelchair accessible vehicles, response times, and digital aspects of the rideshare model.

Feedback from operators and providers indicated there would be a cost associated with the new requirements, including ensuring information about rideshare services is accessible to all passengers, providing accessible fare payment systems, and placing raised registration numbers, such as stickers, on the exterior of passenger doors. These requirements are expected to only impose a modest cost on individual rideshare operators and providers where their provision of information is not accessible.

The regulatory option is expected to improve the amenity, accessibility and safety for people with disability using rideshare services. There will be administrative and compliance costs for rideshare providers to comply.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is the **regulatory option**.

Consultation findings clearly demonstrated there is a lack of certainty for disability stakeholders of the requirements for rideshare operators and providers under the Transport Standards. Consultations also found evidence of accessibility issues for rideshare operators and providers.

Regulation will ensure rideshare is clearly identified in the Transport Standards as a public transport service. This will provide certainty to rideshare operators and providers and disability stakeholders of the requirements for rideshare under the Transport Standards. The requirements for rideshare conveyances would be harmonised with the requirements for taxis. This will work to address accessibility concerns raised by disability stakeholders, such as inaccessible fare payment and booking systems.

Rideshare

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements retrospectively with a compliance schedule timing of 5 years for the raised registration number and response time elements of the regulatory proposal, and prospectively with a trigger mechanism for other requirements that apply to accessible taxis, including:

- minimum number of allocated spaces to be provided
- minimum head room
- use of allocated spaces
- vertical height of doorways.

If rideshare is clearly identified in the Transport Standards and requirements for taxi and rideshare are harmonised, there may be further accessibility issues that require investigation and future reform such as supply of wheelchair accessible vehicles, requirements for response times, and requirements for the digital infrastructure of rideshare. The Australian Government should further investigate these issues when the requirements for rideshare are clear.

4. Dedicated school buses

Issue

Dedicated school bus services are exempt from certain physical access requirements in the Transport Standards, meaning they are not required to be accessible to all students with disability. Disability advocates report this results in a number of issues that affect some students with disability, their parents and carers. These issues include:

- Students may have limited choice in where they can go to school, how they get to school, and what activities they can do due to a lack of accessible transport.
- Students with disability may feel socially excluded or isolated from their peers.
- Advocacy bodies report families / carers face difficulties transporting children to school due to school bus service policies which do not allow for 'out-of-area' pick-ups.
- Cases have been reported to the 2020 Review of the Education Standards where school bus drivers refused to transport students due to their disability.
- Parents may have limited choices on where to live (particularly in rural and regional areas), employment opportunities they can pursue and have to amend their routine around availability of an accessible transport option.

Collective government action would be required to remove the dedicated school bus exemption, if it is determined to be discriminatory, and improve the provision of accessible school buses by state and territory governments to implement and enforce any new requirements.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option are provided at Appendix A.

Table 15: Reform options for Dedicated school buses

Option	Description
Status Quo	Dedicated school buses would continue to be exempt from certain physical access requirements in the Transport Standards. The Transport Standards would remain unchanged and no additional guidance would be issued.
Non-Regulatory	Guidance would be developed to: <ul style="list-style-type: none"> • encourage school bus operators and providers to run school services with Transport Standards compliant buses • provide information and examples of potential equivalent access solutions to transport students with disability where compliant buses cannot be used • educate public transport operators and providers on the exemptions and compliance requirements for dedicated school buses.

Dedicated school buses

Regulatory	<p>There are 2 regulatory options that were consulted on. Guidance would be provided to reflect any new requirements.</p> <p>Option 1</p> <p>The Transport Standards would be amended to remove all dedicated school bus exemptions so there would be no distinction between dedicated school buses and other buses.</p> <p>Option 2</p> <p>The Transport Standards would be amended to include principles for dedicated school bus services to promote the use of Transport Standards compliant ‘low floor’ school buses, and ‘accessible high floor’ school buses.</p> <p>‘Accessible high floor’ buses must also be configured to be able to be retrofitted with a hoist and provide access to onboard accessible features by passengers using mobility aids.</p>
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Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 16: Benefit-cost ratios for Dedicated school buses

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	0.6	-	59.2	59.2 ⁱ	0.01
Regulatory option 1	5.3	-	531.5	531.5	0.01
Regulatory option 2	0.8	-	79.2	79.2	0.01

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory option

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart, regulatory option 1, reflecting a lower rate of compliance with the reform. An estimated rate of uptake of 15 per cent was applied to the non-regulatory option based on submissions, which indicate the high costs to comply with guidance will prevent most operators and providers from adopting guidance. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option 1

The benefits and costs for this reform were estimated based on data proved by a single respondent and public available data to proxy the number of students requiring accessible school buses. The costs associated with the replacement of the school bus fleet to become accessible to all students with disability are material in comparison to number of students who would benefit.

Dedicated school buses

Quantified benefits for this reform are potentially underestimated, with benefits of increased optionality, enhanced independence and inclusion, greater sense of connection to community and place, improved access to services, improved health outcomes for students, family health and educational outcomes not captured.

Regulatory option 2

The benefits and costs for this reform were estimated based on data proved by a single respondent and public available data to proxy the number of students requiring wheelchair access (such as hoists). In comparison with regulatory option 1, this regulatory option reflects a narrower scope, a lower number of buses needing replacement and smaller group of beneficiaries.

Quantified benefits for this reform are potentially underestimated, with benefits of increased optionality, enhanced independence and inclusion, greater sense of connection to community and place, improved access to services, improved health outcomes for students, family health and educational outcomes not captured.

Interdependencies

The accessibility benefits associated with this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as bus, tram and light rail boarding points, notification by passenger of need for boarding devices and others.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 17: Qualitative benefits for Dedicated school buses

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	Yes	Yes	Yes	-
Regulatory option 1	Yes	Yes	Yes	Yes	Yes	-
Regulatory option 2	Yes	Yes	Yes	Yes	Yes	-

Analysis of submissions

Status quo

Feedback from stakeholders indicated a variety of buses are used for school services, including Transport Standards compliant buses and inaccessible small and large coaches. Submissions also noted the is a lack of wheelchair accessible taxis (WATs) during peak times due to them being used for school drop offs.

Consultation findings indicated students with disability may face barriers due to the availability of accessible school buses. A lack of accessible buses may limit the choice of schools a student can attend, or may prevent students from undertaking extracurricular activities and excursions due to lack of accessible school transport or timetabling of services.

When students with disability are denied their human right to travel on designated school buses because they are not accessible, they are being denied the right and opportunity to have social interaction with their peers on their way to and from school and to school activities like swimming carnivals and school excursions.

Spinal Cord Injuries Australia

Dedicated school buses

To reduce or overcome these barriers, students may be required to use a segregated or parallel service which may not be as affordable. For example, a student may be required to use a 'special needs' school bus to travel to school, or may be required to use a WAT to participate in extracurricular activity or school excursions.

Students, parents and carers may prefer to use parallel or segregated services, as they may offer greater level of certainty, safety and amenity. However, consultation also advocated for students with disability to be able to make independent choices in regard to their preferred transport method. When students encounter barriers, it can impose strain on their support networks and can have on flow on impacts for parents and carers, such as limiting the locations they can chose to live in and their employment opportunities.

We are aware that many families with children with physical disabilities are forced to rely on taxis to convey their children to and from school, but that taxis are more expensive, and less reliable than scheduled bus services, particularly in remote and regional areas where services are limited.

Physical Disability Council of NSW

Further, in some situations, conveyances used as dedicated school buses can be used for other public transport services. For example, a submission described rail replacement services deciding to use inaccessible conveyances that would typically be used for school services when there are no other conveyances available to replace the rail service. This renders these services inaccessible and non-compliant.

All submissions from the bus industry supported the status quo, arguing school transport is provided to students without discrimination, and the status quo enables students to receive both choice and access to their preferred mode, whilst not denying students with disability the choice to travel to school on a school bus. The submissions from the bus industry also noted school transport services are developed in partnership with schools and state and territory governments to ensure delivery of the right service.

Three submissions from state governments supported the status quo option, arguing the exemptions do not impact the availability of accessible transport for students, and that the non-regulatory and regulatory options would not ensure a higher level of accessibility. These submissions also noted dedicated special needs buses can cater to students with disability, including having a carer on-board where necessary.

Feedback from the disability community did not support the status quo, as it would not address the accessibility issues raised above. Maintaining status quo has no on-going costs for operators and providers. However, there may be negative impacts on the experience of students with disability.

Non-regulatory

Feedback from two state governments supported the non-regulatory option, but noted funding was required to remove any non-compliant buses from circulation, as upgrading or replacing conveyances will impose significant cost. This cost would include procuring and operating buses that are compliant with the Transport Standards, or procuring lifts and hoists for use where necessary. This high reported cost by industry and governments was also demonstrated in the CBA. Submissions from the bus industry and two governments raised a concern these costs will be too great for school bus operators to bare and the resources would be better used elsewhere.

Consultation found there was significant variety in the types of service provided to transport students with disability to school, depending on the student's needs and transport options available. This variety of options means change to the status quo will have different impacts depending on the nature of the transport students currently use.

Submissions from state governments noted the non-regulatory option would provide flexibility for operators and providers to adopt where practical. They also noted school bus boarding points, particularly in regional areas, may not be fixed points that are serviced by accessible infrastructure. Further, many fixed boarding points in regional and rural areas are either not compliant with the Transport Standards, or are not accessible beyond the immediate boarding point due to a lack of access paths. These concerns about boarding points may limit the effectiveness of guidance.

Dedicated school buses

Feedback from state governments and industry have highlighted the importance of the ability of school bus operators and providers to be able to develop a suitable solution on a case-by-case basis for students. School routes are adapted each year to account for demand and in many cases are booked in advance. In these circumstances, operators and providers have the opportunity to identify the most appropriate solution for student's needs in advance, and transport needs do not vary on a day-to-day basis, as they would for other public transport modes, such as route bus services.

In metropolitan areas, most students can access both public transport route services and school buses which utilise low-floor accessible buses. In rural and regional areas, where there is a need for an accessible school service, operators work with individuals on a case-by-case basis to develop a suitable solution to ensure the student can travel in a dignified and equitable manner. The NSW Government notes this is an outcome the reform needs to deliver.

NSW Government

The bus industry noted using conveyances suitable to the non-regulatory or regulatory options would result in a loss of seating capacity, increasing the number of school buses and drivers required to service the school community. This loss of seating would be further exacerbated for school services which require seatbelts.

In simple terms for every 3 high floor seat belted dedicated school buses, you would need 4 seat belted low floor dedicated school buses, otherwise seating capacity would be lost.

Bus Industry Confederation

Regulatory options

All feedback from people with disability and disability organisations supported the regulatory option to remove or reduce the exemptions for dedicated school buses. These submissions supported removing or amending the exemptions and argued dedicated school bus exemptions exclude students with mobility aids, and force students into paratransit situations.

Currently, students with disability are transported separately in a wheelchair accessible taxi or accessible family vehicle, which is implied segregation, and it should be condemned.

Spinal Cord Injuries Australia

The regulatory option was well supported by government with two government submissions arguing that school services should be fully accessible in the future to create options for students, reduce the demand for WATs, and increase the number of accessible buses available for use. They broadly argued the regulatory option would improve optionality for students, enhance inclusion and improve student's connection with classmates.

Consultation and submissions did not quantify or evidence the experience of students who use mobility aids on dedicated school buses, or how their experiences may be improved by the removal of the dedicated school bus exemptions in the Transport Standards. Further, it is unclear how many students with disability would benefit from the regulatory options as there is no data available on the number of students / children who use mobility aids.

Submissions from all stakeholder groups raised concerns about a blanket removal of the dedicated school bus exemption, citing operational concerns, particularly in regional and rural areas where the cost of providing school transport may increase beyond the viability of a business. In these areas, low floor accessible buses may not be practical or safe for use due to their engine and chassis design.

Submissions noted school bus boarding points, particularly in regional areas, may not be fixed points that are serviced by accessible infrastructure. Submissions also noted many fixed boarding points in regional and rural areas are either not compliant with the Transport Standards, or are not accessible beyond the immediate boarding point due to a lack of access paths. These concerns about boarding points are likely to limit the benefits of the regulatory options.

Dedicated school buses

Submissions from industry and government raised a concern about both regulatory options reducing the carrying capacity of dedicated school buses. Additional buses and bus drivers required to service the same volume of students is likely to impose substantial ongoing cost for operators and providers, impacting the delivery of school bus services to all students, and reducing the availability of seats on school buses for all students.

Submissions from industry and state governments raised concerns about the cost of both regulatory options, discussed above in the non-regulatory option's outcome analysis. While the second regulatory option has been identified as being less costly to industry, concerns about cost remain, as both options will impact capacity, procurement and service delivery.

Clarity is sufficient in both non-regulatory and regulatory options, however, the increased costs incurred by bus operators in rural areas to implement those solutions may result in operators withdrawing from the market and services being removed.

Queensland Government Department of Transport and Main Roads

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is the **status quo**, with further consultation, investigation and research recommended.

The high cost to remove the or reduce the exemptions for dedicated school buses, the lack of available data in submissions about the experience of students who use mobility aids and data on the prevalence and effectiveness of equivalent access solutions limits the ability to impose legislative requirements without further information.

Consultation demonstrated there is an ongoing issue of social exclusion and a lack of optionality that negatively impacts students with disability and their families, where accessible school bus services are unavailable. Stakeholders agreed accessible and safe dedicated bus services should enable fit-for-purpose solutions to suit individual student needs and preferences. In the absence of a suitable option, discrimination faced by student with disability and their families who use or require dedicated school bus services will remain.

There are many differences between the provision of route bus services and dedicated school buses, particularly in regional areas, which increases the cost of complying with the Transport Standards. However, alternative options have not been identified in this reform area to suitably address this issue.

Consultation and economic impact analysis demonstrate the very high costs associated with implementing the proposed regulatory options. The status quo will not impose additional costs on operators or providers.

Further investigation, research and stakeholder consultation is recommended to identify solutions to promote access for students who require use of accessible and safe dedicated bus services. In addition, equivalent access solutions should be investigated and reviewed where an operator or provider can vary the equipment or facilities that give access to a public transport service, so long as an equivalent standard of amenity, availability, comfort, convenience, dignity, price and safety is maintained.

This Decision RIS recommends the Australian Government develop and implement a targeted consultation plan following the consideration of this Decision RIS by Ministers. This plan should outline who are the stakeholders impacted by this issue, how the Australian Government will engage with them to understand their experiences, and how their feedback will be used to develop options for reform to address this issue.

Part 2: Information, communication and wayfinding

This Part includes the following reform areas:

5. Better communication of accessibility features
6. Timely provision of information
7. Real time communication
8. Passenger location during journey
9. Hearing augmentation on conveyances
10. Hearing augmentation: Infrastructure and premises
11. Print size and format
12. International Symbol for Access and Deafness
13. Letter heights and luminance contrast of signs
14. Location of signs
15. Braille embossed (printed) specifications
16. Braille and tactile lettering for signage
17. Lifts - Braille and Tactile Information at Lift Landings
18. Lifts - Audible wayfinding
19. Lifts - Emergency communication systems in lift cars
20. Lifts - Reference for lift car communication and information system
21. Information and communication technologies (ICT) procurement
22. Mobile web systems
23. Accessible Fare System Elements

5. Better communication of accessibility features

Issue

The Transport Standards do not define accessibility, or include guidance on what accessible features or amenities should be communicated, if available, to the public. This makes planning, travelling and adjusting a journey on public transport challenging for people with disability.

Collective government action to communicate the accessibility of services that can be applied across all modes of public transport would benefit people with disability and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 18: Reform options for Better communication of accessibility features

Option	Description
Status Quo	<p>The Transport Standards would remain silent on the definition of accessibility and would not provide guidance on what accessible features or amenities should be available and communicated to the public.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-regulatory	<p>Guidance would be developed to provide a nationally consistent definition of accessibility terminology and a baseline list of accessible features that should be available and communicated to the public.</p> <ul style="list-style-type: none"> • Further consultation with the disability community, the transport industry and governments would be undertaken.
Regulatory	<p>The Transport Standards would be amended to include a definition of accessibility terminology and requirements for communicating accessibility features to the public, including:</p> <ul style="list-style-type: none"> • identification of access barriers within the transport network • definitions of the level / degree of access available at infrastructure, premises and conveyances • a baseline list of accessible features that should be available and communicated to the public through publication and other communication channels. <p>Further consultation with the disability community, the transport industry and governments would be undertaken.</p> <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 19: Benefit-cost ratios for Better communication of accessibility features

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	762.4	-	51.4	51.4 ⁱ	14.84
Regulatory	2225.6	-	71.0	71.0	31.33

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾ Non-regulatory compliance rates assume the rate of uptake would apply to new assets only. The regulatory option assumes 100% compliance across new and existing assets. These differences in assumptions explain why the non-regulatory figure is not a percentage (rate of uptake) of the regulatory option.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 75% was applied to the non-regulatory option based on the low cost and complexity to comply with these requirements, and the benefits to operators and providers of clear communication to their passengers. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory

The benefits and costs for this reform were estimated from publicly available data and a small number of data inputs from the survey to proxy the national compliance.

This reform provides confidence to people with disability that their accessibility needs could be provided for throughout their journey, resulting in the benefits outweighing the costs.

Due to the large number of beneficiaries and high value (willingness-to-pay) placed on the provision of information and benefit accruing to all public transport result in the benefits significantly outweighing the costs.

Interdependencies

This is an enabling reform to communicate accessibility features across a whole public transport journey, including all modes of transport, effectively and consistently.

This reform will assist passengers in making decisions about whether public transport is accessible for their needs, with benefits reliant on implementation of accessibility focused reforms such boarding infrastructure, notification assistance, car parking, and others. The benefits cover all public transport users.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 20: Qualitative benefits for Better communication of accessibility features

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	-	Yes	-	Yes	Yes	-
Regulatory	-	Yes	-	Yes	Yes	-

Analysis of submissions

Status quo

The Transport Standards do not include a definition for the term ‘accessibility’. Consequently, operators and providers develop bespoke terminology to communicate the accessibility of their services to passengers. Submissions from all stakeholders that favoured reform in this area noted the status quo results in the use of mixed terminology, which at times may be inconsistent or contradictory, making it more challenging for people with disability to travel, plan, and adjust their journey. This may act as a barrier to travel for some people with disability to use public transport, and does not address the objectives of the Transport Standards.

Maintaining the status quo would not impose any additional regulatory or cost burden on operators and providers, as they will continue to communicate information about the accessibility of their services in a way that suits their operational / administrative needs. For this reason, one submission from government and one submission from a public transport operator and provider supported the status quo option. These submissions noted that through established internal practices, information about the accessibility of their assets is shared through multiple channels, including on websites and via Disability Access Facilitation Plans. One submission noted that in their experience, these tools serve as an effective mechanism through which passengers can plan their journey with confidence, as long as the information is reviewed regularly for accuracy and the resources are accessed by passengers.

Submissions that supported the status quo also noted that if the regulatory or non-regulatory option were agreed, significant resources would need to be dedicated to auditing.

Non-regulatory

There was general agreement that the application of consistent terminology and the publication of accessible features available on public transport networks would empower customers to make informed decisions about their travel and remove barriers to using public transport.

The non-regulatory option was supported by approximately 50 per cent of industry and government stakeholders. These submissions were supportive of the provision of improved guidance materials to assist operators and providers to provide best-practice information that supports passengers and support a ‘whole-of-journey’ experience. Although there was general support from these stakeholders for reform, several submissions noted that without understanding the exact requirements proposed through the regulatory option, the regulatory option cannot be supported. For this reason, the non-regulatory option was preferred as a pathway for the collaborative development of terminology. Submissions from industry and government highlighted that any guidance produced must be developed through co-design with the disability community and public transport industry and be transparent. This approach was also identified as providing the benefit of flexibility to account for the differing amenities and environmental contexts of each transport mode.

For accessible conveyances (as currently applied in clause 9.10 of the current Transport Standards), the non-regulatory option provides for far greater innovation for the operator to respond to local conditions (which will vary from operator to operator) and also provides clarity on what is the required outcome.

Bus Industry Confederation

Similarly, two submissions from industry raised concerns that the implementation of the regulatory option may result in a perverse outcome for passengers and operators and providers alike, where the definition of 'accessible' is regulated and thereafter whole assets are classified in a misleading manner, which may consequently decrease patronage. For example, in practice, a conveyance may be accessible at one boarding point but not at another. Given this, any future regulatory requirements should carefully consider the legal implications of the use of terminology regarding accessibility and compliance, and recognise that it may be inappropriate to list an asset in a binary nature as 'accessible' or 'inaccessible' for all passengers.

Costs would be incurred by operators and providers to audit assets and maintain any new communications regimes. There would also be costs associated with the update of any physical signage or materials to reflect new terminology. To the extent that guidance is adopted, the consistent use and communication of accessibility terminology would benefit passengers.

Regulatory

The regulatory option was supported by approximately 50 per cent of industry and government stakeholders, and all disability sector stakeholders. These submissions were unanimous in suggesting that a nationally consistent benchmark will improve consistency and certainty for people with disability when using public transport. There was general agreement that while the non-regulatory option may result in similar benefits to the regulatory option, the discretionary nature of the option may result in ongoing inconsistencies.

This would not only provide consistency to people who are travelling in different states but would ensure that passengers of different forms of transport within the same state or city were able to access information that was presented consistently.

Public Transport Ombudsman of Victoria

All submissions from individuals, people with disability and disability organisations supported regulatory reform. These submissions noted that people with disability continue to be frustrated by a lack of information, or inaccurate or misleading information, about the accessibility of public transport services. For example, one submission noted that terms such as 'accessible' and 'accessibility' are routinely used in multiple contexts, both inside and outside the disability sector. Given this, it is important that any terminology used includes well developed and specific qualification, is produced through co-design processes, and is regularly reviewed for accuracy. There are also challenges with the scope of these phrases. Most barriers are disability-specific, and therefore simply noting that a service is 'accessible' has no predictive value unless further information is provided about 'accessible to whom'. These submissions agreed that improving the consistency of information relating to public transport accessibility may allow passengers to make more informed travel decisions and instil a greater sense of independence.

There is a great need for transparency and universality in transport around definitions, terminology, and general communication of accessibility. This has been noted as a continued issue for our members as the lack of regulated and universal communication becomes confusing especially for multimodal travel.

Physical Disability Council of NSW

Submissions from industry and government that supported the regulatory option generally agreed that information is one of the most important customer satisfaction drivers. One submission from government noted that currently, the onus is on customers to pre-plan their journeys to ensure required accessibility features are available. By improving the clarity and availability of information relating to accessibility features, this submission agreed there is the potential to decrease customer anxiety when planning a journey.

Better communication of accessibility features

Submissions from industry and government did note, however, that there are a number of challenges associated with implementing the regulatory option. For example, due to the current differences in terminology used by operators and providers, a significant overhaul of communications channels may be required if any new regulatory requirements are agreed. Issues may arise where there is a misalignment between new Transport Standards requirements for accessibility terminology, and third-party products that provide information about public transport. Submissions also noted the importance of aligning these changes with improvements to staff training and public education campaigns that encompass new terminology.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **regulatory option**, with revisions.

The regulatory option was the preferred option for individuals, people with disability and disability organisations. There was mixed support for the regulatory and non-regulatory option by industry and government. One submission from an operator and provider supported the status quo option. There was broad agreement from all stakeholders that the communication of the accessibility of public transport services would benefit people with disability through greater consistency and certainty.

Based on feedback provided during consultation, this option has been refined to remove proposals to develop nationally consistent terminology. To ensure the intent of the reform is achieved, the Transport Standards Guidelines and / or The Whole Journey Guide will be updated to advise that operators and providers should provide clear explanations of any accessibility terminology used to communicate accessible features available on their services. As the regulatory proposal is performance based, information may be published in a variety of formats, as long as those formats meet other Transport Standards requirements relating to the provision of information. The focus of this reform area is to communicate accessibility to support passengers with journey planning, rather than reporting on compliance with the Transport Standards.

While acknowledging costs and resources will be incurred by implementing the regulatory option, the costs associated with identifying and distributing accessibility information are expected to be modest and are outweighed by the benefits to be gained by improving the greater provision of information to people with disability. Costs should not inhibit compliance in most cases.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements retrospectively with a compliance schedule timing of 5 years.

6. Timely provision of information

Issue

Section 27.2 of the Transport Standards specifies requirements for the provision of information requested in accessible formats, such as large print and braille. The Transport Standards do not, however, include requirements for the timely provision of information that is requested in accessible formats, where it is not immediately available. The Transport Standards also do not require less commonly requested information to be production ready in anticipation of a request. The timely provision of accessible information is fundamental to ensuring that people with disability have the confidence to use public transport.

Collective government action would ensure accessible information is provided in a timely manner and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 21 Reform options for Timely provision of information

Option	Description
Status Quo	<p>The Transport Standards will remain silent on the requirement to provide information requested by a user in a preferred format and in a timely manner, where it is not immediately available.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-regulatory	<p>Guidance would be developed to encourage operators and providers to provide:</p> <ul style="list-style-type: none"> • service-related information in infrequently requested, but preferred, formats in a timely manner if not immediately available. • equivalent access by direct assistance until the request is fulfilled where a passenger’s preferred format cannot be immediately supplied.
Regulatory	<p>The Transport Standards would be amended to include requirements for infrequently requested formats of information to be provided in a timely manner and equivalent access by direct assistance until a request is fulfilled, where a passenger’s preferred format cannot be immediately supplied.</p> <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options. The lack of quantitative data available, and provided by respondents to the CBA data survey, resulted in marginal benefits and costs.

Table 22: Benefit-cost ratios for Timely provision of information

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	0.0	-	0.4	0.4 ⁱ	0.00
Regulatory	0.0	-	0.5	0.5	0.00

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱⁱ⁾The benefits and costs presented in the table above are rounded to two decimal places. The CBA calculated to four decimal places and this may result in zero values in the table

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of 75 per cent was applied to the non-regulatory option based on the low cost and complexity to comply with the requirements, and submissions from operators and providers supporting the implementation of the reform. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory

The benefits and costs associated with this reform reflect the number of data requests from the public submitted to public transport providers / operators per annum provided by a single respondent to the survey. Compliance rates were proxied at a national level meaning the benefits may not reflect future changes in the number of information requested.

The survey indicated that providers / operators received relatively low numbers of information requests and implied they were timely in their response, resulting in relatively marginal benefits and costs.

Interdependencies

This is an enabling reform informing people with disability on accessibility features ahead of travel. Accessibility benefits of this reform could only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as better communication of accessibility features and infrastructure related reforms.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 23: Qualitative benefits for Timely provision of information

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	-	-	-
Regulatory	Yes	Yes	-	-	-	-

Analysis of submissions

Status quo

Under the status quo, public transport operators and providers are required to ensure general information about transport services is accessible to all passengers, and where information cannot be supplied in a passenger's preferred format, direct assistance must be provided.

One submission from industry noted that where information is not available in a preferred format, direct assistance provisions serve as an effective provision for communication. This submission was in favour of maintaining current requirements, as in their experience, direct assistance is often more effective and provides important flexibility to operators and providers to support passengers through other communications methods. Similarly, two submissions from industry and government disagreed with the issue statement identified in the Consultation RIS. These submissions stated that it is already standard practice to provide alternative formats of information when requested as soon as is practicably possible, although these requests are relatively infrequent.

Several submissions from individuals, people with disability and disability organisations noted that although provisions already exist in the Transport Standards to enable passengers to request service-related information in alternative formats, the absence of timeframes associated with this provision can result in information being provided late or with outdated information. This was identified as a barrier to confident and independent travel.

The provision of timely information in a passenger's preferred format is critical to effective journey planning and public transport usage by people who are blind or have low vision.

Vision Australia

Maintaining the status quo would not impose any additional regulatory or cost burden on operators and providers, as they will continue to communicate information about the accessibility of their services in a way that suits their operational / administrative needs.

Non-regulatory

Across the majority of submissions from all stakeholder groups, there was general support for guidance that would improve the accessibility of communications to support passengers.

The majority of submissions from industry noted that the intent of this reform is already achieved through direct assistance provisions included in Section 27.2. Direct assistance was identified as an effective tool to support passengers, as it allows for flexibility and can be used readily across dynamic operating environments. Submissions that supported the non-regulatory option noted that the regulatory option does not provide this necessary flexibility to accommodate the practical constraints of public transport operations. For example, one submission from industry raised concerns that the regulatory option would disproportionately impact smaller operators and providers who may not have the resourcing required to meet the proposed requirements. Two submissions from government also flagged that in their experience, requests for information in alternative formats such as braille are very limited. For these reasons, the non-regulatory option was preferred to accommodate all operating contexts.

The majority of submissions from industry and government also noted that for this reform area to be incorporated into the Transport Standards, further clarity is required on the practical requirements that operators and providers would need to meet. To ensure legal certainty, further explanation needs to be provided to define a 'timely manner', and a list should be developed specifying potential 'preferred formats'. For example, the proposed wording relating to 'commonly requested information' is open to interpretation, and may lead to misalignment of expectations between passengers and operators and providers. Similarly, one submission from government suggested that the lack of clarity included in the regulatory option may undermine the capacity of the regulatory option to address the issues identified in the Consultation RIS. These

Timely provision of information

submissions reaffirmed that further consultation with the disability community and public transport industry is necessary to develop these terms and examples to improve accessibility outcomes and compliance achievement, before a regulatory proposal should be pursued.

The reforms do not define 'timely'. These omissions may result in people with disability not being able to ascertain what information format providers and operators are able to produce and when the requested information will be made available. Moreover, the proposed reforms do not define a list of information that operators and providers must or should be able to provide in a timely manner. This may result in variability in the types of formats that are available to passengers with disability within and across transport providers and operators.

Queensland Government - Department of Transport and Main Roads

Regulatory

There was a mixture of support for the regulatory option from government and the disability sector. These submissions noted the value of regulatory reform in supporting a greater level of compliance with current requirements, and that once processes are established, this should formulate part of business as usual for operators and providers.

Submissions from individuals, people with disability and disability organisations were largely in favour of regulatory amendments to the existing requirements under Section 27.2 of the Transport Standards. These submissions highlighted that a passenger's preferred format may vary depending on the type of information requested, and therefore close consultation with the requesting individual is required. One submission noted that the non-provision of information in preferred formats in a timely manner may discourage people with disability from confidently using public transport.

In feedback from members, currently much of the information provided to people who are blind or vision impaired is outdated by the time they attempt to travel.

Blind Citizens Australia

The majority of submissions from government were also supportive of regulatory reform, noting that the proposed amendments are likely to have minimal practical impact on the way requests are currently handled, and requests for information in alternative accessible formats are minimal.

Support the regulatory model of service information provision, this is expected in other aspects of daily life and needs to be introduced to the transport sphere to reduce potential discrimination, acknowledging that direct assistance is a suitable and potentially short-term measure and/or perhaps suitable in thin markets where costs may be prohibitive/of significance.

City of Newcastle

One submission from government noted that given the practical operational limitations of large, multi-modal networks, it is important that the agreed implementation approach recognises the complexities of planning, managing and operating these networks. Additionally, further clarity should be provided to define a 'timely manner' and examples of accessible formats. One submission from government suggested the regulatory option be amended to remove 'If information cannot be immediately supplied in a passenger's preferred format, Equivalent Access must be given by direct assistance until the request is filled'. The submission noted that this is already a requirement under the Transport Standards.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **regulatory option with additional guidance**.

The regulatory option was supported by all individuals, people with disability and disability organisations. There was mixed support for the non-regulatory option and regulatory option by industry and government. One submission from an operator and provider preferred the status quo option.

Timely provision of information

Overall, there was broad agreement from all stakeholder groups that the timely provision of information in accessible formats is important to ensuring equitable access to public transport and a greater level of confidence for people with disability. Multiple submissions from industry and government noted that the regulatory option strengthens existing requirements, and the impact of new requirements would be minimal.

A number of submissions from across all stakeholder groups referenced the value of direct assistance to facilitate information sharing, and strongly opposed the removal of these provisions. Provisions for direct assistance will be amended through the regulatory option to reflect new requirements, and will continue to provide flexibility to operators and providers in circumstances where the provision of information in other formats may not be immediately possible. To support regulatory amendments, additional guidance material will be provided detailing examples of accessible alternative formats and the expected timeframes for these resources to be produced. Whilst operators and providers are encouraged to use this guidance, it will not be mandated through regulation. Guidance will be developed through consultation with people with disability, state and territory governments, and operators and providers of public transport.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements retrospectively with a compliance schedule timing of 5 years, recognizing complexities associated with updating internal procedures and processes to facilitate the timely provision of information.

7. Real time communication

Issue

The Transport Standards do not include requirements for real time communication between operators and providers and people with disability while undertaking a public transport journey. In some cases, passengers who have accessibility needs or who require specific information are unable to communicate with staff. Where service-related matters arise, it is important that public transport operators can share information with all passengers in real time. If passengers are unable to receive information in real-time, they may be unable to successfully complete their journey, give feedback or make any necessary request for assistance.

Collective government action would introduce requirements for real time communication and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A of the Decision RIS.

Table 24: Reform options for Real time communication

Option	Description
Status Quo	The Transport Standards would remain silent on requirements to provide real time communication between operators and providers and passengers. The Transport Standards would remain unchanged and no additional guidance would be issued.
Non-regulatory	Guidance would be developed to encourage operators and providers to improve the lines of communication between operators, providers and passengers in real time, provide examples of real time communication, and recommendations for disability awareness staff training for operators and providers.
Regulatory	The Transport Standards would be amended to ensure passengers can communicate in real time with operators and providers before boarding, while a conveyance is in transit and after alighting. Guidance would be provided to reflect any new requirements.

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 25: Benefit-cost ratios for Real time communication

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	6.1	-	7.2	7.2 ⁱ	0.85
Regulatory	97.7	-	46.0	46.0	2.12

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 15% was applied to the non-regulatory option based on the high cost and complexity of fully implementing the guidance, and submissions from public transport operators and providers with mixed support for implementation. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory

The benefits and costs for this reform were estimated based on survey data and publicly available data, proxied at a national level. This means that the differences in compliance rates between jurisdictions may not be reflected in the results.

Interdependencies

This is an enabling reform providing access to timely information and, when not available, access to staff should improve the ease of access to use public transport services. The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as better communication of accessibility features and infrastructure related reforms.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 26: Qualitative benefits for Real time communication

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	-	-	-
Regulatory	Yes	Yes	-	-	-	-

Analysis of submissions

Status quo

Section 27.1 of the Transport Standards requires that general information about transport services must be accessible to all passengers. Maintaining the status quo would not introduce additional requirements for real time communication with passengers before, during and after alighting a public transport conveyance.

Submissions from individuals, people with disability and disability organisations identified in their submissions that this may lead to situations where passengers who have accessibility needs or who require specific information are unable to communicate with staff or exchange information in real-time with transport operators or providers. This may result in people with disability being unable to receive information in real-time, imposing a barrier to using public transport.

The importance of any stage of the journey will vary depending on the passenger's disability. For example, people with vision impairment must be able to hail their bus or know that the train pulling in is their service. Equally they must be able to know that their intended stop has been reached. People with mobility impairments who need assistance to board or alight must be able to communicate this.

Queenslanders with Disability Network

Submissions from industry and government noted that service-related information is generally provided in multiple formats to ensure passengers with varying needs have access to the same level of information. For this reason, four submissions disagreed with the issue statement presented in the Consultation RIS and argued that current provisions in the Transport Standards adequately support effective communication of information to passengers during their journey, through numerous mechanisms including help points, websites, maps and information centres. Two submissions from operators and providers preferred continuation of the status quo, stating that the regulatory option would introduce additional regulatory burden that would not guarantee improved accessibility outcomes.

Maintaining status quo would incur no additional costs for public transports operators and providers.

Non-regulatory

The majority of submissions from industry and government noted that in their experience, passengers can already access real time information about their journey through a variety of platforms, including via intercoms, digital displays, mobile applications and direct assistance. To supplement existing practices, these submissions supported the provision of additional guidance material through the non-regulatory option. The non-regulatory option was noted as providing flexibility to accommodate new technology, and support the broad range of systems and service types deployed across public transport networks.

Improvements to the status quo is supported, however, consideration needs to be given to the fact that no one-size solution will fit all circumstances.

Brisbane City Council

Three submissions from industry and government noted that whilst the proposed regulatory requirements may be achievable for large organisations, in many cases new prescriptive requirements would disproportionately impact smaller operators and providers, and would be highly complex to implement. Similarly, some submissions noted that in some circumstances, it is impracticable to implement provisions where passengers can communicate with service providers before and after a public transport journey – for example, at bus stops. Additionally, these submissions noted that there are practical limitations that impact the ability for the regulatory proposal to be fully implemented. This includes the operating environments of infrastructure such as bus stops, where real time communications technology may not be readily deployed. Likewise, a number of implementation challenges were identified in submissions from industry and government, including the diverse origins of information and poorly delineated lines of responsibility across public transport networks, diverse operating environments and additional upgrade costs.

Real time communication

To support operators and providers to communicate in real time with passengers with disability, one submission from government advocated for additional guidance to be provided including a matrix specifying potential communication mechanisms and the suitability of these methods to support distinct types of disability.

Regulatory

Submissions from individuals, people with disability and disability organisations identified that the Transport Standards do not currently require real time communication between operators and providers and people with disability, and in certain cases, this may result in a discriminatory situation where people with disability are unable to access the necessary information to complete their journey safely and with confidence. Currently, the provision of information in real time varies between jurisdictions and transport networks. The majority of submissions from these stakeholders agreed that all points of a public transport journey require real time communication to support passengers, for example, to hail the correct bus service or disembark at the correct location.

In their submission, the Public Transport Ombudsman of Victoria noted that they regularly receive complaints regarding a failure to provide real time communication or to respond to a consumer's request for information in real time. Submissions from the disability sector argued that regulatory reform is required to ensure consistency across services and to produce tangible benefits to amenity, convenience, equality and safety of passengers with disability. Like other reform areas involving information and communication, the use of co-design processes to design communications policies and practices was identified as crucial. One submission from an individual noted that this would particularly be beneficial in cases of service disruption.

There was broad agreement among all stakeholder groups that most of the necessary technology to support the regulatory proposal is either in use already, or could be implemented on conveyances and at infrastructure. In cases where technology has already been deployed, an individual shared that their confidence has increased. However, these functions are not always used or deployed effectively. For example, buses equipped with GPS systems that alert passengers to the next stop, but have the speaker turned down to an inaudible level. Similarly, one submission noted that the systems and practices used to communicate real time information may not be accessible to all passengers, such as people with intellectual disability, and consideration should be given to how information is presented.

Real-time communication is often difficult for people with intellectual disability to understand. Real-time communication includes passenger information displays, audio announcements and signage. Unless real-time information is clear and uses easy to understand language, it will not be accessible for people with intellectual disability.

Council for Intellectual Disability

Three submissions from government, although supportive of the regulatory proposal in principle, suggested that amendments are required to reflect the practical operating environment of public transport services. One submission suggested that the proposed regulatory amendments fail to distinguish between general real time service related information and information related to individual customer help or assistance. To address this concern, the submission proposed amending the content of Section 27.1 to include provisions for real time communication of updates to service information during disruptions and events. The submission also noted implementation challenges associated with the proposed regulatory amendments, including the need for additional staff, expansion of help points arrangements and overall greater capital costs. A number of submissions from industry and government noted that although real time communication technology is available, it is not practical to install at all locations – for example, bus stops – and there is an important role for direct assistance provisions.

To support the implementation of new requirements for real time communication, one submission from government stated that additional staff training must also be provided, including for staff who do not have regular direct face-to-face interactions with customers, but may be involved in the distribution of information – such as control centres.

Real time communication

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **non-regulatory option**.

The use of real time communications technology was well supported across all stakeholder groups to support safe and equitable public transport journeys for people with disability. Stakeholders from both industry and the disability sector highlighted examples of where this technology has been successfully deployed to support the distribution of real time information in multiple formats.

Although supportive of improving accessible information provision, the majority of submissions from industry and government noted the prescriptive requirements proposed in the regulatory option may not be feasible to implement in all operating environments due to practical barriers and consequently highlighted the need for flexibility. Although the regulatory option may provide a greater level of certainty and consistency to improve accessibility, these barriers may limit the overall benefit and effectiveness of the regulatory option. In cases where it is practical to install real time communications systems, this will be encouraged as best practice through new guidance material, and other reforms relating to accessible information provision.

The preferred option will be implemented through inclusion in a revised Whole Journey Guide.

8. Passenger location during journey

Issue

Section 27.4 of the Transport Standards requires all passengers to be given the same level of access to information on their whereabouts during a public transport journey; however, it does not specify where and how visual and audio information must be presented to support the varying needs of people with disability. Operators and providers may provide multi-format information, such as signs at stops, on-board announcements, assisted listening systems, and mobile technology to provide location information, however not all of these formats are accessible to people with disability. An inability to receive arrival and next stop information may cause distress for people with disability, particularly those with hearing or vision impairment.

Collective government action would introduce requirements for the communication of location-specific information during a public transport journey and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 27: Reform options for Passenger location during journey

Option	Description
Status Quo	<p>The Transport Standards provide requirements to ensure all passengers are given the same level of access to information on their whereabouts during a public transport journey, however would remain silent on specifications for where and how visual and audio information is presented.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-regulatory	<p>Guidance would be developed to encourage operators and providers to provide information in multiple formats, including via direct assistance in a timely manner, allowing time for a person to respond and successfully alight.</p>
Regulatory	<p>The Transport Standards would be amended to include requirements for:</p> <ul style="list-style-type: none"> • the visibility of visual information display of next stop • the provision of audio announcements of next stop • announcement of the side or door / gate through which a person must alight. <p>Two sub-options were presented for consideration in relation to visual information display visibility:</p> <ol style="list-style-type: none"> 1. Visual information display of next stop must be visible from all priority seats and allocated spaces. 2. Visual information display of next stop must be visible from all seats and allocated spaces. <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 28: Benefit-cost ratios for Passenger location during journey

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	122.9	-	452.2	452.2 ⁱ	0.27
Regulatory	371.7	-	632.1	632.1	0.59

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 75% was applied to the non-regulatory option based on the low cost and technical complexity to implement the guidance and submissions indicating many public transport operators and providers are able to or currently implement the requirements. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory

The benefits and costs for this reform were developed from the survey responses and the number of public transport premises, proxied at a national level. This implies the benefits and costs may not reflect the full extent of existing and future compliance.

To provide accessibility in line with the requirements of this reform, public transport providers / operators would need to update software, web accessibility and their booking systems.

Interdependencies

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as accessible fare elements, better communication of accessibility features and others.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 29: Qualitative benefits for Passenger location during journey

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	Yes
Regulatory	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

Section 27.1 of the Transport Standards requires that general information about transport services must be accessible to all passengers. Maintaining the status quo would not result in the Transport Standards being amended to provide visual displays and audio announcements of next stop information to support passengers with disability.

Submissions from individuals, people with disability and disability organisations stated that the same level of arrival and next stop information is not always available or accessible to all passengers during a public transport journey, despite the existing requirements in the Transport Standards. Consultation found that the lack of the provision of information in audio and visual formats is a barrier for people with disability accessing and navigating public transport.

Members in locations across Australia reported frustration with the lack of audible announcements on buses.

Blind Citizens Australia

Some submissions from industry and government disagreed with the issue statement provided in the Consultation RIS. These submissions noted that the status quo already requires information be accessible to all passengers, and that the current provisions provide necessary flexibility to operators and providers to meet the needs of passengers with disability when travelling by particular modes, including buses. Submissions argued that on these services, the proximity of passengers to drivers enables direct communication as required to support safe boarding and disembarkation. Likewise, on these services, it may be unfeasible for information about location be communicated by the driver at all stops, and there may be significant costs and work incurred in installing communications systems onto all conveyances.

Maintaining status quo would not incur additional costs to public transports operators and providers.

Non-regulatory

There was a mix of support for the non-regulatory option by industry and government. These submissions agreed that whilst progress has been made to communicate location-specific information to passengers, there is an ongoing need to ensure people with disabilities needs are met. Submissions noted that, for example, the fitting of real time communications devices that convey next stop information demonstrates current industry practice is achieving the intended outcome of the regulatory proposal. For this reason, the regulatory option was argued as introducing unnecessary burden.

Likewise, the flexibility of the non-regulatory option was identified as beneficial in supporting the uptake of technological advancements which may be non-compliant with the prescriptive requirements of the regulatory option. The majority of submissions from industry and government highlighted that bespoke solutions allow operators and providers to provide services that account for the unique operational and technical challenges associated with the communication of location-specific information in different circumstances, such as long-distance coach travel. These submissions noted that reforms must consider the practicality of requirements, including the modes that requirements should apply to, the design constraints of conveyances and the complexities involved with information provision where multiple entities are involved. A number of submissions raised concerns regarding the requirements included in the regulatory option for the location of visual information displays. These submissions noted that in some cases, this is not possible due to the layout of the conveyance, or the obstruction of the displays by other passengers resulting in non-compliance.

Costs would be incurred by operators and providers if they are required to upgrade any assets in alignment with new guidance material. One submission from industry noted the benefit of the non-regulatory option in allowing operators and providers to manage costs which may not be feasible through retrofitting.

Regulatory

The provision of location-specific information in accessible formats was noted as an important factor in easing anxiety and increasing independence when travelling on public transport. Submissions from all stakeholder groups noted that since the adoption of the Transport Standards, there has been an overall improvement in the provision of location-specific information onboard conveyances. There was general agreement that the technology required to support the communication of this information is mature, and in their experience, effective. The implementation of these changes, however, was noted as varying across jurisdictions and modes of transport.

The benefits associated with digital announcements and ‘next stop’ information provided by audio and visual messaging will improve the passenger experience and improve the efficiency of the service for all passengers.

Brisbane City Council

All submissions from individuals, people with disability and disability organisations supported the regulatory option. There was strong support for the importance of a mix of information delivery mechanisms, including audio-visual infrastructure, mobile web services and direct assistance. For this reason, these submissions called for regulatory reform to ensure consistency and certainty. All responses from the disability sector preferred sub-option 2, noting the more fulsome requirements as providing a greater benefit to people with disability than sub-option 1. Two submissions also suggested providing guidance material that references the value of including accessible information about the ultimate destination of the conveyance and stopping patterns.

We are aware of situations where a passenger who is blind or has low vision has boarded the wrong train but has not realised this because the “next stop” information was identical for a number of trains in the network during key parts of the passenger’s journey.

Vision Australia

There was mixed support for the regulatory option by industry and government. Several submissions shared examples of successful deployments of next stop announcement systems and the associated benefits to passengers with disability. Although the technology to support the proposed requirements exists, several submissions emphasised that if new regulatory requirements were applied retrospectively, the cost to fit technology may be prohibitive. Additionally, one submission flagged the need for ongoing work to determine implementation arrangements for smaller conveyances, such as taxis and rideshare, and services where there are no stops between boarding and destination. Direct assistance was identified as an effective and viable mechanism in these circumstances.

One submission from government suggested amendments to the regulatory option. The submission proposed amending Sections 27.1 and 27.4 of the Transport Standards to include specific provisions relating to the provision of real-time updates regarding planned and unplanned disruptions, and real-time next stop information, respectively.

The majority of submissions from industry and government preferred sub-option 1. These submissions stated that the requirements proposed under sub-option 2 are not feasible unless personal devices, such as mobile phones, can be relied upon for information provision.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **regulatory option with revisions, sub-option 1**.

Based on stakeholder feedback, this option has been revised to accommodate point-to-point transport. If a service has no stops between boarding location and destination, they will be exempt from new requirements.

Passenger location during journey

Industry and government were divided on the regulatory, non-regulatory and status quo options, while the regulatory option was preferred by individuals, people with disability and disability organisations. Although some stakeholders disagreed with the issue statement presented in the Consultation RIS, the majority of submissions agreed that whilst progress has been made to communicate location-specific information to passengers, there is an ongoing need to ensure people with disabilities' needs are met. Several submissions from industry noted that current internal practice already aligns with the regulatory proposal, and in these circumstances the likely impact of the regulatory option may be reduced.

Sub-option 1 is preferred to balance the accessibility needs of passengers, with practical limitations relating to conveyance design, which may render the requirements of sub-option 2 unfeasible.

While acknowledging costs will be incurred in implementing the regulatory option, the costs associated with providing accessible passenger location information for new conveyances is expected to be modest and are outweighed by the benefits to be gained in providing an important wayfinding, safety, accessibility and support feature for people with disability.

Consultation findings indicate that while installation of necessary technology may involve a minor addition to total project costs for new assets, retrofitting may be complex and cost prohibitive. As such, the new Transport Standards requirements would apply to new or substantially upgraded conveyances and would not be retrospective. This would address the primary concerns of industry and government stakeholders who supported the non-regulatory and regulatory options.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism. This would address the primary concerns of stakeholders.

9. Hearing augmentation on conveyances

Issue

Section 26.2 of the Transport Standards covers hearing augmentation systems on conveyances for hearing aid passengers, and references AS1428.2 (1992) Design for access and mobility, for hearing augmentation systems. This Australian Standard is outdated, and only requires a hearing augmentation system to cover 10 per cent of the total area of the enclosed space of a conveyance.

Passengers with hearing impairments may miss or misunderstand a Public Address system message unless it is received directly in their telecoil equipped hearing aid via a hearing augmentation system.

Collective government action would strengthen requirements for hearing augmentation systems on conveyances and promote consistency through alignment with requirements in the Premises Standards and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 30: Reform options for Hearing augmentation on conveyances

Option	Description
Status Quo	<p>The Transport Standards would continue to reference an outdated Australian Standard that requires 10% of an enclosed space of a conveyance be covered by a hearing augmentation system.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-Regulatory	<p>Guidance would be developed to encourage operators and providers to, where a public address system is installed, ensure a message broadcast in accessible format should be received in 100% of the area covered by the public address system and be identifiable by the international symbol for deafness.</p>
Regulatory	<p>There are 2 regulatory options that were consulted on.</p> <p>Option 1</p> <p>The Transport Standards would be amended to include that, if a public address system is installed, people who are hearing impaired must be able to receive a message equivalent to the message received by people without a hearing impairment, the message broadcast via the hearing augmentation system must be received in either 80% (sub-option 1) or 100% (sub-option 2) of the area covered by the public address system, and requirements would be updated to comply with contemporary Australian Standards.</p> <p>Option 2</p> <p>Requirements of the Transport Standards would be amended to those outlined in option 1, if a public address system is in operation.</p> <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 31: Benefit-cost ratios for Hearing augmentation on conveyances

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	1.7	-	5.5	5.5 ⁱ	0.31
Regulatory	24.7	-	38.0	38.0	0.65

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 15 per cent was applied to the non-regulatory option based on the high cost and technical complexity raised in submissions to implement with the guidance. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory

The benefits and costs of this reform reflect a magnetic induction system within conveyances, providing accessibility to those with hearing impairments improving their safety, amenity and accessibility while using public transport.

The costs reflect significant upgrades or expansions to existing hearing loop technology with a likelihood to replace the existing system.

Interdependencies

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as hearing augmentation in infrastructure and premises.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 32: Qualitative benefits for Hearing augmentation on conveyances

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	Yes
Regulatory	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

Under the status quo, 10 per cent of the total area of the enclosed space of a conveyance must be covered by a hearing augmentation system.

Several submissions from operators and providers disagreed with the issue statement provided in the Consultation RIS and raised a number of concerns with the proposed requirements of the non-regulatory and regulatory options. These responses noted that their experience very few passengers use hearing augmentation systems to receive information and that many modern hearing aids do not have the ability to connect to the systems. Instead, stakeholders noted that public announcements are provided via visual display screens and other information channels. Two submissions cited internal surveys which suggested a relative preference for information to be provided through visual means, rather than through hearing augmentation systems. Similarly, one submission from industry shared feedback that hearing augmentation systems may already be meeting the needs of passengers.

A survey of bus and coach operators indicates there is no current systemic issue of hearing augmentation systems not currently meeting accessibility needs. Anecdotal feedback from passengers has suggested a preference not to use radio signal functionality in their hearing aids.

Bus Industry Confederation

For these reasons, three submissions from industry and government abstained from providing support for any options presented in the Consultation RIS, and one submission from an operator and provider supported the status quo. Alternatively, one submission suggested deleting references to AS1428.2 (1992) and inserting new guidance material, to align reforms with the modernization of Australian Standards references.

Maintaining status quo would incur no additional costs for public transports operators and providers.

Non-regulatory

There was mixed support for the non-regulatory option from industry and government. Several submissions noted that although greater coverage of hearing augmentation systems would benefit some passengers, there may be more effective alternatives to hearing loop technology, as many modern hearing aids not contain the telecoil switch required to use hearing augmentation systems. Similarly, the majority of these submissions raised concerns that the proposed 100 per cent coverage requirement proposed in the regulatory option is unfeasible, due to the presence of strong electrical currents common in public transport infrastructure locations. Likewise, there was broad acknowledgement that hearing augmentation is exceedingly difficult to implement in aircraft and is therefore unsuitable for regulation. In these cases, alternative forms of information delivery such as direct assistance are more appropriate.

For this reason, a number of submissions stated the current minimum requirements should be preserved and accompanied with additional best practice guidance on the use of other modern assistive listening systems that may be more suitable for use in a public transport environment.

Regulatory

All submissions from individuals, people with disability and disability organisations supported the regulatory option. These submissions noted that the Transport Standards reference a thirty-year-old standard, and widening the requirements for hearing augmentation systems will positively impact the travelling experience of passengers of these systems.

All submissions from the disability community preferred option 1, stating it would provide greater certainty to people with disability. There was mixed support for sub-option 1 and sub-option 2 from these submissions. Those who favoured sub-option 1 noted the relative strength of the requirements compared with sub-option 2, providing the greatest possible benefit for passengers. These submissions noted that in circumstances where environmental factors impact full compliance, equivalent access processes can be enacted. Those who

Hearing augmentation on conveyances

supported sub-option 2 noted that in practice, 100 per cent coverage may not be possible due to technical and operational challenges. To ensure passengers are aware of these limitations, two submissions noted the importance of signage to designate areas with coverage.

Three submissions from government and one submission from industry supported option 1 to provide the greatest level of certainty to passengers of hearing augmentation systems. One submission from government, although supportive of the regulatory option, noted that the prescriptive requirements proposed may not be appropriate for implementation in future rollingstock as prescriptive requirements could limit innovation, whilst retrospective implementation may be challenging. The submission flagged that there may be future opportunities to digitise hearing augmentation through emerging solutions, which must be considered in the broader modernisation of the Transport Standards. Two submissions from government were supportive of sub-option 1, noting that it would provide the greatest net benefit to passengers. One submission from industry favoured sub-option 2, noting that significant challenges may be encountered with meeting uninterrupted 100 per cent coverage across a conveyance both retrospectively and prospectively. For this reason, the submission highlighted the important role of other technologies in providing equivalent messaging, such as passenger information displays.

Two submissions from government and two submissions from industry supported option 2, as it specifically outlines criteria for when a public address system is in active operational use and would represent a functional accessibility improvement to passengers who require hearing augmentation. The majority of these submissions favoured sub-option 2. To address environmental and operational constraints, one submission from industry noted the flexibility of option 2 to provide contingency to operators and providers. One submission from industry also noted that the requirements proposed in option 1 may not accommodate how conveyances are used. The submission outlined how some conveyances with installed PA systems have transitioned to different types of work – for example, route bus transferred to work as a school bus – which makes the PA system redundant. One submission from government also noted that the retrospective application of proposed requirements may be challenging and, in some cases, cost prohibitive.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is the **status quo**, with further consultation, investigation and research recommended to determine whether future reforms are required.

The majority of submissions from industry and government raised concerns regarding the feasibility of the proposed requirements in the context of public transport conveyances. Similarly, multiple submissions questioned whether the proposed requirements align with contemporary best practice for assistive listening systems, and suggested that alternative solutions may deliver a greater net benefit to people with disability. Responses from the disability sector were unanimous in supporting reform to improve the coverage of hearing augmentation systems to provide equitable access to information for passengers with t-coil equipped hearing aids.

Consultations found the provision of information in multiple accessible formats is essential; however, the extent of dissenting views on the proposed issue and options requires further consultation. This Decision RIS proposes the establishment of a working group consisting of hearing augmentation system users and representative organisations, public transport operators and providers and governments. The working group would consider the feasibility of installing hearing augmentation systems in public transport operating environments and the viability of emerging digital solutions. To ensure alignment amongst hearing augmentation reforms, consultations should be conducted in conjunction with hearing augmentation requirements for premises and infrastructure, as outlined in Chapter 10 of this Decision RIS.

The working group would report its finding to the National Accessible Transport Steering Committee. Before any amendments to the Transport Standards could be considered a consultation process, regulatory impact analysis and Ministerial consideration would be required.

The status quo will not impose additional costs on operators or providers.

10. Hearing augmentation: Infrastructure and premises

Issue

Section 26.1 of the Transport Standards includes requirements for hearing augmentation systems installed in public transport premises, except premises to which the Premises Standards apply, and infrastructure. However, these requirements reference outdated Australian Standards for hearing augmentation systems, and do not include requirements for operators and providers to advise passengers about which assistive listening devices are compatible with their systems.

Collective government action would strengthen requirements for hearing augmentation systems on premises and infrastructure and promote consistency through alignment with requirements in the Premises Standards, and would address key stakeholder issues raised through the Transport Standards review processes.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 33: Reform options for Hearing augmentation: infrastructure and premises

Option	Description
Status Quo	<p>The Transport Standards require that 10% of the total area covered by an amplified system that communicates public information in public transport infrastructure and premises be covered by a hearing augmentation system.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-Regulatory	<p>Guidance would be developed to encourage operators and providers to, where a public address system is installed, ensure the message broadcast in accessible format be received in the maximum area covered by the public address system and be identifiable by the international symbol for deafness.</p>
Regulatory	<p>There are 2 regulatory options that were consulted on.</p> <p>Option 1</p> <p>The Transport Standards would be amended that, if installed, a magnetic induction system must cover at least 80% of the area served by the public address system. Boundaries of the area served by the hearing augmentation system must be designated by the international access symbol for deafness where the total area is not covered.</p> <p>Option 2</p> <p>The Transport Standards would be amended so any hearing augmentation systems must cover the maximum area practicable and at least those areas in which staff assistance is available.</p> <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 34: Benefit-cost ratios for Hearing augmentation: infrastructure and premises

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	17.1	1.6	3.8	5.8 ⁱ	2.96
Regulatory	99.7	3.0	7.6	14.8	6.73

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾ Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 15 per cent was applied to the non-regulatory option based on the high cost and technical complexity raised in submissions to implement with the guidance. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory

The benefits and costs of this reform reflect a magnetic induction system, covering at least 80 per cent of infrastructure and premises, and testing of that system, providing accessibility to those with hearing impairments improving their safety, amenity and accessibility while using public transport.

The costs reflect the training required to test a hearing loop system and ongoing testing to maintain continuity of service provided by the Department.

Interdependencies

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as hearing augmentation on conveyances.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 35: Qualitative benefits for Hearing augmentation: infrastructure and premises

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	-	-
Regulatory	Yes	Yes	-	Yes	-	-

Analysis of submissions

Status quo

The Transport Standards requires that 10 per cent of the total area covered by an amplified system that communicates public information in public transport infrastructure and premises be covered by a hearing augmentation system. Feedback from people with disability highlighted that this may lead to situations where a person using a hearing aid may be unable to receive information being broadcast over the public address system depending on where they are located.

Four submissions from government provided feedback regarding the extent of the issue outlined in the Consultation RIS. Feedback received during consultation from industry and government noted that anecdotally, the use of hearing augmentation systems is not widespread and more appropriate solutions may be available for use in public transport environments. Submissions noted that cost-effective assistive technologies are increasingly available, which potentially render hearing loop technologies obsolete. Additionally, one submission from government noted the use of features such as visual display screens, which may be preferable for passengers. For this reason, submissions questioned whether regulatory reform would result in tangible customer benefit or deliver value for money.

Two submissions from government supported the status quo option. One submission noted that currently, they install hearing augmentation systems in key areas where there is seating, help points and other key features where passengers tend to congregate. This was noted as being effective and supports the distribution of information to passengers. One submission supported the status quo, due to limited ability to assess the impacts across their network. The submission did state, however, that a non-regulatory option could be supported in the future to accommodate new technological innovations.

Maintaining that status quo would incur no additional costs for public transports operators and providers.

Non-regulatory

Three submissions from industry and three submissions from government supported the non-regulatory option. These submissions noted that whilst increasing the coverage of hearing loop systems in infrastructure and premises will benefit some customers, there may be better alternatives to induction loop technology. These submissions noted that for this reason, the proposed regulatory option is overly prescriptive and does not adequately allow for new systems and technologies, which could achieve superior customer outcomes, to be easily adopted.

Submissions noted it is important that flexibility remains in recognition of the constraints in specific contexts such as operational heavy rail environments. These submissions noted that the presence of strong electric currents makes installing large-scale hearing loops technically challenging and prohibitively expensive. Additionally, these submissions advocated that coverage should be based on customer journey stages and functional zones, rather than arbitrary targets. Due to the need for flexibility to accommodate these limitations, these submissions preferred the non-regulatory option.

Additionally, one submission from government raised concerns with the issue statement included in the Consultation RIS. The Issue section states "...the Premises Standards require hearing augmentation systems to cover 80-95 per cent of the area covered by the amplified system that communicates public information". The submission stated that while this is technically true, the Premises Standards only requires this under specific circumstances, which may not be applicable in the context of public transport premises and infrastructure.

Regulatory

All submissions from individuals, people with disability and disability organisations supported the regulatory options. These submissions noted the difference in minimum coverage requirements between the Premises Standards and the Transport Standards, and advocated for harmonisation. These submissions noted that current requirements included in the Transport Standards are inadequate and do not provide a sufficient level of service to people with disability.

Hearing augmentation: Infrastructure and premises

There was a variety of support for regulatory option 1 and option 2 from the disability community. Those who preferred option 1 noted the benefit of providing spatial targets for coverage, and suggested this would provide necessary certainty to people with disability that they can travel without discrimination. Submissions noted the potential for electrical currents to impact compliance, and noted that any site-specific constraints can be addressed through equivalent access or unjustifiable hardship provisions. One submission made a number of suggestions to strengthen guidance. One submission supported option 2, noted it may be difficult for those who use hearing loop systems and also are blind or have low vision to identify the exact area covered by a hearing augmentation system. The submission stated that by providing coverage to the maximum practicable area, there will be a greater net benefit to passengers.

Two submissions from industry and three submissions from government supported the regulatory option. Submissions noted that the likely impact of reform is minimal, given the proposal aligns the requirements of the Transport Standards with the Premises Standards. However, one submission from government noted that the potential impact of new regulations on the implementation of new assistive listening technologies must be considered to ensure the Transport Standards remain fit-for-purpose.

There was mixed support among these submissions for regulatory option 1 and option 2. Submissions that supported option 1 noted that the proposal aligns with requirements in the Premises Standards. One submission from industry noted in some cases, retrofitting infrastructure to meet requirements may be challenging and therefore requirements should only apply to new assets. Submissions that supported option 2 noted that the requirements would be feasible to implement and would result in a functional improvement to the accessibility of premises and infrastructure. Additionally, one submission from industry stated that option 2 better accounts for environmental impacts and site complexities.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is the **status quo**. Further consultation, investigation and research is recommended to determine whether additional reforms are required.

The majority of submissions from industry and government raised concerns regarding the feasibility of the proposed requirements in the context of public transport operating environments. Similarly, multiple submissions questioned whether the proposed requirements align with contemporary best practice for assistive listening systems, and suggested that alternative solutions may deliver a greater net benefit to people with disability.

Industry and government provided mixed support for the regulatory, non-regulatory and status quo options. Responses from the disability sector were unanimous in supporting reform to improve the coverage of hearing augmentation systems to provide equitable access to information for passengers with t-coil equipped hearing aids.

Consultations found the provision of information in multiple accessible formats is essential; however, the extent of dissenting views on the proposed issue and options requires further consultation. This Decision RIS proposes the establishment of a working group consisting of hearing augmentation system users and representative organisations, public transport operators and providers and governments. The working group would consider the feasibility of installing hearing augmentation systems in public transport operating environments and the viability of emerging digital solutions. To ensure alignment amongst hearing augmentation reforms, consultations should be conducted in conjunction with hearing augmentation requirements for conveyances, as outlined in Chapter 9 of this Decision RIS.

The working group would report its finding to the National Accessible Transport Steering Committee. Before any amendments to the Transport Standards could be considered a consultation process, regulatory impact analysis and Ministerial consideration would be required.

The status quo will not impose additional costs on operators or providers.

11. Print size and format

Issue

Section 27.3 of the Transport Standards includes requirements for large print. Section 27.3 does not specify, however, font weight and text justification for large print. This is not best practice and does not meet the varying needs of people with low vision or other print disabilities.

Collective government action would strengthen requirements for large print resources and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 36: Reform options for Print size and format

Option	Description
Status Quo	The Transport Standards stipulate requirements for font size and format, however are silent on specifications for font weight and text justification for large print. The Transport Standards would remain unchanged and no additional guidance would be issued.
Non-Regulatory	Guidance would be developed that provides advice on appropriate large print font size, types of font, luminance contrast between text and background, weighted font, the justification of text and the use of sentence case.
Regulatory	The Transport Standards would be amended to include new requirements for large print formats, including luminance contrast between text and background, font weight, and text justification. Guidance would be provided to reflect any new requirements.

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 37: Benefit-cost ratios for Print size and format

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	13.7	-	38.7	38.7 ⁱ	0.35
Regulatory	19.3	-	53.5	53.5	0.36

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 75 per cent was applied to the non-regulatory option based on the low cost and complexity of implementing the guidance. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory

The benefits and costs for this reform were developed from a small number of survey responses and publicly available data on the number of public transport premises, proxied to a national level. This implies the benefits and costs may not reflect the full extent of existing and future compliance.

This reform provides benefits only for users with vision impairment throughout their public transport journey.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 38: Qualitative benefits for Print size and format

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	-	Yes	-	-	-	-
Regulatory	-	Yes	-	-	-	-

Analysis of submissions

Status quo

Section 27.3 of the Transport Standards stipulates requirements for large print font size and colour. Submissions from individuals, people with disability and disability organisations highlighted that since these requirements were drafted there have been developments in large print production technology and best-practice guidelines for print characteristics such as font size and weight. If large print is not formatted appropriately, it may hinder people who have low vision or other print disabilities from being able to receive and understand the information.

One submission from government supported the status quo option, noting that they have developed internal policies that establish minimum requirements for large print formatting. For this reason, the submission deemed amendments to the Transport Standards as introducing additional regulatory burden.

Maintaining the status quo would not incur costs for public transports operators and providers.

Non-regulatory

The non-regulatory option would develop guidance on appropriate large print font size, types of font, luminance contrast between text and background, weighted font, the justification of text and the use of sentence case.

Four submissions from industry and government supported the non-regulatory option. These submissions raised concerns that the prescriptive requirements included in the regulatory option may impact the ability to

deliver different types of information. For example, one submission noted the significant volume of information included in service timetables, and therefore argued it is important operators and providers are afforded flexibility to deliver services to their customers. Submissions also noted the value of the non-regulatory option in terms of staging the implementation costs of any updates to their information provision.

To the extent that guidance is followed, people with low vision or other print disabilities would benefit through improved accessibility of printed information.

Regulatory

The majority of submissions from all stakeholder groups supported the regulatory option. Submissions noted that the whilst the Transport Standards already mandate that people have the right to general information about transport services under Section 27.1 of the Transport Standards, and Section 27.3 provides specifications for large print, the proposed regulatory amendments would bring the Transport Standards into alignment with best-practice principles.

There was wide support from all stakeholder groups that the regulatory option would ensure consistency of service across transport networks and jurisdictions and result in a greater level of accessibility for people who request large print materials.

Support the regulatory option as if the non-regulatory approach is taken there will be significant inconsistency across operators/providers rather than a more standardised approach.

City of Newcastle

Submissions from the disability sector emphasized the importance of thorough user-testing prior to introduction of new materials into networks. One submission cited the guidelines maintained by the Round Table on Information Access for People with Print Disabilities as a definitive reference for the production of large print resources.

The majority of submissions from industry and government agreed that the proposed regulatory requirements are feasible to implement, would incur negligible cost increases and would result in tangible accessibility benefits for passengers who require large print formats. In the experience of these stakeholders, however, requests for information in large print format are infrequent, potentially due to the rise of other technology interventions. One submission noted that it is important that the legislative amendments make clear new requirements are only for documents that are being specifically produced in large print, rather than signage, and suggested amendments to the regulatory option to clearly articulate these requirements are for ad-hoc requests.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **regulatory option with additional guidance**.

The majority of submissions from all stakeholder groups supported the regulatory option to bring the Transport Standards into alignment with best practice principles for large print documentation. Industry and government were largely in support of the regulatory option, noting the proposed requirements are feasible to implement, would incur negligible cost increases and would result in tangible accessibility benefits for passengers who require large print formats. In circumstances where internal policies already reflect the proposed requirements, the impact on operators and providers will be minimal.

The proposal only pertains to documents in large print format requested on an ad hoc basis, rather than signage or regular printed information. Legislative amendments will be drafted to ensure this distinction is clear.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively, where new documents in large print format are requested. This would address the primary concerns of stakeholders, and recognises the negligible costs and impact of implementing the reform.

12. International Symbol for Access and Deafness

Issue

Section 16.1 of the Transport Standards specifies requirements for the use of international symbols for accessibility and deafness. The Australian Standards currently referenced in Section 16.1 are outdated, and the requirements included in the Transport Standards do not align with those included in the Premises Standards.

Collective government action would strengthen requirements for the use of the international symbol for accessibility and deafness and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 39: Reform options for International Symbol for Access and Deafness

Option	Description
Status Quo	<p>The Transport Standards would continue to reference outdated Australian Standards in relation to the international symbol for accessibility and deafness.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-Regulatory	<p>Guidance would be developed which provides advice on the application of the international symbol for accessibility and deafness, including what features should be identified, design requirements and size to incorporate viewing distances.</p>
Regulatory	<p>The Transport Standards would be amended to update the Australian Standards reference to more contemporary standards, and size requirements for the international symbol for accessibility and deafness.</p> <p>Two regulatory options were presented for consideration in relation to the size of accessibility symbols:</p> <p>Sub-option 1</p> <p>The size of accessibility symbols must comply with AS1428.2 (1992) <i>Design for access and mobility, Part 2: Enhanced and additional requirements—Buildings and facilities, Table 1.</i></p> <p>Sub-option 2</p> <p>The size of accessibility symbols must be of appropriate size when considering viewing distances and provided at 60 millimetres x 60 millimetres at a minimum.</p> <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 40: Benefit-cost ratios for International Symbol for Access and Deafness

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	37.8	-	62.5	62.5 ⁱ	0.60
Regulatory	53.3	-	86.4	86.4	0.62

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 75 per cent was applied to the non-regulatory option based on the alignment of the requirements with the Premises Standards and the low cost and complexity to implement the requirements. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory

The benefits and costs for this reform were estimated from publicly available data and a small number of data inputs from the survey to proxy the national compliance.

This reform provides confidence to people with vision impairments that their accessibility needs could be provided for throughout their journey.

Interdependencies

This is an enabling reform to effectively and consistently communicate accessibility features across a whole public transport journey. This reform will assist passengers in making decisions about whether public transport is accessible for their needs, with benefits reliant on implementation of accessibility focused reforms such print size, letter heights, luminance contrast and others.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 41: Qualitative benefits for International Symbol for Access and Deafness

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	-	Yes	-	-	-	-
Regulatory	-	Yes	-	-	-	-

Analysis of submissions

Status quo

The status quo option would maintain the existing requirements for the international symbol for accessibility and deafness.

There was very limited support for the status quo option. One submission from government supported the status quo option, stating the current provisions are sufficient.

Maintaining the status quo would not provide greater clarity to public transport operators and providers. Maintaining the status quo would incur no additional costs by public transports operators and providers and would have negligible impacts on the user.

Non-regulatory

The non-regulatory option would develop guidance that provides advice on the application of the international symbol for accessibility and deafness, including what features should be identified, design requirements and size to incorporate viewing distances.

One submission from an operator and provider supported the non-regulatory option. This submission noted that in some cases, there is a lack of distinction between the responsibilities of jurisdictions and franchisee operators. They expressed concern that non-compliance with the new regulatory requirements could be wrongfully applied to the franchisee, despite lacking the means or authority to comply with the proposed regulatory requirements. For this reason, the non-regulatory option was supported.

To the extent that guidance is followed, people with disability would benefit from improved consistency and accessibility of symbols for accessibility across the whole public transport journey.

Regulatory

During consultation, stakeholders overwhelmingly supported the notion that the consistency of symbols for accessibility is integral to the 'whole-of-journey' experience of passengers and contributes significantly to user confidence. Submissions agreed that all written and graphical transport related signage should be clearly visible and understood by all commuters.

The majority of submissions from all stakeholder groups supported the regulatory option, stating that the new requirements are feasible to implement and the impact on industry is likely to be minimal as the reforms do not involve material changes to requirements. Submissions noted that the Transport Standards currently reference AS1428.2 (1992), which is outdated and should be replaced with a modern reference in alignment with updates to the Premises Standards. Similarly, the harmonisation of references would provide greater clarity to operators and providers on their obligations under the Transport Standards.

Consistency of symbols for accessibility is integral to the provision of information and whole of journey travel for people with disability. The harmonisation of the transport standards and premises standards will provide greater clarity and ease of use of public transport.

Physical Disability Council of NSW

Submissions from individuals, people with disability and disability organisations noted that it is important that symbols and messaging also recognise that not all disabilities are visible, and it is important that correct and accurate symbols are used to indicate the presence of hearing loop technology.

There was mixed support for the sub-options presented in the regulatory option across all stakeholder groups. Approximately half of all submissions preferred sub-option 1, noting that it includes more comprehensive guidance material to support operators and providers, is feasible to implement and would result in a potential improvement for customers. Approximately half of all submissions supported sub-option 2, noting the value of aligning the Transport Standards requirements with the Premises Standards to promote consistency and certainty for operators and providers of their obligations under the DDA.

One submission from government highlighted it is important the Transport Standards clarify this requirement is for fixed signage where viewing distances need to be considered, not printed material or digital materials which have size limitations.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **regulatory option, sub-option 2**.

The majority of submissions from all stakeholder groups supported the regulatory option to bring the Transport Standards into alignment with best practice principles for the use of the international symbol for accessibility and deafness. There was broad agreement from all stakeholders that the consistency of symbols for accessibility is integral to the 'whole-of-journey' experience of passengers and contributes significantly to user confidence.

Support for the two sub-options presented was approximately even across all stakeholder groups. Sub-option 2 will align the Transport Standards with the Premises Standards.

Noting AS1428.1 (2009) has now been superseded by AS1428.1 (2021), reference to AS1428.1 (2009) clauses 8.2.1 and 8.2.2 will be updated with the equivalent clause reference in AS1428.1 (2021). There is no material change to the content of these updated Australian Standards clauses.

Submissions indicate the new requirements are feasible to implement and the impact on industry is likely to be minimal as the reforms do not involve material changes to requirements. Some stakeholders did raise cost concerns; however, these concerns often included assets which are in the scope of the existing requirements in the Premises Standards and are already implemented. Those requirements in the Premises Standards for new or substantially renovated premises came into force from 2010. Standardisation to existing requirements would mitigate costs via economies of scale, consistency and clarity.

The reform proposal only pertains to fixed signage where viewing distances need to be considered, not printed material or digital materials which have size limitations. Legislative amendments will ensure this distinction is clear.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively.

13. Letter heights and luminance contrast of signs

Issue

Section 17.1 of the Transport Standards contains requirements for letter heights and illumination of static, non-braille and non-tactile signs. However, the Transport Standards lack clarity regarding font type and luminance contrast for static, non-braille and non-tactile signs, and do not provide certainty that signage design will be consistent and accessible to people with disability.

Collective government action would strengthen requirements for non-braille and non-tactile signage and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 42: Reform options for letter heights and luminance contrast of signs

Option	Description
Status Quo	<p>The Transport Standards reference Australian Standards for height and illumination of signs, however, will continue to lack clarity regarding font type and luminance contrast for static, non-braille and non-tactile signs.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-Regulatory	<p>Guidance would be developed for operators and providers on appropriate signage design requirements, including font, letter height, luminance contrast, and location of signs.</p>
Regulatory	<p>The Transport Standards would be amended to include new requirements for non-braille and non-tactile signs. There are 2 regulatory options that were consulted on.</p> <p>Option 1</p> <p>This option would require all non-braille and non-tactile signs to:</p> <ul style="list-style-type: none"> • use Sans Serif font • provide characters, icons and symbols with a minimum luminance contrast of 30% to the background sign surface <p>Option 2</p> <p>In addition to the requirements proposed in option 1, this option would require all non-braille and non-tactile signs to:</p> <ul style="list-style-type: none"> • provide a luminance contrast on a sign of no less than 30% when viewed against the background or against other surfaces that are within 2 metres. <p>Two sub-options were presented for minimum letter heights:</p> <ol style="list-style-type: none"> 1. By using the Viewing Distance formula. 2. In accordance with AS1428.2 (1992) Clause 17.2 Height of letters in signs, Table 2, Height of letters for varying viewing distances <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative and qualitative assessment

This assessment included a high-level summary of the definitional reform and potential impacts for letter heights and luminance contrast of signs.

Letter heights and luminance contrast of signs

This is one of the six reforms categorised as definitional, which improves consistency and clarification of certain definitional terms and are considered minor and clarifying for providers, operators or manufacturers. As such, there are limited, or no costs and monetised benefits associated with these definitional reforms.

There are identified non-monetised benefits for people with disability associated with definitional reforms. These qualitative benefits improve outcomes for people with disability and are important for decision-makers to consider, in addition to the monetised costs and benefits.

Analysis of submissions

Status quo

Section 17.1 of the Transport Standards contains requirements for letter heights and illumination of static, non-braille and non-tactile signs, but lacks clarity regarding font type and luminance contrast.

Luminance contrast is important for people who have low vision as it helps differentiate the sign elements and improve readability. Consultation findings suggest that maintaining the status quo will continue to negatively impact people with disability if signage is unclear and difficult to read.

No submissions preferred the status quo option.

Maintaining the status quo would incur no additional costs for operators and providers.

Non-regulatory

One submission from government and three submissions from industry supported the non-regulatory option. These submissions suggested that the current requirements in the Transport Standards are adequate, however, would benefit from additional guidance to deliver meaningful accessible outcomes for customers. This solution was preferred, as it maintains a level of flexibility to ensure that signage design can be considered as part of an integrated wayfinding strategy specific to each site and asset.

One submission questioned how guidance material would apply to signs visible from the street or vehicles, such as station entrance flag-style signage, or internally illuminated signs, which may have different viewing requirements.

Regulatory

Throughout public consultation, there was broad agreement that clear and legible signage is an important factor in providing an accessible public transport service. All submissions from individuals, people with disability and disability organisations, and the majority of submissions from industry and government supported the regulatory option. Reform to update outdated references to AS1428.2 (1992) was well supported by all stakeholder groups. Similarly, the additional requirements detailed in the regulatory option were well supported across all stakeholder groups to enable greater consistency across public transport networks and support a more accessible 'whole of journey' approach to signage.

In particular, the added requirements for luminance contrast were noted as a beneficial addition to help make signs more legible and easily identifiable by the disability sector. In response to the specified requirements for luminance contrast, one submission from a disability organisation raised concerns that the 30 per cent minimum requirement does not meet the needs of the low vision community, and is not supported by contemporary evidence or user testing. The submission noted that whilst the 30 per cent figure is a minimum requirement, in practice this may not be exceeded, to the detriment of passengers with vision impairment.

We know from extensive anecdotal reports from clients and orientation and mobility specialists that the 30% level that is specified as a minimum does not meet the needs of the low vision community, and is, moreover, unsupported by robust, contemporary evidence and user testing.

Vision Australia

One submission from government noted that as signs are often suspended from ceilings, there may be issues concerning the practicality of measuring luminance contrast testing with background surfaces within

two metres, as the testing requirements are not always feasible. For this reason, the submission suggested the regulatory option be amended to remove 'or against other surfaces within two metres' and moved to guidance material. Similarly, one submission from industry noted that jurisdictions may also require signage – for example, school buses – and that these requirements could potentially contradict new requirements agreed to the Transport Standards. The majority of submissions from industry and government noted that the impact of the proposed regulatory changes would be minimal, although if the requirements were introduced retrospectively, complexities may arise.

There was split support for regulatory option 1 and option 2 among all stakeholder groups. Those who preferred option 1 noted the option will provide clarity to both customers and operators and providers regarding what is required, and will see the Transport Standards maintain prescriptive requirements relating to letter height. Those who preferred option 2 stated that it will provide the greatest certainty for sign design. The majority of submissions that support option 2 supported sub-option 2. These responses noted the value of maintaining reference to Australian Standards to reflect best practice design.

Two submissions from the disability community did not support either of the proposed options, instead stating further consultation through a co-design process is required to identify appropriate font size, stroke width, text justification and signage finish. These submissions stated it is critical that user testing is conducted to ensure these factors are considered and the resulting signage is legible to people with vision impairment. One submission also noted that consideration should be made to ensuring signage is inclusive of people with intellectual disability.

Choice of signage, clear and easy wayfinding, accessible information, text print size, language choices and accessible pictograms are all important elements to ensure transport is accessible and inclusive for people with intellectual disability.

Council for Intellectual Disability

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **regulatory option 2, sub-option 2**.

The majority of submissions from industry and government, and all submissions from individuals, people with disability and disability organisations supported the regulatory option. There was broad support for aligning the Transport Standards with contemporary best practice, and the additional requirements proposed were supported as a mechanism to provide more consistent and accessible 'whole of journey' experiences for people with disability. Feedback provided from the disability sector will inform the development of guidance to supplement new requirements with best practice advice regarding stroke width, text justification and signage finish, the value of user-testing and luminance contrast.

Option 2, sub-option 2 was supported by a combination of industry, government and disability sector stakeholders. This option will provide the greatest certainty for sign design, and aligns with industry best practice design.

Consultation findings indicate that while the impact of the proposed requirements would be minimal for new assets, complexities may arise when retrofitting existing assets. As such, the new Transport Standards requirements would apply to new or substantially upgraded infrastructure and would not be retrospective.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism. This would address the primary concerns of stakeholders.

14. Location of signs

Issue

Sections 17.2 and 17.3 of the Transport Standards include provisions for the location of signage in premises, infrastructure and conveyances via reference to AS1428.2 (1992). To simplify the Transport Standards, there is an opportunity to combine these sections and update references to the outdated Australian Standard.

Collective government action would update Australian Standard references to reflect technological progress and modernise the Transport Standards.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 43: Reform options for Location of signs

Option	Description
Status Quo	<p>The Transport Standards provide requirements on the location of signs in premises, infrastructure and conveyances.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-Regulatory	<p>Guidance would be developed that provides advice on best practice location of signs, including signage placement, purpose of the sign message, format of signs, operational context which considers passenger movements in an environment, and common viewing ranges for both seating and standing passengers.</p>
Regulatory	<p>The Transport Standards would be amended to include new requirements for the location of non-braille and non-tactile signs, including:</p> <ul style="list-style-type: none"> • signs must be visible from seated and standing position. • if used on conveyances, destination signs must be placed above the windscreen. • placement of the sign must be considered. Two regulatory sub-options were provided for consideration. Sub-option 1 proposes specific height ranges for the placement of signs in uncrowded and crowded areas, respectively. Sub-option 2 proposes compliance with AS1428.2 (1992). <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative and qualitative assessment

This assessment included a high-level summary of the definitional reform and potential impacts for the location of signs.

This is one of the six reforms categorised as definitional, which improves consistency and clarification of certain definitional terms and are considered minor and clarifying for providers, operators or manufacturers. As such, there are limited, or no costs and monetised benefits associated with these definitional reforms.

There are identified non-monetised benefits for people with disability associated with definitional reforms. These qualitative benefits improve outcomes for people with disability and are important for decision-makers to consider, in addition to the monetised costs and benefits.

Analysis of submissions

Status quo

Currently, requirements for the location of signage on public transport networks are contained in Section 17.2 and Section 17.3. These requirements do not include provisions which consider environmental factors in sign location. For example, a local bus stop identification sign versus an exit sign on a crowded station platform. This may consequently negatively impact legibility for users.

No submissions preferred the status quo option for this reform area.

Maintaining status quo would incur no additional costs for public transports operators and providers.

Non-regulatory

The non-regulatory option would develop guidance that provides advice on best practice location of signs, including signage placement, purpose of the sign message, format of signs, operational context which considers passenger movements in an environment, and common viewing ranges for both seated and standing passengers.

Three submissions from industry and one submission from government supported the non-regulatory option.

Two of these submissions noted that conveyances are subject to design requirements mandated under Australian Design Rules (ADRs). These submissions highlighted that compliance with ADRs that impact conveyance design must take precedence over conflicting requirements in the Transport Standards. For this reason, the non-regulatory option was noted as providing valuable flexibility to operators and providers to implement upgrades as per their operational requirements

To the extent that guidance is followed, people with disability would benefit from improved accessibility and consistency of sign placement.

Regulatory

There was broad support from all stakeholder groups for the regulatory option. Submissions noted that the current requirements included in Sections 17.2 and 17.3 of the Transport Standards are useful, and should be improved to provide greater clarity regarding the placement of non-braille and non-tactile signs, including through the provision of viewing height ranges.

Individuals, people with disability and disability organisations noted that in certain cases, signs may technically meet compliance requirements, but not be placed to adequately meet the needs of passengers. Poor placement can lead to situations where signs are obscured at peak usage times, negatively impacting passengers with disability.

Access to accurate information at bus stops is often absent or inaccessible. This can be as simple as bus stop numbers or zone letters in bus interchanges being at a suitable height to be seen, where currently they are at the top of a pole of sign, or being able to access information about which buses stop at a particular zones at a bus interchange (O-Bahn).

Campbelltown City Council Disability Access and Inclusion Advisory Committee

Submissions from all stakeholder groups advocated for consistency in the placement of signage to provide certainty to passengers when completing a public transport journey. The majority of submissions from industry and government noted that although challenges may arise with retrofitting, these requirements could easily be incorporated in the design phase of new projects.

The regulatory option was identified by the majority of submissions as providing a greater level of consistency across jurisdictions and modes of transport, and improving public transport accessibility by establishing a greater level of predictability. Operators and providers noted that both of proposed regulatory options are feasible to implement, would reduce regulatory ambiguity and would result in improved accessibility for

Location of signs

passengers with disability. Submissions noted that there is minimal practical difference between the two sub-options.

There was mixed support for the proposed sub-options from all stakeholders. Submissions that preferred sub-option 1 noted the value of direct reference to technical specifications and the provision for flexibility in the range of heights to accommodate the practical placement of signs in conveyances with limited space. Submissions that preferred sub-option 2 noted that reference to the Australian Standard would assist operators and providers by removing ambiguity and provides greater flexibility with placement zones for signs in constrained environments.

Submissions stated that the placement of signs needs to consider that often people are using facilities whilst there is heavy foot traffic and should be placed in locations that allow for ease of reading and wayfinding during peak usage times. Submissions emphasised further clarity is needed regarding the definition of 'crowded' and 'uncrowded' areas. One submission from an individual suggested providing additional guidance material that states wayfinding information signs should be located both prior to and at decision points, to support passenger flow during peak times. Multiple submissions emphasized that user-testing should be conducted when determining the location of new signs, to ensure accessibility for people with disability, including consideration of lighting to manage glare.

One submission from industry noted that that conveyances are subject to design requirements mandated under Australian Design Rules (ADRs). This submission stressed that compliance with ADRs that impact conveyance design must take precedence over conflicting requirements in the Transport Standards.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **regulatory option, sub-option 2** with additional guidance.

There was broad support from all stakeholder groups for the regulatory option. Operators and providers noted that the proposed regulatory amendments are feasible to implement, would reduce regulatory ambiguity and would result in improved accessibility for passengers with disability.

There was mixed support for the proposed sub-options across all stakeholder groups. Reference to technical standards in sub-option 2 will assist operators and providers by removing ambiguity and providing greater flexibility with placement zones for signs in constrained environments.

Additional guidance material to supplement the regulatory amendments will be provided, including the potential layout of signage to support wayfinding, the value of user-testing and the interaction of the Transport Standards with other regulations such as ADR 44/02, for the provision of emergency exit signage.

Consultation findings indicate that while the impact of the proposed requirements would be minimal for new assets, complexities may arise when retrofitting existing assets. As such, the new Transport Standards requirements would apply to new or substantially upgraded infrastructure and would not be retrospective.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism.

15. Braille embossed (printed) specifications

Issue

The Transport Standards requires that general information about transport services must be accessible to all passengers, and that if information cannot be supplied in a passenger’s preferred format, equivalent access must be given via direct assistance. Section 17.6 of the Transport Standards includes design specifications for braille materials. However, there is a lack of clarity on the standard of braille required for use in the provision of public transport information in printed formats. This presents a challenge to people with vision impairment who rely on braille to access key journey information.

Collective government action would strengthen requirements for braille in printed formats and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option are provided at Appendix A.

Table 44: Reform options for Braille embossed (printed) specifications

Option	Description
Status Quo	<p>The Transport Standards would continue to remain silent on the standard of braille and raised lettering.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-Regulatory	<p>Guidance would be developed on best practice for the provision of information in braille formats, including the standard of braille to use, and recommended braille publications.</p>
Regulatory	<p>The Transport Standards would be amended to include new requirements for the standard of braille, including:</p> <ul style="list-style-type: none"> • The standard of braille to provide information to passengers in braille format. • If material is specifically requested in a grade of braille other than the standard specified in the Transport Standards, it must be supplied in the passenger's preferred grade in a timely manner. <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 45: Benefit-cost ratios for Braille embossed (printed) specifications

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	5.1	-	7.9	7.9 ⁱ	0.65
Regulatory	12.9	-	10.6	10.6	1.21

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾ Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 75 per cent was applied to the non-regulatory option based on the low cost and complexity to update to a new braille format. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory

The benefits and costs for this reform reflect a change in braille standards, requiring upgrades to the standard of braille across a number of conveyances nationally. The benefits for this reform were estimated based on a small number of data points provided through the survey and were proxied at a national level implying that the benefits and costs may not reflect the extent of existing compliance.

This reform provides only benefits users with vision impairment reflecting a relatively small cohort of beneficiaries.

Interdependencies

The accessibility benefits of this reform will only be realised if there is equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as braille and tactile lettering for signage.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 46: Qualitative benefits for Braille embossed (printed) specifications

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	-	-
Regulatory	Yes	Yes	-	Yes	-	-

Analysis of submissions

Status quo

Under the status quo, the Transport Standards will continue to not include provisions for the minimum standard of braille. Ambiguity regarding the standard of braille will remain, and this may lead to situations where different complexities and standards of braille are used throughout public transport sites. Inconsistent braille requirements present challenges to braille readers.

Multiple submissions from operators and providers shared that they receive very few requests for information in braille format, and current solutions involving direct assistance and engagement with customers works effectively.

Although the majority of stakeholders were supportive of reform in this area, several submissions from organisations representing people with vision impairment, including Blind Citizens Australia, Vision Australia, and the Australian Braille Authority, raised significant concerns regarding factual errors presented in the Consultation RIS issue statement and the proposed non-regulatory and regulatory options. For this reason, all three submissions advocated for further consultation with community representatives and subject matter experts to develop fit-for-purpose amendments to the status quo. These submissions either abstained from supporting any options presented in the Consultation RIS, supported the continuation of the status quo pending further consultation, or suggested significant amendments to the proposed options.

BCA recommends that the options listed in the consultation RIS are discarded in their entirety and a regulatory option is developed in consultation with braille experts. Further there needs to be a clear stipulation between braille labelling and braille signage to ensure consistency in application of any measures under this section.

Blind Citizens Australia

These submissions emphasized that whilst this is not an ideal solution, the non-regulatory and regulatory options are flawed and their adoption would result in significant disadvantages and negligible benefits to braille passengers in a public transport context. These submissions noted that the content of the options was not developed in consultation with braille experts. This is reflected by inaccurate descriptions of braille codes and usage, and a poor awareness of the neuropsychology of braille reading. For example, one submission noted that the provision for ‘all transport related information to be produced only in Grade 1 braille’ is fundamentally flawed, as this does not reflect the complexities and practical use cases of braille. If this proposal was adopted, it would significantly disadvantage the majority of braille readers who use contracted braille. It is also questionable if people who only use Grade 1 braille would want to access transport related information in this format.

Maintaining the status quo would incur no additional costs to public transports operators and providers.

Non-regulatory

There was broad support for increasing the consistency in the use of grades of braille to produce positive outcomes for passengers.

One submission from government and three submissions from industry supported the non-regulatory option. Some submissions raised concerns that the regulatory option lacks clarity regarding the extent to which information must be readily available in braille format, the practical implementation of proposed requirements, and what a “timely manner” would entail should a passenger request printed material in a grade other than Grade 1.

One submission from government noted the benefit of improved guidance, whilst minimizing the risk of perverse outcomes whereby operators and providers cease printing in braille altogether. For example, if information is provided in the default format, Grade 1 Braille (uncontracted), but an experienced Braille reader requests an alternate Braille format, it must be provided for the readers under the regulatory option.

Braille embossed (printed) specifications

This may result in some operators choosing not to provide print information in Braille in the first place to avoid potential extra responsibility

Additionally, this submission noted the proposed regulatory option seems to confuse signage requirements under the section 17.6 of the Transport Standard and general information (non-signage) requirements under the section 27.1. The submission supported the non-regulatory option, suggesting the proposed regulatory option in the Consultation RIS will further confuse the issue.

Regulatory

The majority of submissions from individuals, people with disability and disability organisations, and government supported reforms to improve the functional accessibility of printed braille resources.

During consultation, both industry and the disability sector noted the current braille requirements in the Transport Standards are inadequate and do not reflect current best practice. Although the Transport Standards include provisions for braille signage, stakeholders raised that no regulation or guidance is provided for service-related printed publications that are provided in braille format. This was highlighted as a cause of situations where inappropriate practices are unintentionally implemented by operators and providers, disadvantaging braille readers.

New regulatory requirements were highlighted by the majority of industry and government submissions as a tangible way to provide greater clarity to operators and providers and improve outcomes for passengers who use braille. There was broad agreement that standardizing the grade of braille required in printed format would also contribute to a greater consistency of service across jurisdictions and modes of transport. To avoid misinterpretation of new requirements, one submission from government suggested amendments to provide clarity that makes clear the specifications detailed in the regulatory proposal only apply to printed information, not braille signage.

Several submissions from operators and providers noted that compliance with the proposed requirements would incur minimal additional costs and have minimal impact on the way requests are currently processed, given that there is already a requirement to provide information in accessible formats.

One submission from government raised concerns that the regulatory option may require operators and providers to provide braille versions, in various formats, of any material available. This submission noted that given requests for braille documents are rare, these translations would be bespoke, outsourced, time consuming and expensive to produce.

We feel that an exemption should be made in 1-to-1 translation of braille in signage, to avoid the use of words related to colour. For instance, the passenger information totems at Southern Cross Station, in central Melbourne, say in both English and Braille to press the red or green buttons. We feel it would be more sensible for the braille translation to specify, for instance, the left or right buttons.

PMP Urbanists

A submission from industry noted that the exact following of legislative requirements can result in sub-optimal outcomes for those with low vision. The submission suggested that the adoption of new requirements for braille standards could be accompanied by a register of precedential exemptions which are recorded and accessible via the legislation.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is to support a **regulatory option in-principle, with a working group to determine the final technical specifications.**

Although the majority of stakeholders were supportive of reform in this area, several submissions from organisations representing people with vision impairment raised significant concerns regarding factual errors presented in the Consultation RIS issue statement and the proposed non-regulatory and regulatory options.

Braille embossed (printed) specifications

Similarly, submissions from industry and government highlighted the need for further clarity regarding a number of matters, including expected timeframes for development and to what materials the requirements would apply. Responses from the disability sector were largely supportive of aligning the Transport Standards with best practice to improve accessibility outcomes for braille readers. Operators and providers were also supportive of reform to improve regulatory clarity, and would likely incur minimal additional costs and have minimal impact on the way requests are currently processed, given that there is already a requirement to provide information in accessible formats.

Consultation has demonstrated that the inclusion of new requirements to improve the functional accessibility of printed braille resources is welcomed by all stakeholder groups. However, there were concerns that the grade of braille specified was incorrect.

This Decision RIS proposes the establishment of a working group consisting of braille users, subject matter experts, public transport operators and providers and governments to determine the appropriate grade of braille to be specified. The remit of the working group will not intersect with other braille reforms considered in this DRIS. Once developed, the preferred option would be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements retrospectively with a compliance schedule timing of 5 years.

16. Braille and tactile lettering for signage

Issue

Braille and tactile signs provide people with vision impairment equitable access to public transport services, subsequently reducing discrimination for people with disability. Section 17.6 of the Transport Standards includes design specifications for braille materials. However, the Transport Standards do not reflect current best practice and standards in relation to braille and tactile signs. The requirements included in the Transport Standards also do not align with those included in the Premises Standards, creating uncertainty for operators and providers and inconsistency for passengers of braille.

Collective government action would strengthen requirements for braille and tactile lettering for signage and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 47: Reform options for Braille and tactile lettering for signage

Option	Description
Status Quo	The Transport Standards would continue to remain silent on the standard and complexity of braille and raised lettering on signs, including the use of identification signage. The Transport Standards would remain unchanged and no additional guidance would be issued.
Non-Regulatory	Guidance would be developed to include best practice advice on braille and tactile signage, including definitions, locations of signage, recommendations for co-design and consultation with people with disability, and harmonisation with the Premises Standards.
Regulatory	The Transport Standards would be amended to include new requirements for braille and tactile signage, including braille design requirements, tactile design requirements, and braille and tactile labels. Guidance would be provided to reflect any new requirements.

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 48: Benefit-cost ratios for Braille and tactile lettering for signage

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	-	-	-	-	0.02
Regulatory	6.3	-	10.6	10.6	0.59 ⁱ

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

ⁱ⁾The benefits and costs presented in the table above are rounded to two decimal places. The CBA calculated to four decimal places and this may result in zero values in the table

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 75 per cent for new assets was applied to the non-regulatory option based on the low cost and complexity to install signs in a new braille format. Existing assets signs were not expected to be replaced to be updated to the braille format unless the sign itself was being replaced. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Regulatory

The benefits and costs for this reform reflect a change in braille standards, requiring upgrades to the standard of braille across a number of conveyances nationally. The benefits for this reform were estimated based on a small number of data points provided through the survey and were proxied at a national level implying that the benefits and costs may not reflect the extent of existing compliance.

This reform provides only benefits users with vision impairment reflecting a relatively small cohort of beneficiaries.

Interdependencies

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as international symbol for access and deafness, letter heights and luminance contrast.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 49: Qualitative benefits for braille and tactile lettering for signage

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	-	-
Regulatory	Yes	Yes	-	Yes	-	-

Analysis of submissions

Status quo

Under the status quo, the Transport Standards will continue to lack specific design requirements for braille and tactile signage.

Submissions from individuals, people with disability and disability organisations noted that currently, braille signage produced in compliance with the Transport Standards has a significantly different layout to signage produced in compliance with the Premises Standards. Consequently, examples were provided where braille signage is provided inconsistently and is of varying quality, both within public transport sites and across

Braille and tactile lettering for signage

networks and jurisdictions. This was noted as detrimental to passengers by decreasing the predictability of information. Further, as there are no auditing mechanisms incorporated to measure compliance with requirements for braille and tactile signs, one submission noted these issues may go unresolved.

The end result of this jumbled mess of braille signs is that there is no consistency or predictability, and more often than not the fundamental purpose of the braille sign is thwarted because it is difficult or impossible to read.

Vision Australia

Submissions from industry and government largely supported reform in this area, noting that the current requirements do not reflect contemporary best practice for braille and tactile signage or align with requirements included in the Premises Standards.

In their submission, Vision Australia supported the status quo as an interim measure, stating that the policy options presented in the non-regulatory and regulatory options are flawed, self-contradictory and not fit-for-purpose. The submission noted the necessity of new regulatory requirements, but that the content must be subject to further consultation with subject matter experts and the community. The submission stated that the option presented in the Consultation RIS was not adequately developed with braille passengers and recognised experts, such as the Australian Braille Authority.

Maintaining status quo has would incur no additional costs to public transports operators and providers.

Non-regulatory

There was mixed support for the non-regulatory option by industry and government. These submissions noted the benefit of additional guidance material to help foster a more consistent user-experience, by supporting operators and providers to produce signage in-line with best practice principles and other applicable standards, including the Premises Standards and National Construction Code.

These submissions favoured the non-regulatory option as it provides necessary flexibility to accommodate the unique operating environments of conveyances. These submissions stated that the regulatory option does not provide the necessary flexibility to accommodate situations where there may not be an appropriate location for braille signage to be installed. Conversely, the non-regulatory option was noted to allow for consideration of individual circumstances to ensure the best outcome for passengers. One submission from industry also noted the importance of flexibility to allow signage to be presented with information that is relevant to braille readers. For example, references to colour should be replaced with directional cues.

Three submissions from government and industry noted that internal policies have already been developed and implemented to ensure braille signage meets industry best-practice, including compliance with AS1428.4.2 and through co-design. These submissions noted, however, that there is a limited number of signs that the proposed requirements would impact, as most signs would be covered by the Premises Standards and National Construction Code.

The Australian Braille Authority supported the non-regulatory option in their submission. Support for the non-regulatory option was prefaced by the caveat that they were not consulted in the development of the options for this reform area, despite being the standards setting body for braille in Australia. The submission highlighted concerns that the Transport Standards currently do not include specifications for how information should be adjusted for relevance to braille readers, and proposed the non-regulatory option as a pathway to ensure signage is both legible and relevant to passengers.

Regulatory

The majority of submissions from individuals, people with disability and disability organisations supported the regulatory option. There was mixed support for the regulatory option from industry and government. There was agreement among all stakeholder groups that the standardisation of braille formatting will enable a more consistent user experience for braille readers, and ensure information is provided to the same standard as other passengers. These submissions noted that the Transport Standards do not reflect current best practice for braille and tactile signage, and that there are inconsistencies in the format of signage between the

requirements of the Transport Standards and Premises Standards. Two submissions from the disability sector noted the importance of user-testing to ensure signage is designed appropriately and leads to an optimal outcome for all stakeholders.

Although there is some level of clarity provided within the regulatory option, BCA strongly recommends that user testing is conducted wherever braille and tactile lettering for signage are implemented to ensure people who are blind or vision impaired can access either the braille, the tactile lettering, or both, as applicable.

Blind Citizens Australia

Submissions from industry and government noted that the requirements are feasible to implement and would represent a functional improvement for braille readers. These submissions highlighted that the regulatory option would improve clarity to operators and providers and remove inconsistencies with other legislation, such as the Premises Standards. Costs would be incurred if any new regulatory requirements were implemented retrospectively.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is to support a **regulatory option in-principle, with a working group to determine the final technical specifications.**

Although the majority of stakeholders were supportive of reform in this area, several submissions from organisations representing people with vision impairment raised significant concerns regarding factual errors presented in the Consultation RIS issue statement and the proposed non-regulatory and regulatory options.

Similarly, submissions from industry and government highlighted the need for further clarity regarding a number of matters, including expected timeframes for development and to what materials the requirements would apply. Responses from the disability sector were largely supportive of aligning the Transport Standards with best practice to improve accessibility outcomes for braille readers. Operators and providers were also supportive of reform to improve regulatory clarity, and would likely incur minimal additional costs.

Consultation has demonstrated that the inclusion of new requirements to improve the functional accessibility of braille and tactile signage resources is welcomed by all stakeholder groups. However, there were concerns that the grade of braille specified was incorrect.

This Decision RIS proposes the establishment of a working group consisting of braille users, subject matter experts, public transport operators and providers and governments to determine the appropriate grade of braille to be specified. The remit of the working group will not intersect with other braille reforms considered in this DRIS, including Stage1 Chapter 5.3 *Priority Seating*. Once developed, the preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism.

Interaction with Stage 1 reform area

Table 47: Interaction with Stage 1 for Braille and tactile lettering for signage

Stage 1 reform area	Interaction	Description
Chapter 5.3: Priority seating	Contain potentially contradictory requirements for braille sign height on conveyances.	<p>Stage 1 is applicable to conveyances. It includes proposals for braille and tactile signs to 'be located immediately adjacent or as close as possible to the priority seating'.</p> <p>Stage 2 is applicable to infrastructure, premises and conveyances. It stipulates the height above floor of braille text as 1200 millimetres to 1600 millimetres. On conveyances this range, it may in some case not be possible and in this situation the Stage 1 requirement will take precedence.</p>

17. Lifts - Braille and tactile information at lift landings

Issue

Inadequate and inconsistent braille and tactile information at lift landings can lead to disorientation and a reluctance to use public transport by affected passengers. Affected passengers need information about which landing a lift car has arrived at so they can continue their journey.

Collective government action would ensure braille and tactile information is consistently provided at lift landings. This change is needed to modernise the Transport Standards to address key stakeholder issues raised through the Transport Standards review process, and promote consistency with the Premises Standards.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 50 Reform options for Lifts - Braille and tactile information at lift landings

Option	Description
Status Quo	The Transport Standards will continue to not include requirements for braille and tactile wayfinding information at lift landings. The Transport Standards would remain unchanged and no additional guidance would be issued.
Non-regulatory	Guidance would be developed to encourage operators and providers to provide braille and tactile signs on lift landing door frames, including location of signage and information to be provided on signs.
Regulatory	The Transport Standards would be updated to include braille and tactile signage requirements at lift landings, including updated Australian Standards requirements. Guidance would be provided to reflect any new requirements.

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 51: Benefit-cost ratios for Lifts - Braille and tactile information at lift landings

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	-	-	-	-	-
Regulatory	13.8	-	1.0	1.0	13.30

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

Considerations to note in interpreting analysis

Limitations:

Non-regulatory

There are no costs and benefits associated with this non-regulatory reform. The Department indicated that the compliance rate applied to new assets only and responses to the data survey did not identify a pipeline of future investments.

Regulatory

The benefits and costs of this reform were estimated through limited data provided through the survey and costs developed by Rider Levett Bucknall proxied to understand compliance at a national level. This implies the benefits and costs may not reflect the full extent of existing compliance, and costs are not reflective of variation in construction or delivery costs that could be incurred at different sites.

Lifts covered by the Premises Standards were compliant, implying cost implications for remaining lifts and with benefits impacting a small cohort of beneficiaries with vision impairments.

Interdependencies

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms related to other lift infrastructure.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 52: Qualitative benefits for Lifts - Braille and tactile information at lift landings

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	-	-
Regulatory	Yes	Yes	-	Yes	-	-

Analysis of submissions

Status quo

The status quo option would continue to not include requirements for braille and tactile wayfinding information at lift landings.

During consultation, there was one government submission supporting the status quo. The submission argued that the provision of braille and tactile information at lift landings would be technically challenging due to variances in lift frames and the length of the information required.

Maintaining the status quo has no ongoing costs for public transport operators and providers. For people living with disability, the status quo would remain a barrier to independent travel.

Non-regulatory

The proposed non-regulatory option provides guidance to public transport operators and providers on best practice design and implementation of braille and tactile signs on lift landing doors.

Lifts - Braille and tactile information at lift landings

There were a small number of submissions from government and industry stakeholders that supported the non-regulatory option. Those submissions raised the benefits of a flexible approach for addressing site-specific issues. Other issues raised in support of the non-regulatory option included avoiding possible regulatory inconsistencies among disability standards, the high costs associated with additional signage requirements and associated maintenance. Submissions suggesting higher costs also stated that their public transport buildings already had sufficient wayfinding information, which would imply that costs should not be higher as sufficient wayfinding information is already provided.

There were no submissions from disability stakeholders supporting the non-regulatory option.

Regulatory

The submissions supporting the regulatory option converged on the benefits of a consistent approach to providing information at lift landings. Most of the submissions supported the regulatory option. Stakeholders' submissions focused on the benefits of regulation in providing consistency of requirements, low-cost implementation and increased inclusion of people living with disability.

The regulatory option is needed to ensure that there is a consistent and predictable approach taken. Having braille and tactile signs in some locations or in some premises but not in others is, in some ways, more confusing and disorienting for people who are blind or have low vision that having none at all.

Vision Australia

Disability stakeholders told us without regulation public transport operators and providers may only implement some or none of the recommendations. Discretionary implementation would result in inadequate and inconsistent braille and tactile information at lift landings. For disability stakeholders, the regulatory option was the most effective way to remove barriers to travel and allow them to participate more in their community and travel confidently

Public transport owners and operators, who supported the regulatory option, stated that the regulatory option was the most efficient pathway to address their obligations under the Transport Standards to remove discrimination, as far as possible, for people living with disability.

Public transport owners and operators were conscious of costs associated with disability reform. However, government and industry stakeholders balanced those costs against the benefit of regulatory reform. Government stakeholders told us that cost associated with implementation would not be significant

Many lifts sold in Australia are imported from Europe and comply with European lift standards. The Australian Standard AS1735.12 (2020) was updated in 2020 and harmonized requirements with European lift standards. Previous European lift standards addressed many features addressed in the lift reform areas (reforms 17, 18, 19, 20). Therefore, compliance costs are considered low due to the number of pre-existing lifts which already meet the requirements of AS1735.12 (2020). However, where lifts would not meet the requirements of AS1735.12 (2020), retrofitting those older lifts and sites would be more expensive.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis, the preferred option is the **regulatory option**.

Updated braille and tactile signage at lift landings would align with those in building regulation. The braille requirements in the proposed Australian Standard are considered sufficient, and this reform would not be in scope of working groups proposed in the Decision RIS.

The consultation process provided evidence that the existing provision of audio, braille and tactile signs was insufficient to address the wayfinding and communication issues identified in the issue statement. On balance, submissions identified that regulation of braille and tactile signage at lift landings would align with the objectives of the Transport Standards to remove discrimination, as far as possible, for people with

Lifts - Braille and tactile information at lift landings

disability concerning public transport services. Braille requirements would align with those in the Premises Standards.

The scope of assets included in this reform is small. Braille requirements would align with those in the Premises Standards, which cover the majority of lifts in operation in transport infrastructure. During consultation, stakeholders who provided examples or estimates for implementing the regulatory option included assets that are out of scope of the Transport Standards and are already required to have braille and tactile signage at lift landings.

The regulatory option ensures that people living with disability can access and safely use public transport. Standardisation of requirements provides certainty for transport owners and operators and manufacturers, installers, and readers of braille and tactile signs.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements retrospectively with a compliance schedule timing of 5 years.

18. Lifts - Audible wayfinding

Issue

The Transport Standards reference AS 1735.12 (1999), which excludes public transport lifts serving less than three floors on platforms, over bridges, subways, and concourses from providing audible wayfinding information.

Without audible wayfinding cues, people with disability can become confused and disoriented, resulting in a reluctance to use public transport and limiting their participation in the community.

Collective government action would ensure audible wayfinding information is provided consistently at lift landings and address key stakeholder issues raised through the Transport Standards review process and promote consistency with the Premises Standards.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 53: Reform options for Lifts - Audible wayfinding

Option	Description
Status Quo	<p>Lifts serving less than three floors would continue not to be required to provide audible wayfinding information.</p> <p>The Transport Standards would remain unchanged and guidance material would not be updated.</p>
Non-regulatory	<p>Guidance would be developed to provide operators and providers best practice advice on audible wayfinding information for lifts. There are 2 non-regulatory options that were consulted on.</p> <p>Option 1</p> <p>Prescriptive advice on the type of location and wayfinding information recommended to be provided in audio announcements.</p> <p>Option 2</p> <p>Performance-based advice recommended to be provided to ensure passengers can confirm where they have arrived and make basic orientation decisions while travelling on public transport services.</p>
Regulatory	<p>The Transport Standards would be amended to include requirements for audible landing location and wayfinding information in lifts. There are 2 regulatory options that were consulted on.</p> <p>Guidance would be provided to reflect any new requirements.</p> <p>Option 1</p> <p>Prescriptive requirements for the type of location and wayfinding information in audio announcements.</p> <p>Option 2</p> <p>Performance-based requirements to ensure passengers can confirm where they have arrived and to make fundamental orientation decisions while travelling on public transport services.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 54: Benefit-cost ratios for Lifts - Audible wayfinding

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	0.1	-	1.3	1.3 ⁱ	0.07
Regulatory	15.0	-	9.4	9.4	1.60

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 15 per cent was applied to the non-regulatory option based on the high complexity to implement and maintain the audio wayfinding requirements in lifts where they are not currently installed or operational. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option

The benefits and costs of this reform were estimated through limited data provided through the survey and costs developed by RLB proxied to understand compliance at a national level. This implies the benefits and costs may not reflect the full extent of existing compliance, and costs are not reflective of variation in construction or delivery costs that could be incurred at different sites.

Lifts covered by the Premises Standards were compliant, implying cost implications for remaining lifts and with benefits impacting a small cohort of beneficiaries with vision impairments.

Interdependencies

The accessibility benefits of this reform will only be realised if there is equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms related to other lift infrastructure.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 55: Qualitative benefits for Lifts - Audible wayfinding

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	-	-
Regulatory	Yes	Yes	-	Yes	-	-

Analysis of submissions

Status quo

Lift design and technology have changed since the inception of the Transport Standards in 2002. The exemption for audible wayfinding no longer aligns with industry best practice in the manufacturing and installation of lifts. Under the status quo, there will continue to be no requirements for audio announcements in lifts serving less than three levels.

Only one public transport operator and provider supported the status quo. The submission stated that they already require audible announcements at lift landings. It was not clear in the submission if the audible announcements mentioned include lifts serving less than three floors.

Maintaining the status quo has no ongoing costs for public transport operators and providers. For people living with disability, the status quo would remain a barrier to independent travel.

Non-regulatory

The non-regulatory option is discretionary and does not provide certainty that guidance will be implemented.

A small number of public transport operators and providers supported the non-regulatory option. Supporters of the non-regulatory options raised concerns about the interaction with the requirements in the Premises Standards and costs to develop and install verbal audio announcements. One submission stated that most of their existing lift cars are equipped to deliver verbal audio announcements and those announcements exceed current Transport Standards requirements. It was not clear if the existing audible wayfinding requirements applied to lifts serving less than three floors.

It was acknowledged by public transport operators and providers that the majority of their existing lifts had the capacity to deliver audible wayfinding cues. However, submissions raised concerns about retrofitting older lifts to deliver audio announcements.

One submission indicated a preference for option 2, the performance-based non-regulatory option.

There were no submissions received from people with disability or their advocates supporting the non-regulatory option.

Regulatory

There are two regulatory options proposed. Both options would apply to premises (except premises to which the Premises Standards apply) and infrastructure (except airports that do not accept regular public transport services).

Submissions from people with disability and their advocates strongly supported the regulatory option. People with disability were evenly divided on regulatory option 1 and 2. Those who supported option 1, argued that prescriptive requirements would ensure consistency, while those who supported option 2 acknowledged that

Lifts - Audible wayfinding

public transport operators and providers may need performance-based requirements to deal with site specific issues.

People with disability and their advocates said the existing Transport Standards requirements were not acceptable. Without audible wayfinding cues, using public transport can be unsafe, interrupt their journey, undermine their independence and reduce their usage of public transport.

The increasing complexity of public transport infrastructure and premises have led to an unprecedented need for clear, consistent, and meaningful information to assist people who are blind or have low vision with independent and safe wayfinding.

Vision Australia

Most public transport operators and providers supported the regulatory option. Their submissions acknowledged the need for audible wayfinding cues and the benefits that would extend to other public transport passengers.

Public transport operators' and providers' submissions indicated that the regulatory option was of low complexity to implement and the number of lifts in scope and their capability to deliver audible announcements was known. Costs were likely to be limited to developing site-specific appropriate audible wayfinding cues for lifts serving less than three floors. The need to address site-specific factors meant most submission supported regulatory option 2.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis, the preferred option is **Regulatory Option 2.**

The consultation process provided evidence that lifts operating under three floors do not meet the varying needs of people with disability or provide accessible public transport services.

Most existing lift cars can deliver verbal audio announcements. The limitation to the provision of audible wayfinding is due to the ongoing reference to the lift standard AS1735.12 (1999) in the Transport Standards.

It is noted all regulatory lift reforms areas in the DRIS, which include reforms 17, 18, 19, 20 and 34, are addressed by adoption and reference to elements in AS1735.12 (2020).

The regulatory option ensures that people living with disability can access and safely use public transport. For people with disability the regulatory option addresses consistency and certainty in accessing information while travelling across the transport network.

Aligning the Transport Standards with industry best practice would provide certainty for transport owners and operators to meet their obligations under the Transport Standards. Updated Transport Standards Guidelines would support public transport operators in delivering performance-based requirements in regulatory option 2.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism.

Interaction with Stage 1 reform area

Table 54: Interaction with stage 1 Lifts - Audible wayfinding

Stage 1 reform area	Interaction	Description
Chapter 5.6: Lifts	Require differing requirements for audio announcements at lift landings.	<p>Stage 1 requires audio announcements when lifts stopped at more than two landings.</p> <p>Stage 2 proposes audible wayfinding announcements at all landings through AS1735.12 (2020).</p>

The stage 2 reform options supersede stage 1 reform options. AS1735.12 (2020) requires audible wayfinding announcements at all landings. The AS1735.12 (2020) requirement would make the Stage 1 requirement for audio announcements when lifts stopped at more than two floors redundant.

19. Lifts - Emergency communication systems in lift cars

Issue

People who are deaf, hard of hearing, speech impaired or non-verbal are at risk of being unable to communicate the need for assistance during an emergency. The Transport Standards reference an out of date standard, which has no requirements for a means by which deaf, hard of hearing, speech impaired or non-verbal passengers in a lift car can communicate with staff in an emergency and receive a message confirming their call. The Transport Standards references AS1735.12 (1999) and updated requirements in AS1735.12 (2020) and AS1428.5 (2021) align with industry best practice in the provision of emergency communications in lift cars.

Collective government action would ensure emergency communication systems in lift cars are accessible and would address key stakeholder issues raised through the Transport Standards review process and promote consistency with the Premises Standards.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 56: Reform options for Lifts - Emergency communication systems in lift cars

Option	Description
Status Quo	<p>The Transport Standards would continue to reference an outdated Australian Standard that means people with disability would continue to encounter barriers to communicate for assistance during an emergency.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-regulatory	<p>Guidance would be developed that provides advice on emergency communications systems in lift cars to ensure deaf, hard of hearing, speech impaired or non-verbal passengers are able to communicate with staff in an emergency and receive a message confirming their call.</p>
Regulatory	<p>The Transport Standards would be amended to update Australian Standard references to more contemporary standards.</p> <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 57: Benefit-cost ratios for Lifts - Emergency communication systems in lift cars

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	0.1	-	1.0	1.0 ⁱ	0.12
Regulatory	39.8	-	8.8	8.8	4.52

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 15 per cent was applied to the non-regulatory option based on the high complexity to implement and maintain the emergency communication systems in lifts where they are not currently installed or operational. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory

The benefits and costs of this reform were estimated through limited data provided through the survey and costs developed by Rider Levitt Bucknall proxied to understand compliance at a national level. This implies the benefits and costs may not reflect the full extent of existing compliance, and costs are not reflective of variation in construction or delivery costs that could be incurred at different sites.

Lifts covered by the Premises Standards were compliant, implying cost implications for remaining lifts and with benefits impacting all public transport users, specifically those with hearing impairments.

Interdependencies

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms related to other lift infrastructure.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 58: Qualitative benefits for Lifts - Emergency communication systems in lift cars

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	-	-
Regulatory	Yes	Yes	-	Yes	-	-

Analysis of submissions

Status quo

The Transport Standards reference AS1735.12 (1999) Lifts, escalators and moving walks. The standard referenced has no requirements for a means by which deaf, hard of hearing, speech impaired or non-verbal passengers in a lift car can communicate with staff in an emergency and receive a message confirming their call.

The absence of adequate emergency communication systems presents a barrier to independent travel. People with disability may find themselves in an emergency with no means to communicate or contact staff. Emergencies where passengers cannot communicate with staff can cause considerable anxiety for individuals who experience such a situation. The cohort of passengers that is affected is positively correlated with increasing age. Australia's ageing population means that the number of people affected will likely increase.

This issue is addressed in overseas jurisdictions by complying with more recent lift standards requirements. One submission supported the status quo and said lifts in transport areas should be no different to lifts in premises.

Maintaining the status quo has no ongoing costs or additional regulatory burden for public transport operators and providers; however, the negative impacts on people with disability would remain.

Non-regulatory

Guidance proposed in the non-regulatory option is intended to reduce barriers for deaf, hard of hearing, speech impaired, or non-verbal people to communicate with staff in an emergency and receive a message confirming their call.

A non-regulatory option may reduce the lack of alignment between the Transport and Premises Standards. Feedback from the disability sector, governments, and public transport operators and providers indicates that requirements in the Premises Standards and National Construction Code reference more recent Australian Standards.

There were no submissions from people living with disability or disability advocates that supported the non-regulatory option.

Of the few public transport operators and providers who supported the non-regulatory option, the reason most often cited was their existing compliance with the requirements in the National Construction Code and the Australian Standards referenced in the Premises Standards.

Transport operators and providers who believed they exceeded the current requirements of the Transport Standards also raised concerns about the implementation costs of the regulatory option

Regulatory

The requirements proposed in the regulatory option intend to provide certainty in emergency communications in lift cars.

Submissions from individuals, people with disability and disability organisations, outlined safety risks and discrimination in the provision of emergency communication systems in the Transport Standards.

Most submissions from individuals, people with disability and disability organisations expressed support for a regulatory approach to address this issue. These stakeholders preferred the regulatory option because it addressed the safety issues arising from the Transport Standard's reference to an outdated standard. Regulation would ensure alignment with other disability standards.

It is acknowledged that AS1428.5 (2021) signage requirements contained in clause 3.2.14 may not align with AS1428.1 (2009) signage requirements. However, the Transport and Premises Standards are reviewing

Lifts - Emergency communication systems in lift cars

references with a view to updating their references to the AS1428.1 (2021) standard, which would address these minor differences.

Most submissions from public transport operators and providers recognised the need for improved emergency communication in lifts to promote inclusion and address safety issues at non-staffed stations. Transport operators and providers raised cost concerns about the costs associated with legacy and heritage assets. To address the issue of legacy and heritage assets a small number of submissions stated a preference for the regulation to apply to new or significantly renovated lifts.

A few stakeholders, supporting the regulatory option, called for further work to be undertaken on best practice for addressing people who may be unable to communicate verbally or in English.

The cost-benefit analysis took the most conservative approach in estimating the regulatory option and included capital and operating costs associated with retrofitting or providing new facilities for emergency communication systems in lift cars.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **regulatory option**.

The preferred regulatory option, supported by most disability, government and industry stakeholders, ensures that people who are deaf, hard of hearing, speech impaired or non-verbal can contact employees from lift cars in an emergency and receive a message confirming their call.

The preferred option ensures that transport operators and providers have greater certainty that they meet their responsibilities under the DDA. Harmonising the Transport Standards with current requirements in the lift industry and aligning with the Premises Standards and National Construction Code provides certainty for public transport operators and providers.

Australia's ageing population means that the number of people affected by issue will increase over time and the regulatory option ensures that Transport Standards addresses the issue and remain fit for purpose into the foreseeable future.

The regulatory option would be supported by updated guidance in both the Transport Standards Guidelines and the Whole Journey Guide. Updated guidance in the Transport Standards Guidelines will provide additional information to operators and providers on how new requirements in the Transport Standards can be met, and be supported by further guidance in The Whole Journey Guide where suggested guidance extends beyond what will be required in the amended Transport Standards.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism.

20. Lifts - Reference for lift car communication and information system

Issue

People who are hard of hearing, and particularly those who also have vision impairments, only sometimes receive equal access to information while travelling in lift cars compared to other passengers.

The Transport Standards reference AS1735.12 (1999) Lifts, escalators and moving walks, which has no requirement for assistive listening systems in lifts.

Collective government action would ensure standardisation of references for lift communication and information systems and address stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 59: Reform options for Lifts - Reference for lift car communication and information systems

Option	Description
Status Quo	<p>The Transport Standards would continue not to include provision for assistive listening systems in lifts.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-regulatory	<p>Guidance would be updated to include best practice guidance on accessible lift car communication and information systems, and recommend that deaf or hard of hearing passengers should receive the same audible information in a lift car as other passengers.</p>
Regulatory	<p>The Transport Standards would be amended to include requirements for the provision of hearing loop systems in lift cars and service-related information broadcast on an external public address system within a lift car. The hearing loop system would require the international symbol for deafness.</p> <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 60: Benefit-cost ratios for Lifts - Reference for lift car communication and information systems

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	0.0 ⁱⁱ	-	0.6	0.6 ⁱ	0.07
Regulatory	10.6	-	5.7	5.7	1.86

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

⁽ⁱⁱ⁾The benefits and costs presented in the table above are rounded to two decimal places and calculated to four decimal places in the CBA, which may result in zero values in the table.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 15 per cent was applied to the non-regulatory option based on the complexity to implement and maintain the hearing loop systems and connecting them to external PA systems in lifts where they are not currently installed or operational. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory

The benefits and costs of this reform were estimated through limited data provided through the survey and costs developed by RLB proxied to understand compliance at a national level. This implies the benefits and costs may not reflect the full extent of existing compliance, and costs are not reflective of variation in construction or delivery costs that could be incurred at different sites.

Lifts covered by the Premises Standards were compliant, implying cost implications for remaining lifts and with benefits impacting all public transport users, specifically those with hearing impairments.

Interdependencies

The accessibility benefits of this reform will only be realised if there is equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms related to other lift infrastructure.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 61: Qualitative benefits for Lifts - Reference for lift car communication and information systems

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	-	-
Regulatory	Yes	Yes	-	Yes	-	-

Analysis of submissions

Status quo

The Transport Standards reference AS1735.12 (1999) Lifts, escalators and moving walks, which has no requirement for assistive listening systems in lifts.

People who are hard of hearing, particularly those who also have vision impairments, do not always receive equal access to information while travelling in lift cars compared to other passengers.

Many lift cars can verbally announce landing locations and may even relay public address system announcements to the occupants of the lift car. For people with vision or cognitive impairments, this is a valuable service. Unfortunately, if they are hard of hearing and using hearing aids, the information or message being announced through the car's speakers may be unclear.

Consultation findings have indicated that disability stakeholders believe the current situation is discriminatory and is addressed in overseas jurisdictions by complying with more recent lift standards requirements.

Only one submission from a government stakeholder supported the status quo. They stated that advances in technology had made existing standards redundant and neither guidance or regulation was required to address lift car communication and information systems.

Maintaining the status quo does not meet the varying needs of people with disability or meet the objectives of the Transport Standards to remove discrimination against people with disability concerning public transport services.

The status quo has no ongoing costs or additional regulatory burden for public transport operators and providers. For people who are hard of hearing, particularly those who have vision impairments, the lack of equal access to information would remain.

Non-regulatory

AS1735.12 (1999) Lifts, escalators and moving walks has no requirement for assistive listening systems in lifts. While the updated standard AS1735.12 (2020) Lifts, escalators and moving walks has enhanced accessibility requirements for assistive listening systems, it does not capture the in-car announcement of service-related information broadcast over PA systems, such as platform changes or late-running services. This is partly due to lift standards addressing requirements in public lifts and not necessarily addressing the needs of people living with disability using lifts in public transport locations.

The guidance provides the opportunity to include additional information on best practices for:

- aligning announcements broadcast via the lift car speakers also be captured by the assistive listening (hearing loop) systems.

Lifts - Reference for lift car communication and information system

- additional service-related information (such as platform changes or late-running services) which considers the bespoke nature of lifts in public transport infrastructure.

There were no submissions supporting the non-regulatory option from people with disability or their advocates.

A few transport operators and providers argued that announcements about service changes are not made in lifts as they are not critical areas of the journey and that standard operations rely on something other than a public announcement system.

For government and industry stakeholders who supported the non-regulatory option, the majority of their submissions acknowledged hearing augmentation and assistive listening devices at key customer touchpoints are essential for facilitating seamless independent travel. However, these stakeholders raised concerns about:

- the implementation of magnetic induction loops may not result in an optimal outcome due to their unreliability in lifts and proneness to interference.
- the advancement of technology (e.g. Bluetooth capable t-coil) may make the additional requirements redundant and increase costs.

To address these technical opportunities and barriers, government and industry stakeholders said guidance would help them to implement solutions using newer technologies, such as Bluetooth t-coils, in older lifts.

TMR supports the non-regulatory option to allow for uncertainty around emerging technologies and applications in heavy rail environments, while also enabling enhanced accessibility of general facility PA announcements for people who use hearing aids, if external audible PA announcements are currently also provided within lifts.

Queensland Government Department of Transport and Main Roads

Government and industry stakeholders told us that newer lifts, which comply with the 2020 lift standards, include assistive listening systems and technology. The additional requirement in the regulatory option, for in-car announcements mirroring those broadcasts over PA systems, would be a new requirement beyond compliance with the AS 1735.12 (2020).

Most government and industry stakeholder said guidance would allow them to implement custom solutions for in-car announcements of service-related information, depending on the age of the lift infrastructure and the broadcast systems used in their public transport infrastructure.

To the extent that guidance is followed, hearing aid passengers, particularly those with vision impairments, will benefit through receiving the same quality of service-related, audible information as other passengers when travelling in lifts.

Regulatory

The requirements proposed in the regulatory option are intended to provide certainty in the provision of lift car communication and information systems.

All submissions from people with disability and disability organisations supported the proposed regulatory option. Most of those submissions raised the issue of discrimination. Disability stakeholder submission said the status quo dissuades affected people from using public transport and hinders their independence in the community.

A few disability stakeholders said that new technology was very useful, but not all people with disability had access to or could use newer technology.

Government and public transport operators who supported the regulatory option identified the benefits of consistency and certainty in implementing requirements and auditing compliance with the Transport Standards.

Lifts - Reference for lift car communication and information system

A few government submissions raised the importance of updating the lift Standards referenced within the Transport Standards to align with industry best practice. The submissions which supported referencing AS1735.12 (2020) did not comment on the additional requirement, beyond the scope of the newer lift standard, for in-car announcements to mirror those broadcasts over PA systems.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **non-regulatory option**.

The non-regulatory option for lifts differs to the preferred status quo option for hearing augmentation in infrastructure and premises. Many lifts at transport sites already contain assistive listening systems whereas hearing augmentation in infrastructure and premises options had more technical and scope issues, which informed the choice of the status quo option.

The non-regulatory approach will provide guidance on best practices to align announcements broadcast via the lift car speakers to also be captured by the assistive listening (hearing loop) systems. The non-regulatory approach would help transport operators and providers to ensure additional service-related information (such as platform changes or late-running services) would also be provided in the lift car. The non-regulatory option recognises the need for flexibility in implementing bespoke solutions for lift car communication and information systems.

The non-regulatory option acknowledges that most new lifts supplied and installed in Australia, especially those manufactured in Europe, already meet the requirements of AS17:35.12 (2020), especially those supplied since 2014. These lift installations have enhanced accessibility requirements for assistive listening systems, and additional guidance will assist transport owners and operators to use their existing assistive listening systems to provide in-car announcement of service-related information broadcast over PA systems.

For older lift installations, especially those that do not have assistive listening systems, additional guidance on the use of more recent technology (e.g. Bluetooth capable t-coil) may provide cost-effective solutions to address the limitations of older lift installations.

The provision of updated guidance will provide the transport operators and providers with the necessary information to update their existing lifts and exceed minimum requirements should they choose to do so.

The preferred option will be implemented through inclusion in a revised Whole Journey Guide.

21. Information and communication technologies (ICT) procurement

Issue

The Transport Standards do not provide technical requirements for Information Communication Technology (ICT) procurement and do not support best practice for ensuring ICT procurement will result in accessible products or services.

In the absence of national minimum accessibility requirements, there are inconsistencies in the level of accessibility for ICT applications, products and services across different states and territories.

The practical implications are that people with disabilities may not be able to fully access aspects of operator’s and provider’s ICT products and services. For example:

- people who are visually impaired may have difficulty or be or unable to read / view content on a website, mobile screen, or use a screen reader.
- people living with disability may have difficulty or unable to use digital fare systems.

Collective government action would set consistent requirements for all ICT procurement and would address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 62: Reform options for ICT procurement

Option	Description
Status Quo	<p>The Transport Standards would continue to be silent on requirements for ICT hardware, services and software procurement.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-regulatory	<p>Guidance would be developed for ICT hardware, services and software procurement to provide advice that ICT accessibility requirements should be considered at procurement and suggest technical standards to adhere to. There are three non-regulatory options that were consulted on, including performance-based requirements, varied levels of Web Content Accessibility Guidelines (WCAG) compliance, and updated Australian Standards.</p>
Regulatory	<p>The Transport Standards would be amended to include requirements for ICT hardware, services and software procurement.</p> <p>There are five regulatory options that were consulted on:</p> <p>Option 1</p> <p>The Transport Standards would be amended to set performance requirements for ICT procurement.</p> <p>Option 2</p> <p>The Transport Standards would be amended to require compliance with <i>AS/EN301549 (2016) Accessibility requirements suitable for public procurement of ICT products and services</i>.</p> <p>Option 3</p> <p>The Transport Standards would be amended to require compliance with <i>AS/EN301549 (2016) Accessibility requirements suitable for public procurement</i></p>

Option	Description
	<p>of ICT products and services. and prescribe additional minimum Web Content Accessibility Guidelines (WCAG) 2.0 AAA requirements.</p> <p>Option 4</p> <p>The Transport Standards would be amended to require compliance with AS/EN301549 (2020) <i>Accessibility requirements suitable for public procurement of ICT products and services</i>.</p> <p>Option 5</p> <p>The Transport Standards would be amended to require compliance with AS/EN301549 (2020) <i>Accessibility requirements suitable for public procurement of ICT products and services</i>. and prescribes additional minimum Web Content Accessibility Guidelines (WCAG) 2.1 AAA requirements.</p> <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options. Regulatory options 2 and 4 were not included in the final CBA, due to their estimated minimal variations between the other similar options.

Table 63: Benefit-cost ratios for ICT procurement

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory option 1	230.5	-	442.0	442.0	0.52
Non-regulatory option 2	115.3	-	397.8	397.8	0.29
Non-regulatory option 3	146.0	-	530.4	530.4	0.28
Regulatory option 1	951.4	-	916.5	916.5 ⁱ	1.04
Regulatory option 3	1585.6	-	2651.8	2651.8 ⁱ	0.60
Regulatory option 5	2008.5	-	3535.7	3535.7 ⁱ	0.57

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

ⁱNon-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart, regulatory option 3, reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 50 per cent was applied to non-regulatory option 1 based on submissions from public transport operators and providers, and state governments, which indicated many of these stakeholders are currently, or are working towards implementing this guidance. An estimated rate of uptake of 15 per cent was applied to the non-regulatory option 2 and 3 based on the increased cost and complexity of implementing the additional guidance beyond option 1. Submissions indicated these requirements are beyond the current practice for

Information and communication technologies (ICT) procurement

most operators and providers. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory

The regulatory reforms aim to provide information to the public on accessible infrastructure across a potential public transport journey. The common benefit and cost drivers for the regulatory options come from improving amenity and accessibility for all public transport users. It is assumed that these reforms would apply to most transport operators and providers.

The benefits and costs for these reforms were estimated based on survey responses and insights from the Consultation RIS proxied to estimate compliance at a national level, implying that the benefits and costs may not reflect the full extent of national compliance.

Regulatory option 1

Provides performance-based standards to meet accessibility requirements. The option is less prescriptive and may impact a lower number of beneficiaries. Due to the performance-based requirements costs are also reduced.

Regulatory options 2

Options 2 would require compliance with AS/EN301549 (2016). This option was not costed in the CBA as preliminary estimates indicated the benefits and costs were higher than option 1 and lower than option 3.

Regulatory options 3

Option 3 requires compliance with AS/EN301549 (2016) and WCAG 2.0 AAA to meet accessibility requirements. The prescriptive requirements coupled with WCAG 2.0 imply higher benefits and costs compared to regulatory option 1. However, more stakeholders are likely to comply with WCAG 2.0 AAA and this decreases the impact compared to option 5.

Regulatory option 4

Options 4 would require compliance with AS/EN301549 (2020). This option was not costed in the CBA as preliminary estimates indicated the benefits and costs were higher than option 3 and lower than option 5.

Regulatory option 5

Option 5 provides the highest level of benefits as its requirements are the most comprehensive to meet the needs of people with disability. This option requires compliance with AS/EN301549 (2020) and WCAG 2.1 AAA.

Interdependencies

This is an enabling reform to provide consistent standards of ICT procurement to ensure current and future ICT assets will meet accessibility requirements for people with disability. This reform will assist passengers in making decisions about whether public transport is accessible for their needs, with benefits reliant on implementation of accessibility focused reforms such as better communication of accessibility features, and others.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 64: Qualitative benefits for ICT procurement

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory option 1	Yes	Yes	-	-	-	-

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Non-regulatory option 2	Yes	Yes	-	-	-	-
Non-regulatory option 3	Yes	Yes	-	-	-	-
Regulatory	Yes	Yes	-	-	-	-

Analysis of submissions

Status quo

The Transport Standards do not provide technical requirements for Information Communication Technology (ICT) procurement and do not support best practices for ensuring ICT procurement results in accessible products or services.

In the absence of national minimum accessibility requirements, there are inconsistencies in the level of accessibility for ICT applications, products and services across different states and territories.

There were no submissions from people with disability or their advocates that supported the status quo.

Submissions supporting the status quo came from industry and a government stakeholder. Industry stakeholders cited flexibility as the main benefit of the status quo. The number and variety of electronic devices, complex ICT procurement environments and working in conjunction with other providers' systems all required an ability to respond flexibly to these factors.

The current system provides bus operators with the flexibility required to meet the travel needs of disabled passengers.

Bus Association Victoria

Maintaining the status quo has no ongoing costs or additional regulatory burden for public transport operators and providers. Maintaining the status quo may not meet the varying needs of people with disability or meet the objectives of the Transport Standards to remove discrimination against people with disability concerning public transport services.

Non-regulatory

There were no submissions from people with disability or their advocates that supported the status quo. Submissions supporting the non-regulatory option from industry and government stakeholders raised issues similar to supporters of the status quo, such as the variety and complexity new personal devices, coupled with complex ICT procurement environments. The main benefit of the non-regulatory option was the flexibility to respond to this complex environment and to access guidance that would assist them in making their purchasing decisions.

An issue raised by the industry stakeholders was the potential cost of a regulatory option on small and medium-sized enterprises (SMEs). Many SMEs do not have dedicated ICT teams or must work with larger firms or governments, who have their own ICT systems. Guidance would assist them to address accessibility issues but would minimise the cost for those SMEs.

The BIC supports progress in the Transport Standards for ICT procurement principles to ensure hardware and software support a more accessible digital world. However, due to the inherent costs

associated with ICT products and services, any introduced reform would need to take care not to create a solution that would see many small to medium-sized businesses decide not to implement this procurement reform.

Bus Industry Confederation

Other submissions from governments acknowledged that in the absence of national standards the result is inconsistent levels of accessibility across ICT applications. However, regulation may result in unintended consequences. Regulation may limit innovation, or continued innovation in the provisions of information via personal devices may result in the Transport Standards referencing out-of-date requirements.

Some governments told us that they have adopted ICT procurement standard AS/EN301549 (2016) Accessibility requirements for ICT products and services, including:

- Australian Government—BuyICT
- NSW government—digital.NSW
- Government of South Australia—Online Accessibility Policy

The 2020 version of AS/EN 301 549 has been released, which includes some different requirements from the 2016 version. The most notable change between these standards is the change in Web Content Accessibility Guidelines (WCAG) compliance. The 2020 version cites the updated WCAG 2.1 Level AA in line with international best practices.

Where jurisdictions are progressing to a web presence which meets WCAG 2.0 AA, in line with the Web Accessibility National Transition Strategy, implementing the options which reference this WCAG standard will not impose additional costs. However, if jurisdictions voluntarily move to AS/EN 301 549 (2020) the change from WCAG 2.0 AA to WCAG 2.1 AA would impose additional costs.

Most of the submissions supporting the non-regulatory option said that option 1, which was performance-based guidance, would be the most appropriate option to align with their operations.

To the extent that guidance is followed, there would be improved accessibility for people with disability using public transport ICT systems and provide owners and operators more certainty in meeting their obligations to remove discrimination.

Due to the discretionary nature of this option, it does not provide certainty that operators and providers will adopt minimum accessibility procurement requirements, which may not lead to an increase in accessible ICT applications, products, and services for people with disability.

Regulatory

The support for the regulatory options was slightly greater than for the non-regulatory options. All disability stakeholder submissions supported regulatory options. Most of the disability stakeholders supported option 5, which included the latest AS/EN 301 549 (2020) references and WCAG 2.0AAA standards.

In the area of accessible public transport, it is our strong belief that a standards-based approach must be adopted to the accessibility of ICT, rather than the performance-based approach envisaged in regulatory sub-option 1 provided in the Consultation RIS. Not only will a standards-based approach lead to greater consistency, predictability, and usability, it will also mirror the approach that is being taken in other areas in Australia and in jurisdictions including Canada, the US and the EU.

Vision Australia

While government and industry submissions converged on the need to include ICT procurement in the Transport Standards, government submissions favoured option 4, while the industry submission favoured the performance-based solution, option 1. The one industry submission supporting regulatory option 1 stated that this was closely aligned with the performance-based non-regulatory option, but it provided greater certainty for industry and disability stakeholders by regulating the performance characteristics required to remove discrimination.

Information and communication technologies (ICT) procurement

The industry submission cited the practical limitation with compliance to WCAG 2.1AAA and the inability to meet those requirements across all content types. The main benefit of option 1 was ensuring innovative solutions, which meet the needs of their passengers living with disability, could be tailored to the mode of transport, existing infrastructure, and ICT framework.

Option 4 was supported by most government stakeholders. Government stakeholders cited the requirement for WCAG 2.1AA as being achievable for all content types. Like the industry submission, government stakeholders argued that WCAG 2.1AAA included in option 5 was not achievable across all content types.

One government submission said that the prescriptive nature of the regulatory options would ensure that compliance was easier to assess and would assist with determining if discrimination against people with disability was being addressed.

Preferred option

Informed by the consultation outcomes, impacts, cost, and outcomes analysis above, the preferred option is **regulatory option 1**, which is a performance-based outcome.

The Transport Standards would be amended to set performance requirements for ICT procurement. Further consideration was given to the consultation and submissions that detailed the barriers encountered by people living with disability, especially those with vision and hearing impairment, accessing information necessary for them to use public transport services.

All jurisdictions have included WCAG requirements in their contract agreements related to ICT contracts. However, WCAG implementation issues with existing ICT procurements meant there was support for the performance-based non-regulatory option by industry and government stakeholders. However, the discretionary nature of guidance would not address the needs of people living with disability to access information. For government and disability stakeholders supporting the regulatory option, a key consideration was the certainty a regulatory option would provide, where the Transport Standards are silent on ICT procurement. The performance-based regulatory option was identified as the most efficient way to ensure that the needs of people with disability were addressed and to ensure accessibility of ICT systems is included in the procurement and upgrading of ICT systems.

It was noted that WCAG 2.0 was first published in 2008, and more recent WCAG requirements, such as WCAG 2.1 AA, were published in 2018 and would better address ICT systems than guidance from 2008. However, submissions about the technical difficulties associated with WCAG 2.0 AAA compliance across all content types were noted. Potential impacts on SMEs in implementing more stringent regulatory options were also considered. The rapid technological advancement of devices and the ICT systems supporting, enabling, and delivering information to people with disability was assessed against the potential unintended consequences of implementing prescriptive requirements, which may limit improved accessibility options in the near future. Prospective implementation of the reform would assist transport owners and operators to plan and design for accessibility requirements and minimise costs associated with auditing and redesigning existing ICT systems, especially for SMEs.

On balance, regulatory option 1 was considered the option which addressed the needs of people with disability, ensured consistency in the implementation of public transport related ICT procurement, and provides public transport owners and operators with the flexibility to implement solutions to improve accessibility and remove discrimination as far as possible.

Interaction with Stage 1 reform area

Table 64: Interaction with stage 1 for ICT procurement

Stage 1 reform area	Interaction	Description
Chapter 5.5: Digital	Reference different technical standards for	Stage 1 cites ISO Standard 9241-303 for luminance calculation requirements for digital information screens.

Information and communication technologies (ICT) procurement

information screens	luminance calculation for digital screens.	Stage 2 cites AS EN 301 549 for hardware and software systems. The technical requirements of AS EN 301 549 may conflict with those of ISO Standard 9241-303.
Chapter 5.7: Website accessibility	Reference different WCAG requirements for website accessibility.	Stage 1 proposes WCAG 2.1 AA as the standard for web accessibility. Stage 2 includes procurement requirements relevant to ICT services and software, potentially including websites.

The Transport Standards states that Australian, Australian/New Zealand standards and Australian Design Rules are incorporated into the legislation. Where a conflict exists between an international (ISO) standard and an Australian standard, the preference would be to incorporate the Australian standard and technical requirements.

Interaction with Chapter 5.5 Digital information screens

Australian governments adopted internationally aligned ICT procurement standards for accessibility, AS EN 301 549, in 2016. AS EN 301 549 was updated in November 2020. There are no substantive technical differences between the ISO and AS EN standards for luminance requirements. Therefore, the Stage 2 recommendation clarifies the stage 1 recommendation and aligns with the whole of government approach for accessible ICT procurement.

Interaction with Chapter 5.7 Website accessibility

Stakeholder feedback in Stage 2 identified the need for WCAG 2.1 AA to be applied beyond website accessibility. Moving from website accessibility requirements and applying those to ticketing machines, digital displays and other ICT equipment was identified as a necessary scope change.

Stage 2 requirements align with the Stage 1 requirements. Most governments require compliance with WCAG 2.1 AA in their contracts and guidelines. However, due to the breadth of ICT procurement and interactions amongst ICT systems and hardware, performance-based procurement reflects the needs of complex procurements and accommodates innovations. Reforms, such as mobile web systems, reflect existing contract and guidelines to use WCAG 2.1 AA, especially for customer facing systems.

22. Mobile web systems

Issue

Public transport operators and providers are increasingly reliant on mobile information technology, including applications and websites, to communicate service related information to passengers. This may include static information such as information text or dynamic information such as trip planning tools.

The Transport Standards do not include minimum accessibility requirements for mobile web systems, and are therefore misaligned with industry best-practice. This may lead to circumstances where mobile web systems are inaccessible and present barriers to using public transport.

Collective government action would introduce accessibility requirement for mobile web systems and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 72: Reform options for mobile web systems

Option	Description
Status Quo	<p>The Transport Standards would continue not to include requirements for mobile web systems and mobile information technology to ensure accessibility of information for people with disability.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-regulatory	<p>Guidance would be developed to provide best practice advice on web Content Accessibility Guidelines (WCAG) requirements, and the benefits of user testing when developing applications and tools through mobile web systems, applications and information provided by third parties.</p>
Regulatory	<p>The Transport Standards would be amended to include new requirements for mobile web system provisions. There are 2 regulatory options that were consulted on.</p> <p>Guidance would be provided to reflect any new requirements.</p> <p>Option 1</p> <p>All information provided by an operator or provider must meet WCAG 2.1 AA requirements as a minimum.</p> <p>Option 2</p> <p>Only information related to transport services must meet WCAG 2.1 AA requirements as a minimum.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 73: Benefit-cost ratios for mobile web systems

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	24.9	-	4.5	4.5 ⁱ	5.52
Regulatory option	74.4	-	6.2	6.2	11.92

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 75 per cent was applied to the non-regulatory option based on submissions, which indicated many operators and providers are implementing accessibility standards for mobile web systems. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory

The benefits and costs for this reform were developed from the survey responses and the number of public transport premises, proxied at a national level. This implies the benefits and costs may not reflect the full extent of existing and future compliance.

Provision of mobile web systems can provide various benefits to users with different types of disability and the costs in providing accessible mobile web systems are lower compared to benefits delivered.

Interdependencies

This is an enabling reform improving the accessibility of mobile web platforms would to improve accessibility for people with disability while on mobile devices. The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as better communication of accessibility features and infrastructure related reforms.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 74: Qualitative benefits for mobile web systems

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	-	-
Regulatory	Yes	Yes	-	Yes	-	-

Analysis of submissions

Status quo

The use of mobile phones and applications has changed since the inception of the Transport Standards in 2002. As such, the use of these technologies to provide public transport information is not captured in the Transport Standards. Under the status quo, there will continue to be no requirements for information provided in a mobile format.

During consultation, there was broad agreement that people with disability are disadvantaged by the lack of accessibility provisions for mobile web systems. Submissions from all stakeholder groups noted that mobile web systems are now a mainstream part of the provision of information related to public transport services. These systems have proliferated across most public transport services, but have not been accompanied by requirements to ensure they are usable by people with disability. There are a range of design and implementation factors that are required to ensure the diverse needs of passengers are met. Submissions noted the value of accessible mobile web systems in instilling a sense of confidence in passengers and the equitable provision of information, increasing independence.

It is important to understand mobile and personal technology devices are commonly used by members of the community for the gathering of information. This is especially relevant in the context of public transport use and trip planning. It is integral that people with disability receive this same level of access.

Physical Disability Council of NSW

One submission from an operator and provider supported the status quo option. The submission highlighted that due to the complexities of mobile web system environments, the status quo provides valuable flexibility to manage challenges whilst providing tailored accessibility features for passengers. The submission noted that depending on the scope to which new requirements are applied, the cost to update web systems may be highly burdensome.

Maintaining status quo would incur no additional costs to public transports operators and providers, but would not address barriers identified during consultation.

Non-regulatory

Industry and government submissions which supported the non-regulatory option noted that mobile web system are increasingly an important information channel for passengers. There was agreement from all stakeholder groups that it is important that these systems are designed to be accessible to all customers and accommodate future technological developments to ensure public transport information can be accessed without discrimination. Conversely, poor design practices were identified as a barrier to accessing information.

Most submissions from government and industry noted that work is already underway to meet compliance with WCAG accessibility requirements. Submissions supported the provision of guidance that includes best-practice design principles and examples of practical constraints. The non-regulatory option was identified as providing valuable flexibility to future proof the Transport Standards to accommodate technological innovation and the incorporation of new versions of standards as they are developed. One submission noted that similarly, the non-regulatory option accommodates known constraints with providing dynamic information at WCAG AAA level compliance in some circumstances. Similarly, some submissions noted concerns regarding public transport information that is provided on web systems operated by organisations that are not party to the Transport Standards, such as Google and Apple.

One submission stated that specific versions of WCAG should not directly be referenced in the Transport Standards where they cannot easily be updated. The submission stated that the non-regulatory option supports the encouragement of implementing contemporary best practices as they arise, maximizing outcomes for customers.

Submissions also noted the potential unintended consequences of the regulatory options, whereby innovation of mobile web systems may be hampered by prescriptive references to WCAG standards that become outdated. Submissions noted this may result in a perverse outcome where operators and providers are disincentivised to meet contemporary practices, reducing benefits to people with disability.

Regulatory

All submissions from individuals, people with disability and disability organisations supported the regulatory option. Submissions from industry and government supporting the regulatory option agreed that the Transport Standards do not adequately cover matters relating to mobile web systems, and the introduction of new requirements would be beneficial to people with disability. During consultation, feedback from industry, government and the disability sector emphasised that regulatory requirements are necessary to ensure that systems across consistently accessible.

As transport standards do not currently include any requirements around digital accessibility systems, providing information in accessible formats should be considered a high priority.

Centre for Inclusive Design

Similarly, several submissions from industry and government noted the benefit of prescriptive references to a WCAG standard to support mobile web system procurement and development as a part of the full product development lifecycle. These submissions agreed that new requirements would also support operators and providers by providing greater clarity on their requirements – some of which have already been adopted in internal policies, and align with requirements for website accessibility agreed in the first stage of reforms.

A number of submissions from the disability sector also highlighted the importance of ensuring information remains accessible in multiple formats, and not solely online. One submission also suggested including references to the Cognitive Accessibility Guidelines for websites in guidance material. The Cognitive Accessibility Guidelines better enables websites and information to be accessible for people with intellectual disability.

Everyone is talking about apps. I think they've also got to realise that a lot of people, both elderly and those with disability, including my wife and I, we don't use apps on the old phones. We use phones for phone calls.

Focus group participant

There were divergent views shared on the preferred regulatory option. Most submissions from the disability community supported option 1, noting its relative strength compared to option 2 in that it requires all information on public transport websites to meet accessibility requirements, not just information directly related to transport services. One submission suggested accompanying guidance could be strengthened by referencing the value of WCAG AAA compliance, where feasible.

We strongly believe that all information provided on websites or in apps must be fully accessible. The option which specifies that discretionary information need not be accessible amounts to the legitimising of information censorship, and is completely incompatible with current policies and discourse around the inclusion and non-discriminatory treatment of people with a disability.

Vision Australia

Of those who supported the regulatory option, industry and government evenly supported option 1 and option 2. A number of submissions noted that it is important to consider the feasibility of providing all information to WCAG 2.1 AA level compliance – for example, interactive maps. In cases where full compliance is not possible, the submission highlighted the importance of providing equivalent information in text alternatives. Additionally, one submission suggested additional guidance be provided to define 'service information' and whether matters such as events and campaigns would be covered by the option.

One submission noted that auditing, updating and maintaining the accessibility of mobile web systems requires ongoing maintenance and funding, and that the regulatory option would incur costs to operators and providers.

Mobile web systems

One submission noted there is a significant cost to audit and update web systems, and the regulatory option would benefit from additional guidance around user-testing and verification methodologies. Submissions also noted the importance of staging the implementation of new requirements to support an effective roll-out of updated systems.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is **regulatory option 1**.

Industry and government provided mixed support for the status quo, non-regulatory and regulatory options, while all submissions from the disability sector supported the regulatory option.

Across all stakeholders, there was broad recognition that mobile web systems are now a mainstream part of the provision of information related to public transport services, and people with disability are disadvantaged by the lack of accessibility provisions on these services. Several operators and providers noted internal policies to update their mobile web systems to WCAG compliance, but recognised that the auditing, updating and maintenance of mobile web systems to meet accessibility requirements would incur additional costs.

Most submissions from the disability sector supported option 1, while industry and government evenly supported option 1 and option 2. Option 1 was identified as feasible to implement and would provide a greater level of benefit to people with disability than option 2.

It is important to acknowledge the interaction of this reform with the broader ICT procurement (reform 21). The ICT procurement reform includes hardware, software and services. The proposed ICT procurement performance-based option acknowledges the flexibility needed to manage complex ICT procurements. However, mobile web systems are increasingly the primary point for accessing information about public transport and accessibility features. Most governments require compliance with WCAG 2.1 AA in their contracts and guidelines.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism.

23. Accessible fare system elements

Issue

The Transport Standards do not adequately cover or support existing or future technologies used in fare payment and validation. As a result, current fare system requirements are not fit-for-purpose, and customers with disabilities may be exposed to inaccessible or inconsistent fare systems.

Fare system elements may include fare system vending machines, cashless reload devices, validation devices, and check-in kiosks. These elements are installed at public transport infrastructure, premises, and conveyances. Elements include respective fare payment methods, including tokens, paper and digital tickets, and other contactless tokens.

A fare system consists of hardware (the physical infrastructure of the devices/machines) and the user interface (the accessibility of the digital information provided by the machine or online elements as defined by its software elements).

Current requirements in the Transport Standards do not adequately address these fare system elements. For the system to be functionally accessible, the way users interact with the devices/machines and how they access electronic and digital information must be taken into consideration.

Collective government action would ensure fare systems are accessible and would address key stakeholder issues raised through the Transport Standards review process.

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 65: Reform options for accessible fare system elements

Option	Description
Status Quo	<p>The Transport Standards will continue not include provisions for accessible fare payment options and other fare payment options to be equal in cost.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-Regulatory	<p>Guidance would be developed to encourage the uptake of accessible fare system elements or other ICT or WCAG guidelines to promote consistent accessibility attributes across other industries, and recommend accessible fare systems should not incur more expensive prices than other fare payment options.</p>
Regulatory	<p>The Transport Standards would be amended to include new requirements for fare and ticketing systems.</p> <p>Guidance would be provided to reflect any new requirements.</p> <p>Option 1</p> <p>A new performance standard would be created for fare system hardware and software.</p> <p>Option 2</p> <p>New requirements would be created for fare and ticketing systems, including compliance with updated Australian Standards for fare system hardware and software.</p> <p>Option 3</p> <p>New requirements would be created for fare and ticketing systems, including compliance with updated Australian Standards for fare system hardware and software, and compliance with WCAG requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 66: Benefit-cost ratios for accessible fare system elements

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	1.6	-	0.1	0.1	0.14
Regulatory option 1	31.6	-	119.2	119.2 ⁱ	0.27
Regulatory Option 2	35.8	-	139.1	139.1 ⁱ	0.26
Regulatory Option 3	40.0	-	149.0	149.0 ⁱ	0.27

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory:

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart, regulatory option 2 sub-option 2, reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 15 per cent was applied to the non-regulatory option based on the high cost and complexity to implement some of the proposed guidance. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory:

The costs and benefits for the reforms were estimated based on limited data received from the survey proxied to estimate compliance at a national level, implying that the benefits and costs may not reflect the full extent of national compliance.

Option 1 provides performance-based standards to meet accessibility requirements, implying the lowest benefits and costs compared to other regulatory options.

Option 2 requires compliance with prescriptive ES standards to meet accessibility requirements, implying the higher benefits and costs compared to option 1.

Option 3 requires compliance with prescriptive ES and WCAG standards to meet accessibility requirements, implying the highest benefits and costs compared to the other options, as this improves accessibility for the largest cohort of people with disability.

Interdependencies

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as location of fare system elements.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 67: Qualitative benefits for accessible fare system elements

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	Yes
Regulatory option 1	-	-	-	-	-	-
Regulatory option 2	Yes	Yes	-	Yes	Yes	Yes
Regulatory option 3	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

Since the introduction of the Transport Standards in 2002, there have been advances in the accessible fare system elements. In 2002, the main access to fare systems was purchasing paper-based tickets.

There was one submission from a disability advocacy group supporting the status quo. The advocacy group stated that their members relied on staff at the train stations to resolve any access issues, and the provision of travel passes and concessions ensured that their costs of travelling were reduced.

Governments and industry made the most submissions supporting the status quo. The submissions from government stakeholder indicated they were unaware of barriers or accessibility issues, and believed that equivalent access options were available for people with disability accessing fare system elements.

Government and industry submissions argued that ICT and fare system procurement should continue as is. For these stakeholders the status quo allows for flexibility in implementing solutions to accessing fares on public transport, especially when there are multiple ICT systems involved.

The status quo option would not involve new costs to operators and providers, and would not introduce additional regulatory burdens or associated administrative costs. References to 2002 requirements would remain and the Transport Standards would not address the advances in accessible fare systems.

Maintaining the status quo may not meet the varying needs of people with disability or provide certainty to operators and providers to meet their objectives under the Transport Standards to remove discrimination against people with disability concerning public transport services.

Non-regulatory

During consultations, disability stakeholders told us about the importance of providing a variety of ticketing options, and ticketing should not be solely available electronically as not everyone has access to or can use technology.

There should be other options and human incorporation not removed.

Community workshop participant

Accessible fare system elements

Support for the non-regulatory option was mainly from industry and some government stakeholders.

Private sector or contracted owners and operators raised concerns about the regulatory option because they were generally not responsible for the fare system(s) on their transport network. For those owners and operators, the non-regulatory option would help them to remove discrimination in their scope of operation. One industry submission stated that there were alternative options for fares, but it was unlikely those options would comply with WCAG 2.1AA requirements.

Government stakeholders supporting non-regulatory options identified the need for flexibility to address emerging technologies and their existing fare systems. Government stakeholders identified equivalent access solutions as being available for people with disability when accessing fare systems. If regulated, the costs associated with rectifying existing fare systems were considered too costly by some governments, and therefore, they supported the non-regulatory option.

Regulatory

Community consultations and submissions from disability advocates highlighted that equal access to fare system elements was not occurring, and this acted as a barrier to the use of public transport for some people living with disability.

Unable to access fare system, couldn't reach or read the elements.

Survey respondent

The requirements proposed in the regulatory options are intended to provide certainty in the provision of fare system elements, which would enable improved access and reduce discrimination against people with disability.

Submissions from individuals, people with disability and disability organisations, governments and transport operators outlined their need for consistency and clarity to promote inclusion and reduce barriers to accessing public transport. Consistent requirements would ensure that relevant requirements could be included in procurement documents, and standardisation of the requirements would enable people with disability to plan and undertake their journeys with greater confidence.

Submissions supporting the regulatory option indicated the existing Transport Standards references were outdated and focused on paper-based ticketing systems.

Accessible fare systems are fundamental in the independent use of public transport for people with disability. When systems become outdated, and standards do not keep up to date with changes in the technology and how systems are rolled out, it becomes an issue as accessibility is not considered.

Physical Disability Council of NSW

Government and disability stakeholders differed on their preferred options. Most government stakeholders identified regulatory option 2, which contained prescriptive requirements. However, government stakeholders were divided between sub-options 1 and 2, which specifies compliance with AS/EN 301 549 (2016) and AS/EN 301 549 (2020) respectively. The main difference between these two options is the level of WCAG compliance.

Government stakeholders argued that sub-option 1, which references AS/EN 301 549 (2016) and WCAG 2.0 AA was aligned with the Web Accessibility National Transition Strategy. An equal number of government stakeholders thought it best to select sub-option 2, which requires compliance to the more stringent WCAG 2.1 AA, because this would ensure a better outcome for people with disability and minimise amendments to the Transport Standards to 'catch up' to WCAG standards.

All but one disability submission identified regulatory option 3. Where a sub-option was selected, sub-options 2 and 3 were preferred. Again, the focus was on which level of WCAG compliance was necessary to remove discrimination against people with disability using public transport.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **regulatory option 2, sub-option 2**.

Consultations and most submissions acknowledged the Transport Standards need to ensure accessible fare system elements. Most submissions preferred the regulatory option, which would minimise incidents where people living with disability may be exposed to inaccessible or inconsistent fare systems.

It is important to acknowledge the interaction of this reform with the broader ICT procurement (reform 21) and mobile web systems (reform 22). The ICT procurement reform covers hardware, software and services. The proposed ICT procurement performance-based reform acknowledges the flexibility needed to manage complex ICT procurements. However, accessible fare system elements and mobile web systems are increasingly the primary points for accessing information about public transport and accessibility features.

The regulatory option was considered necessary to address a gap in the Transport Standards and to ensure a minimum level of compliance was established and aligned with current practise in government and industry transport operators and providers.

The regulatory option would ensure consistency in the implementation of fare system elements, which was considered important by disability stakeholders to address their needs, ensure an uninterrupted whole of journey travel experience, and induce more people with disability to use public transport.

Government stakeholders saw prescriptive regulation as delivering consistency and would ensure compliance was easier to measure. The preferred option ensures transport operators and providers have greater certainty they are meeting their responsibilities under the DDA.

Sub-option 2 was selected based on consultation feedback and for alignment with the reform process' objective to modernise references and requirements, where it is relevant to do so. Many jurisdictions are WCAG 2.0 AA compliant and acknowledged the benefit of moving to WCAG 2.1 AA. While disability stakeholder preferred option 3, which had some additional prescriptive features, there was acknowledgement in their submissions that a prescriptive standard and WCAG 2.1 AA was the core requirement to maximise outcome for people with disability in accessing fare system elements. On balance it was considered the preferred option would meet those objectives, align with other proposed ICT based reform and not impose an unnecessary burden on transport owners and operators.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism.

Interaction with Stage 1 reform area

Table 68: Interactions with Stage 1 for accessible fare system elements

Stage 1 reform area	Interaction	Description
Chapter 5.5: Digital information screens	Reference different technical standards for luminance calculation for digital screens.	Stage 1 cites ISO Standard 9241-303 for luminance calculation requirements for digital information screens. Stage 2 cites AS EN 301 549 for hardware and software systems. The technical requirements of AS EN 301 549 may conflict with those of ISO Standard 9241-303.

The Transport Standards states that Australian, Australian/New Zealand standards and Australian Design Rules are incorporated into the legislation. Where a conflict exists between an international (ISO) standard and an Australian standard, the preference would be to incorporate the Australian standard and technical requirements.

Accessible fare system elements

Australian governments adopted internationally aligned ICT procurement standards for accessibility, AS EN 301 549, in 2016. AS EN 301 549 was updated in November 2020. There are no substantive technical differences between the ISO and AS EN standards for luminance requirements. Therefore, the Stage 2 recommendation clarifies the stage 1 recommendation and aligns with the whole of government approach for accessible ICT procurement.

Part 3: Accessibility at stations, stops, wharves and access routes

This Part includes the following reform areas:

24. Doors on access paths
25. Continuous access on access paths
26. Flange gaps within access paths
27. Resting points
28. Requirement for handrails in overbridges and subways
29. Location of fare system elements
30. Allocated spaces and priority seating in waiting areas
31. Accessible toilets with equal proportion of left- and right-hand configurations
32. Emergency call buttons in accessible toilets
33. Ambulant toilets
34. Lift specifications and enhancements
35. Specifications for escalators and inclined travellers
36. Poles, objects and luminous contrast
37. Lighting

24. Doors on access paths

Issue

The Transport Standards stipulate that doors along access paths must not present a barrier to independent passenger travel. However, the Transport Standards do not indicate what ‘not presenting a barrier’ entails.

Manual doors on access paths can be challenging for people with disability and their companions to use, creating a barrier for independent access to public transport. While some doors along access paths are more accessible for people with disability, such as automatic and power-assisted doors, manual doors continue to be used along access paths.

Collective government action would improve doors access for people with disability and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option are provided at Appendix A.

Table 68: Reform options for Doors on access paths

Option	Description
Status Quo	<p>The Transport Standards will continue to remain silent on when automatic or powerassisted doors should be provided.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-regulatory	<p>Guidance would be developed to encourage all doors on access paths to be automatic or power assisted, so that doors on access paths do not present a barrier to people with disability.</p>
Regulatory	<p>There were 2 regulatory options consulted on. Guidance would be provided to reflect any new requirements.</p> <p>Option 1</p> <p>Transport Standards would be amended to require that all doors that are opened by passengers must be automatic or power assisted.</p> <p>Option 2</p> <p>The Transport Standards would be amended to include requirements for power assisted unisex accessible and ambulant toilet doors. All other doors could be automatic, staff operated, power assisted by passengers or manual.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 69: Benefit-cost ratios for Doors on access paths

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	-	-	-	-	-
Regulatory option 1	52.9	-	15.8	15.8	3.34
Regulatory option 2	53.0	-	4.8	4.8	11.00

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

Considerations to note in interpreting analysis

Limitations

Non-regulatory

There are no costs and benefits associated with this non-regulatory reform. No uptake of guidance is estimated for the cost benefit analysis based on the high cost and complexity of upgrading doors.

Regulatory option 1

The benefits and costs were estimated based on limited data points provided through the survey and publicly available data to proxy compliance at a national level, implying benefits and costs may not capture the full extent of compliance.

Compliance would only be required if doors weren't covered by the Premises Standard, potentially resulting in lower costs compared to amenity benefits for all public transport users from the provision of power-assisted or automatic doors.

Regulatory option 2

The benefits and costs were estimated based on limited data points provided through the survey, publicly available data to proxy compliance at a national level and costs of providing automatic doors for accessible toilets by RLB.

This reform option only applies to access paths to accessible toilets, reducing the number of doors requiring upgrade in comparison to option 1.

Interdependencies

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as boarding point infrastructure and nominated assistance.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 70: Qualitative benefits for Doors on access paths

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	Yes
Regulatory option 1	Yes	Yes	-	Yes	Yes	Yes
Regulatory option 2	-	Yes	-	-	-	-

Analysis of submissions

Status quo

Consultation findings indicate that under the status quo, manual doors are still used along access paths, particularly in premises and infrastructure. This poses a barrier for people with disability to travel. Feedback from all stakeholder groups has acknowledged the importance of power-assisted and automatic doors in removing barriers for people with disability. Only one submission expressed support for maintaining the status quo.

Over a third of submissions across stakeholder groups indicated this problem is more apparent in infrastructure and premises, with a number of submissions noting that automatic or power-assisted doors are already in use for the majority of conveyances, where possible.

Maintaining the status quo does not meet the varying needs of people with disability or meet the objectives of the Transport Standards to remove discrimination for people with disability in relation to public transport services.

Not all people are able to use manual doors, I have been unable to open doors.

Survey respondent

Maintaining the status quo has no ongoing costs or additional regulatory burden for public transport operators and providers. However, negative impacts on community accessibility, safety and amenity would remain with doors on access paths, and accessible or ambulant toilets continuing to impose a barrier for people with disability and their companions.

Non-regulatory

Industry and government stakeholders were largely divided on their preferred option, however half of the submissions from this stakeholder group expressed support for the non-regulatory option. Where the non-regulatory option has been supported, the rationale provided is that best practice design and the requirements outlined in the regulatory option are already applied in practice where feasible, and therefore additional regulatory burden is unnecessary. The non-regulatory option was also identified as the option which provided greater flexibility to address cost concerns; unintended consequences identified with the regulatory option, such as vandalism and mechanical failure which may render these facilities inoperable; or where design constraints mean it is not possible to retrofit spaces to adopt the regulatory option.

Consultation suggests that manual doors are still used in public transport sites and that use of manual doors can be a threshold barrier for some people using public transport.

Doors on access paths

Many of our members use mobility aids and experience difficulties in opening and closing doors manually. People who have limited hand function can likewise struggle with manual door handles and the process of turning or pulling doorknobs or handles. This can be highly inconvenient when trying to use public transport and reduces the capacity for people with disability to travel independently.

Physical Disability Council of NSW

To the extent that guidance is followed, costs would be incurred to install and maintain automatic or power-assisted doors where they are not already in operation. Costs may be incurred to audit and upgrade or replace existing doors. However, the non-regulatory option will enable operators and providers to manage implementation (and related costs) to suit their operational requirements, including through staged implementation. The non-regulatory option would also provide operators and providers with greater guidance and clarity regarding the use and accessibility of doors on access paths. The use of automatic or power-assisted doors on access paths and well-placed controls will also improve accessibility for passengers with limited mobility.

Given this option is discretionary, it does not provide certainty that guidance will be implemented. Outcomes from consultation suggest that additional guidance to support current practice may not be sufficient in addressing barriers that people with disability continue to face, and uncertainty about the accessibility of premises and infrastructure may remain. Where guidance is not adopted, doors along access paths will continue to present a barrier which may deter some passengers from using public transport services or travelling independently. This option is unlikely to meet the intended outcome of this reform or the objectives of the Transport Standards.

Regulatory

Two regulatory options are presented for consideration. Regulatory option 1 would amend the Transport Standards to include requirements that all doors be automatic or power assisted. Regulatory option 2 would amend the Transport Standards to limit these requirements to unisex accessible and ambulant toilet doors.

All submissions from individuals, people with disability and disability organisations expressed support for a regulatory approach, noting the barriers faced in opening and closing manual doors. Amongst these stakeholders, regulatory option 1 (all doors must be power-assisted or automatic) was the preferred option, with submissions noting it provides the broadest improvements in safety and accessibility for people with disability.

Forty per cent of industry and government stakeholders expressed a preference for one of the regulatory options, however submissions argued that it is not feasible to have all doors in public transport sites and conveyances automatic or power-assisted. Many submissions recommended revisions to the options presented to exclude certain conveyances or site elements.

Half of the submissions that supported a regulatory option recommended that the requirement should not apply to ambulant toilets. One submission from government that supported regulatory option 2, noted that automatic doors for ambulant toilets is not practical where these toilets are not standalone features and are part of a cubicle. This submission saw regulatory option 2 as a more feasible and a technically viable solution, but recommended that requirements relating to ambulant toilets be moved to guidance. Another submission from industry that supported regulatory option 1 also recommended ambulant toilets be excluded from this option. This submission noted including ambulant toilets would impact the overall number of available facilities.

Three quarters of submissions from industry and government stakeholders in support of a regulatory approach also outlined conflicting design and safety requirements which may impact implementation of elements of the regulatory options. This was particularly relevant for conveyances. The regulatory options presented already exclude dedicated school buses, taxis and wide bodied and small aircraft; however, suggestions were made to exclude other conveyances. One submission noted that the requirements of the regulatory options are particularly difficult to implement for ferries and existing conveyances, and in many instances, conveyances with passenger operated doors already use automatic or power-assisted doors where feasible. In conveyances such as buses and ferries, drivers, cabin crew or deckhands open doors or gates for

Doors on access paths

passengers. Most conveyances therefore already meet accessibility needs for people with disability by already implementing the proposed requirements or through direct assistance.

Another submission outlined that cavity sliding doors cannot be used on a bus or coach because every door must be an emergency exit and open outwards. Further conflicting safety requirements were also outlined in one submission which noted that inter-car smoke doors within trains must close during emergencies and the force requirements for safety are in conflict with the proposed requirements for force to open doors. Another submission noted that ferries have limitations in making all doors power operated due to environmental conditions making assets more susceptible to marine corrosion.

Feedback from operators and providers indicated there would be a significant financial cost to retrofit existing conveyances and infrastructure, and there would be ongoing electrical inspection and maintenance costs. Technical constraints and operational impacts were raised as challenges that impede the ability to retrofit existing conveyances (i.e. taking conveyances out of service for major upgrades, design and space limitations in some conveyances and marine corrosion concerns in ferries).

Mandating the provision of automatic or power-assisted doors through a regulatory option may lead to a greater use of these doors on access paths relative to the non-regulatory option. Reducing the use of manual doors would achieve the outcomes of this reform and the objectives of the Transport Standards by removing barriers and discrimination for people with disability. Costs would be incurred to install and maintain automatic or power-assisted doors where they are not already in operation. However, 50 per cent of submissions from industry and government expressly indicated that best practice design means that the requirements are already applied in practice for conveyances, where feasible to do so. Many doors would also fall under the purview of the Premises Standards.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is **Regulatory with revisions option 2**.

Feedback indicated that automatic doors for ambulant toilets are not practical as these toilets are generally not standalone features and are part of a cubicle. The requirement for automatic ambulant toilet doors have been removed from the preferred option.

Feedback from operators and providers also identified interactions with existing safety requirements and environmental conditions on conveyances. For various types of conveyance, a number of technical and design barriers were identified. In response to these issues, the scope of the regulatory option was amended. The requirements for power assisted unisex accessible toilet doors would apply to premises (except premises to which the Premises Standards apply) and infrastructure (except airports that do not accept regular public transport services), but for conveyances, the amended option would only apply to unisex accessible toilet doors on trains. This means that dedicated school buses, taxis, wide bodied and small aircraft, buses, coaches and ferries would be excluded from the requirement that unisex accessible toilet doors must be power-assisted.

Guidance will encourage the use of power-assisted and automatic doors for all doors in conveyances, public transport premises and infrastructure.

Submissions from industry and government indicate that best practice design means that automatic or power-assisted doors are already largely applied in practice and those that are not will be challenging to upgrade. Updated guidance and mandating the use of power-assisted and automatic accessible toilet doors in infrastructure, premises and trains, will remove the ambiguity in the Transport Standards and address concerns about the feasibility of having all doors power-assisted or automatic by mandating these requirements at critical infrastructure points such as toilets.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism. This would address the primary concerns of stakeholders.

Doors on access paths

This option provides a balance of improved accessibility for people with disability, particularly at critical infrastructure points such as toilets, while not creating significant undue cost and technical burden for public transport operators and providers.

25. Continuous access on access paths

Issue

The Transport Standards has requirements for continuous accessibility on access paths, which includes connecting public areas of a premise or infrastructure, such as a train platform and taxi rank. The requirements in the Transport Standards reference a dated Australian Standard and are not aligned with the Premises Standards. As a result, operators and providers may face difficulty negotiating outcomes that satisfy both the Transport Standards and the Premises Standards and people with disability may not experience consistent standards or service across public transport conveyance, infrastructure and premises.

Collective government action would update requirements to align with contemporary Australian Standards and would address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 71: Reform options for continuous accessibility on access paths

Option	Description
Status Quo	The Transport Standards will continue to reference an outdated Australian Standard for continuous accessibility on access paths. The Transport Standards would remain unchanged and no additional guidance would be issued.
Non-regulatory	Guidance would be updated to include advice on continuous accessibility to encourage the maintenance of continuous accessibility to and within public transport nodes.
Regulatory	The Transport Standards would be updated for continuous access on access paths to provide performance-based requirements to increase accessibility for people with disability in premises and infrastructure. Guidance would be provided to reflect any new requirements.

Cost benefit Analysis

Quantitative and qualitative assessment

This assessment included a high-level summary of the definitional reform and potential impacts for continuous access on access paths.

This is one of the six reforms categorised as definitional, which improves consistency and clarification of certain definitional terms and are considered minor and clarifying for providers, operators or manufacturers. As such, there are limited, or no costs and monetised benefits associated with these definitional reforms.

There are identified non-monetised benefits for people with disability associated with definitional reforms. These qualitative benefits improve outcomes for people with disability and are important for decision-makers to consider, in addition to the monetised costs and benefits.

Analysis of submissions

Status quo

Poor access and connections to public transport present a significant barrier to continuous accessibility. Submissions from individuals, people with disability and disability organisations have indicated that that while

Continuous access on access paths

public transport may itself be relatively accessible, connections within surrounding precincts can pose a significant barrier to ease of travel and use of public transport for people with disability. Submissions noted that people with disability often only use the routes they know to be accessible, which limits the transport options within a network. Submissions from individuals, people with disability and disability organisations highlighted that continuous accessibility on access paths needs to consider the end-to-end nature of using public transport.

In most cases, paths connecting public transport assets or giving access to public transport assets will be the responsibility of local authorities or private property owners. This places them beyond the direct control of the operator or provider. Consultation findings indicate that difficulties are therefore faced by public transport operators and providers in negotiating outcomes that would satisfy the Transport Standards in areas and surrounding precincts beyond their jurisdiction or control. Only one submission from a government stakeholder expressed support for maintaining the status quo, with this submission echoing these concerns.

Maintaining the status quo would not involve ongoing costs to public transport operators and providers. However, it would fail to achieve the objectives of the Transport Standards of providing greater clarity for operators and providers. Maintaining the status quo would also fail to meet the needs of people with disability who would continue to have difficulty accessing public transport precincts. Maintaining the status quo also presents a lost opportunity to improve regulatory consistency by harmonising the requirements with those in the Premises Standards.

Non-regulatory

Almost 60 per cent of submissions from governments, operators and providers indicated the non-regulatory option is the preferred option due to compliance concerns posed by the regulatory option.

Governments, operators and providers detailed the difficulties and high costs associated with negotiating and implementing suitable end-to-end trip solutions where multiple land owners are involved. For example, where access paths connect to public streets that may be the jurisdiction of local government or council, bus stops that may be in the jurisdiction of another operator, and/or premises or infrastructure, such as carparks, that are under private ownership. Submissions outlined that issues of ownership may impact the compliance and delivery of any regulated standard and may be difficult to balance the needs of various stakeholders when negotiating the design or alteration of access paths. Submissions from governments, operators and providers highlighted that the non-regulatory option may allow innovation and flexibility, in working towards maximising access in a cooperative manner with local authorities and asset owners.

No submissions from individuals, people with disability and disability organisations supported the non-regulatory option. Submissions from this stakeholder group highlighted the importance of accessibility across the whole public transport journey and that lack of continuous access poses one of the most significant barriers to use of public transport. One submission emphasised that to reduce this reform area to advice would diminish the existing rights of people with disability.

To the extent that guidance is followed, costs may be incurred to audit and upgrade or replace access paths. The non-regulatory option would allow operators and providers to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation. The non-regulatory option would provide operators and providers with greater guidance and clarity to existing requirements, however, would also present a lost opportunity to improve regulatory consistency by harmonising the requirements with those in the Premises Standards.

Given this option is discretionary, it does not provide certainty that guidance will be implemented which may reduce confidence of passengers to travel if paths and connections with surrounding precincts are not accessible. To the extent that guidance is followed, people with disability will benefit from continuous accessibility on access paths that considers the end-to-end nature of using public transport services, enhancing both their confidence and the safety of their journey.

Regulatory

The regulatory option would amend the Transport Standards to include performance-based requirements regarding continuous accessibility on access paths, including requirements for connecting public areas of a premise or infrastructure.

Twenty-five per cent of government and public transport operators favoured the regulatory option, with these submissions echoing concerns raised by those who supported the non-regulatory option, that issues of land and asset ownership may impact compliance and the delivery of any regulated standard. It was noted there was no clear determination in the Transport Standards regarding who is responsible for complying with the Transport Standards beyond the operator and provider. As a result, operators and providers are often open to complaints about assets that they do not own and have no control over. It was noted that if all relevant land and asset owners are not obligated to comply with the Transport Standards, footpaths and pedestrian crossings that form part of accessible access paths will continue to be non-compliant.

Feedback from individuals, people with disability and disability organisations highlighted that continuous accessibility on access paths needs to consider the end-to-end nature of using public transport services. While some submissions acknowledged the challenges faced by government and public transport operators, many noted that poor connections and surrounding pedestrian precincts present the most significant barriers to continuous accessibility, particularly for people who are blind or have low vision and use access paths for wayfinding.

There was a strong preference amongst individuals, people with disability and disability organisations for maintaining a regulatory approach, with all submissions from this stakeholder group expressing support for the regulatory option.

The requirements of the regulatory option would not capture the entire journey; however, alignment with the Premises Standards will provide a more consistent experience and service across public transport conveyances, infrastructure and premises for people with disability. The requirements of the regulatory option do not apply to premises to which the Premises Standards apply, but will extend to premises and infrastructure that support the provision of public transport services. This would include access paths that approach relevant premises or infrastructure from any accessible car parking spaces associated with the premises or infrastructure; access paths that enter the relevant premises or infrastructure from adjoining public streets or walkways, connected premises or infrastructure; and access paths that access public spaces and accessible facilities within relevant premises or infrastructure. The updated Transport Standards Guidelines and / The Whole Journey Guide reflecting the new requirements will include guidance regarding the responsibilities of third parties under the DDA outside this remit, including responsibilities regarding the accessibility of public footpaths and pedestrian crossings that connect public transport services.

The regulatory option should ensure greater certainty and consistency through harmonisation of the requirements with the Premises Standards and would ensure that continuing access would be protected and maintained. As there is no material change to the intent of the Transport Standards, no significant impacts to operators and providers are likely to arise. However, the regulatory option is unlikely to address concerns raised by government and public transport operators and providers regarding land and asset ownership and where responsibility lies in complying with the requirements.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is the **regulatory option with additional guidance**.

While the requirements of AS1428.2 (1992) clause 7(e) will be retained, the regulatory option improves regulatory consistency by removing other references to outdated Australian Standards and harmonising the requirements with those in the Premises Standards where possible. The regulatory option improves accessibility across more elements of the transport journey and provides great certainty and confidence for people with disability. Improving regulatory consistency will also provide greater clarity for operators and providers to meet the objectives of the Transport Standards.

Continuous access on access paths

While acknowledging the challenges posed by land and asset ownership to government, operators and providers, maintaining a regulatory approach (definitional change) is the most effective way of achieving consistency and certainty. The proposed amendments also do not address accessibility concerns in precincts surrounding public transport premises and infrastructure. It is proposed this option be refined to address these concerns by including clearer guidance on who is responsible for access paths, as well as best practice guidance in relation to connections between transport nodes and pedestrian precincts surrounding and servicing transport nodes. This will respond to comments from individuals, people with disability and disability organisations, regarding the need to consider the end-to-end nature of using public transport services, as well as concerns raised by governments, operators and providers regarding negotiating and implementing suitable end-to-end trip solutions where multiple land owners are involved. Best practice guidance will highlight these obligations and encourage all landowners to provide continuous accessibility on access paths, including suitable connections to public areas of a premise or infrastructure.

Providing greater guidance will reiterate the need for cooperation by all stakeholders, thinking beyond compliance and the physical and governance boundaries of services and infrastructure, and focusing instead on accessibility needs across the whole public transport journey. This option would ensure greater certainty and consistency through harmonisation of accessibility standards and provides a balance of continuous improvement for people with disability, emphasising the importance of accessibility across the whole public transport journey, while acknowledging that the public transport journey is managed and affected by a range of stakeholders.

As there is no material change to the intent of the Transport Standards, no significant impacts to operators and providers are likely to arise and access paths are already required to be compliant.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements on commencement.

26. Flange gaps within access paths

Issue

Pedestrian level crossings include a ‘flange gap’, which is the gap between the rail track and road that permits train, light rail or tram wheels to safely travel through a level crossing. Flange gaps on access paths present a safety risk to the safe passage of people with disability, particularly those with low vision or who are blind and utilise a cane, and those who use mobility devices, where wheels can become stuck in the gap as people traverse a level crossing.

The Transport Standards do not reference flange gaps within access paths at level crossings. This omission has been identified by operators and providers as a significant gap in the Transport Standards, creating uncertainty regarding compliance obligations.

Collective government action would improve the safety of flange gaps nationally and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 72: Reform options for flange gaps within access paths

Option	Description
Status Quo	The Transport Standards would continue to remain silent on flange gaps within access paths at level crossings. The Transport Standards would remain unchanged and no additional guidance would be issued.
Non-regulatory	Guidance would be developed to encourage the upgrade and removal of railway level crossings and to ensure level crossings do not form part of an access path, encourage research and trials of new flange gap filler products and technologies to minimise the flange gap and good design and safe traversing of flange gaps.
Regulatory	<p>There were 2 regulatory options consulted on. Guidance would be provided to reflect any new requirements.</p> <p>Option 1</p> <p>The Transport Standards would be amended to include new requirements for flange gaps that form part of an access path, including where possible, level crossings must not form part of an access path.</p> <p>Where a ‘flange gap filler’ product or technology is approved it must be used to eliminate or reduce the gap.</p> <p>Option 2</p> <p>In addition to requirements at Option 1, this option includes design requirements consistent with contemporary Australian Standards.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 73: Benefit-cost ratios for flange gaps within access paths

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	18.0	-	6.2	6.2 ⁱ	2.90
Regulatory option 1	118.3	-	42.4	42.4 ⁱ	2.79
Regulatory option 2	118.3	-	5128.9	5128.9 ⁱ	0.02

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

This option reflects a lower take up of option 1. An estimated rate of uptake of 15 per cent was applied to the non-regulatory option based on the high cost and complexity of upgrading or removing level crossings. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory

The benefits and costs for these reform options were estimated based on limited data from survey responses, proxied at a national level. The quantified benefits of these options do not fully capture the safety and amenity benefits to the public including bicycle users. The benefits and costs for this reform were estimated based on limited data from survey responses, proxied at a national level.

The costs for regulatory options 1 reflect the investment in flange gap fillers at level crossings. This is a lower cost option in comparison with regulatory option 2 to achieve the benefits attributed to this reform. Cost for Options 2 reflect the replacement of level crossings. This is a higher cost option in comparison with regulatory option 1 to achieve the benefits attributed to this reform.

Interdependencies

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as bus, tram and light rail boarding points.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 74: Qualitative benefits for flange gaps within access paths

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	Yes
Regulatory	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

Flange gaps are a necessary feature for train, light rail and tram wheels to safely travel through a level crossing. However, flange gaps present a safety risk for people with disability who may get stuck in the gap while traversing a level crossing. Consultation findings highlight this safety issue is exacerbated for people who use mobility devices and those with low vision or who are blind and utilise a cane. This safety risk remains by maintaining the status quo.

Two out of 19 submissions that commented on this reform option expressed support for the status quo. These submissions from individuals, people with disability and disability organisations, highlighted that maintaining the status quo would help drive research and maintain pressure in developing a suitable gap filler product to address safety concerns posed by flange gaps. Concerns were raised in these submissions that the regulatory and non-regulatory options would see current research projects and trials cease, and allow flange gaps to continue to be found on level crossings that are under the purview of the Transport Standards.

By maintaining Status Quo rail operators are obliged to find a solution that eliminates flange gaps on level crossings. Advice on level crossing elimination is welcome and grade separated crossings are a far safer option for all and should be pursued.

Queenslanders with Disability Network

Maintaining the status quo has no ongoing costs for public transports operators and providers; however, negative impacts on community safety and accessibility would remain where flange gaps are not upgraded or removed. While level crossings and flange gaps can be eliminated through grade separation, this is not always possible or practical due to topography, road and rail alignment, property constraints, and local community access needs. Despite the omission of flange gap requirements in the Transport Standards, there has been considerably government and industry efforts to upgrade and remove level crossings, where feasible. The commitment to continue to minimise the safety risks posed by level crossings indicate that these efforts are likely to continue under the status quo.

The status quo option fails to address compliance challenges that the necessary flange gap creates. A range of horizontal gap limits are specified within the Transport Standards. However, flange gap specifications necessarily exceed these limits to enable train, light rail and tram wheels to safely travel through a level crossing. This creates uncertainty for operators and providers who are unable to meet their compliance obligations where flange gaps are involved.

Non-regulatory

The non-regulatory option would provide guidance to encourage the continued upgrade and removal of railway level crossings and continued research and trials of new flange gap filler products and technologies.

Two out of 19 submissions that commented on this reform option expressed support for the non-regulatory option until a suitable gap filler product or solution is available. However, these submissions from industry and government stakeholders indicated that greater safety and clarity would be provided by a regulatory option when a suitable gap filler product or solution is available and approved for use in Australia.

Flange gaps can pose disproportionate safety risks for people who travel in mobility aids with small wheels and other smaller devices, and/or who have vision impairment. TMR does not consider the proposed non-regulatory option addresses these risks sufficiently. Provision of guidance to users of at-grade crossings is positioned as temporary a measure, however, do not consider that this acceptably mitigates the risk to users. Moreover, the guidance proposed by the non-regulatory option shifts the burden of safety responsibility onto users. TMR would consider a regulatory approach in the future once tested solutions have been proven to work.

Queensland Government - Department of Transport and Main Roads

One of these submissions also raised concerns that the Office of the National Rail Safety Regulator is outlined in both the regulatory and non-regulatory option as the authority to approve gap filler or similar products. The submission questioned the Office of the National Rail Safety Regulator's authority in this regard. This concern was echoed in a number of submissions that expressed support for the regulatory option, as outlined further below. To the extent that guidance is followed, costs would be incurred to continue to upgrade and remove railway level crossings, and to develop, research and install any approved flange gap filler products. Submissions indicate that level crossing removal work has a substantial financial cost and requires significant investment to implement. Operators and providers will be able to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation. However, where level crossings cannot be upgraded or removed, the non-regulatory option fails to address compliance challenges that the necessary flange gap creates and this uncertainty for operators and providers would remain.

Given this option is discretionary, it does not provide certainty that guidance will be implemented. However, there has been considerable government and industry efforts to upgrade and remove level crossings. The commitment to continue to minimise the safety risks posed by level crossings indicate that these efforts are likely to continue. Where level crossings are upgraded and removed, or a suitable gap filler product is developed, people with disability will benefit from enhanced confidence and safety along access paths near trains, light rails and trams.

Regulatory

A regulatory approach was preferred amongst the majority of stakeholders across government, operators and providers, individuals, people with disability and disability organisations. Submissions recognised the continued need to upgrade and remove railway level crossings and highlighted the regulatory options allowed for continuous improvement and a focus on continued research into a successful flange gap filler product.

Most submissions that preferred a regulatory option supported regulatory option 2, citing that it provided greater certainty and safety benefits for people with disability, as well as cyclists and people using prams. Regulatory option 2 incorporates the same proposed amendments to the Transport Standards as regulatory option 1, with additional maximum gap size requirements in compliance with Australian Standards where elimination of level crossings from access paths is not feasible. Submissions noted that option 2 allowed greater flexibility where grade separation or elimination of level crossing from access paths was not possible, providing consistency with Australian Standards. However, one submission from a disability organisation who expressed a preference for regulatory option 1, outlined concerns that the maximum gap width allowance in regulatory option 2 would not provide the same level of safety for passengers with disability that currently exists with unassisted boarding platform requirements that require maximum gap limits of 40 millimetres. One submission from government suggested that regulatory option 2 should be amended to only apply to heavy rail. This submission noted that light rail needs a separate requirement for appropriate gaps, and that a gap filler product would not be appropriate for light rail due to rail profile design and installation requirements in the roadway.

A number of concerns were raised regarding both regulatory options, indicating the options presented may be unviable or may not address the issues that this reform area seeks to remedy. One industry submission raised concerns about the ambiguity and uncertainty created through the phrase 'where possible' in regulatory option 2. This language is also employed in regulatory option 1. Echoing concerns raised in a submission supporting the non-regulatory option, four submissions from industry and government noted that references in the regulatory options to the Office of the National Rail Safety Regulator as an approval body for gap filler products is incorrect and inconsistent with Rail Safety National Law.

TMR supports improvements in the accessibility and safety of flange gaps, however the regulatory and non-regulatory options do not provide sufficient detail to guarantee the suitability of future products. Furthermore, the regulatory and non-regulatory options would mandate / promote the use of flange gap filler products approved by ONRSR. TMR understands this reform proposal is inconsistent with Rail Safety National Law. As outlined in the ONRSR Way: The nature of the Rail Safety National Law (RSNL) means ONRSR is not an approver of equipment, services or processes.

Queensland Government - Department of Transport and Main Roads

Costs would be incurred in implementing either of the regulatory options. Submissions indicate that level crossing removal work has a substantial financial cost and requires significant investment to implement. However, there has been considerable government and industry efforts and a commitment to continue to upgrade and remove level crossings where possible. Where level crossings cannot be upgraded or removed, and until a suitable gap filler is developed and approved, the regulatory options presented fail to address the continuing safety risk posed by flange gap.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is the **non-regulatory option with revisions**.

While a regulatory approach was preferred amongst the majority of stakeholders, submissions indicate that further investigation and research into suitable regulatory options is required to adequately address the safety risk posed by flange gaps. Submissions also indicate that the safety risks posed by flange gaps are already addressed, to the extent possible, until suitable gap filler products or technologies are developed.

Following feedback through the Consultation RIS, the proposed guidance material for this option will be refined to remove references to the Office of the National Rail Safety Regulator as an approval authority for flange gap filler products and technologies. The Office of the National Rail Safety Regulator was established under Rail Safety National Law as the body responsible for rail safety regulation. The Office of the National Rail Safety Regulator has a range of functions, powers and responsibilities for facilitating and improving rail safety under the Rail Safety National Law. Five out of 9 submissions from industry and government highlighted that regulatory option 1 and 2 incorrectly extend the authority of the Office of the National Rail Safety Regulator to being an approval authority for gap filler products.

Submissions also indicated that the regulatory options presented are unlikely to adequately address the safety risk posed by flange gaps. The qualifying phrase 'where possible', presented in the regulatory options, recognises and reflects the limitations in seeking to address the safety risk posed by flange gaps. This qualified approach means that the options presented are unlikely to lead to further improvements beyond existing government and industry efforts and commitments to continue to upgrade and remove level crossings.

Further research indicates that the safety risks posed by flange gaps are already addressed, to the extent possible, by the Office of the National Rail Safety Regulator under Rail Safety National Law. Further regulation through the Transport Standards is unlikely to address the residual risk posed by flange gaps and may lead to uncertainty and inconsistencies if Rail Safety National Law is amended or the Office of the National Rail Safety Regulator updates its guidance on eliminating or minimising the safety risks of level crossings.

Any additional impacts of the non-regulatory option on users and operators and providers will be minimal as the preferred option seeks to strengthen and encourage current efforts by industry and government at continuous improvement. Recognising the safety risks posed by flange gaps, considerable efforts have been made to upgrade and remove railway level crossings, with research continuing to ensure an effective solution for all stakeholders. Costs will continue to be incurred by operators and providers to upgrade and remove level crossings, and develop, research and install any approved flange gap filler products.

The non-regulatory option provides a balance of continuous improvement for people with disability, while encouraging the continued upgrade and removal of railway level crossings to improve safety and accessibility.

Flange gaps within access paths

Guidance would also be provided on good design and safe traversing of flange gaps, and encourage and emphasise the importance the continued research and trials of new flange gap filler products and technologies to find a suitable solution to eliminate or minimise flange gaps and provide safe passage for all public transport users. A regulatory approach should be further investigated and adopted in the future once a suitable option is available to address the safety risk posed by flange gaps.

The preferred option will be implemented through inclusion in a revised Whole Journey Guide.

27. Resting points

Issue

The Transport Standards require resting points every 60 metres along an access path, and these resting points must have accessible seats. However, there are no requirements in the Transport Standards to provide an allocated space for a wheelchair or similar mobility aid at a resting point.

The Transport Standards accommodate people who are ambulant, but prone to fatigue; however, people using wheelchairs or similar mobility aids, and their assisting travelling companions, are at a disadvantage. This inhibits the ability of affected passengers to rest along access paths.

Collective government action would improve the amenity and accessibility of access paths for people who use mobility aids and their companions and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 75: Reform options for Resting points

Option	Description
Status Quo	<p>The Transport Standards will continue not to include provision of allocated spaces at resting points.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-regulatory	<p>Guidance would be developed to encourage the installation of allocated spaces at resting points. Guidance would include advice on design and technical elements to ensure resting points are suitable for all passengers.</p>
Regulatory	<p>The Transport Standards would be amended to include new requirements for the provision of allocated spaces at resting points, including design requirements and compliance with Australian Standards.</p> <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 76: Benefit-cost ratios for Resting points

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	36.9	-	5.4	5.4 ⁱ	6.80
Regulatory	69.9	-	10.1	10.1	6.94

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory option

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 75 per cent was applied to the non-regulatory option based on the low cost and complexity of ensuring allocated spaces are available around resting points on access paths. Submissions indicated this was easily implementable in most situations. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option

The benefits and costs for this reform were estimated based on publicly available information, a single response from the survey and costs from RLB. This implies benefits and costs may not reflect the full extent of compliance and costs do not reflect variation in construction or delivery costs that could be incurred at different sites.

Resting points provide an amenity benefits to all public transport users and the public producing relatively high benefits in comparison to the costs.

Interdependencies

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as accessible car parking, allocated spaces and priority seating in waiting areas.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 77: Qualitative benefits for resting points

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	Yes
Regulatory	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

The Transport Standards will continue to not specify requirements for allocated spaces at resting points along access paths. The Transport Standards accommodate people who are ambulant, but prone to fatigue, but do not similarly accommodate the amenity and accessibility of people using wheelchairs or similar mobility aids, and their assisting travelling companions.

People independently pushing manual wheelchairs are as likely to fatigue as ambulant people with mobility impairments. Travelling companions pushing people in manual wheelchairs may fatigue, and if using a resting point must find a location for the wheelchair and its occupant. At times, people using powered mobility aids may be travelling with a person who fatigues and so both will need access to a resting point that has an allocated space.

Consultation findings indicated a lack of appropriate resting points that include allocated spaces is a barrier to travel on public transport and is seen as an omission in the Transport Standards. Submissions from all stakeholder groups noted there would be significant value in incorporating spaces for wheelchairs and other mobility supports, such as assistance animals, to ensure people who use accessibility aids and their companions have equal and dignified access to designated rest areas.

One submission from government supported maintaining the status quo, viewing the current requirements as adequate and citing concerns regarding space constraints and the prescriptive nature of the proposed regulatory option. This submission also noted safety concerns for those using adjacent pathways.

Maintaining the status quo would continue to disadvantage people using mobility aids and their travelling companions, and does not meet the varying needs of people with disability or the objectives of the Transport Standards to remove discrimination for people with disability in relation to public transport services. Maintaining status quo has no on-going costs for public transports operators and providers; however, negative impacts on community safety, amenity, and accessibility would remain.

Non-regulatory

Three out of 18 submissions indicated support for the non-regulatory option, welcoming the clarity guidance would provide regarding technical requirements for allocated spaces at resting points. These submissions, from industry and government stakeholders, preferred the non-regulatory option, citing concerns about topography constraints and third-party land and asset ownership that may impact implementation of the regulatory option.

Benefits will be achieved to the extent that operators and providers implement the proposed guidance under the non-regulatory option, with any associated costs of implementation able to be managed flexibly to suit operational requirements, including through staging the implementation. While site constraints may make retrospective application challenging for some existing assets, one submission indicated that the costs associated with implementation, where feasible to do so, would be minimal. Submissions indicate implementation of allocated spaces is anticipated to be easily accommodated, provided space is available to adjust the placement of existing seats. Additional costs may be incurred for more challenging sites where guidance is adopted.

Given this option is discretionary, it does not provide certainty that guidance will be implemented. To the extent that guidance is followed, people who rely on mobility aids, their carers and their travelling companions would benefit from equal and dignified access to designated rest areas. If guidance is not followed, this may deter some potential passengers or reduce the number of journeys that they would otherwise undertake, and would reduce the amenity of access paths longer than 60 metres.

Regulatory

The regulatory option was preferred amongst all stakeholder groups. Consultation findings indicated that a lack of appropriate resting points that include allocated spaces is seen as an omission in the Transport Standards. The need for appropriate rest points that accommodate all passengers, ambulant or non-ambulant, was apparent from submissions received.

There would be significant value in incorporating spaces for mobility aids beside designated rest points and seating. These spaces could not only be used for wheelchairs but also any other mobility support used by a person with disability, including guide dogs, to ensure that people who use accessibility aids, and their companions have equal and dignified access to designated rest spots. Having well designed spaces for people to rest along access paths enhances the transport experience for people with limited mobility and would likely encourage more use of public transport options.

Physical Disability Council of NSW

Operators, providers and government stakeholders were largely supportive of the regulatory option recognising it would promote inclusion, equality and consistency for people with disability, although some submissions raised concerns regarding implementation where multiple land owners are involved. Submissions noted there is lack of clarity in the Transport Standards on where responsibility lies to meet the regulatory requirements. In these instances, operators and providers are often exposed to complaints about assets they do not own and/or have no control over.

A number of operators and providers noted the clear need for allocated spaces next to seating in resting areas has resulted in allocated spaces being installed as standard practice, even in the absence of mandated requirements in the Transport Standards. Submissions in support of the regulatory option noted a regulatory approach would provide better amenities and ensure consistent application across transport sites. Some submissions noted the requirements would be feasible to implement, particularly for new projects, but some challenges may be faced in retrospective application if it would necessitate significant modifications (for example, on an over bridge). This may result in the introduction of allocated spaces being unachievable on some existing infrastructure.

Some amendments to the regulatory option were suggested. One submission from an organisation representing people with disability suggested space specifications for allocated spaces should be applied as a minimum regulatory requirement, in recognition there may be multiple passengers at any one time who may benefit from these spaces. A number of submissions from government and industry suggested guidance on how to discourage inappropriate use of the allocated spaces, or the inclusion of signage or demarcation on the space, similar to priority seating on public transport. Submissions noted this would help prevent luggage, bicycles and advertisement boards being placed on the space and ensure access is not compromised by street furniture, bins or other amenity features.

Submissions indicate that at existing sites, implementation of allocated spaces is likely to be easily accommodated, provided space is available to adjust the placement of existing seats. One submission outlined that new assets could readily comply with the new requirements with minimal cost, but that if significant modifications are required for existing assets (such as rebuilding an over bridge), this could have more significant cost impacts. A regulatory option should ensure amenity and accessibility for mobility aid users and their travel companions, and ensure certainty of the requirements for operators and providers in relation to access paths.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis above, the preferred option is the **regulatory option with additional guidance**.

The installation of resting point allocated spaces at resting points will benefit people who rely on mobility aids, their carers, and their travelling companions and improve the amenity of access paths for all users.

Following feedback through the Consultation RIS, guidance to accompany the regulatory option has been refined to include:

- Inclusion of signage or demarcation of allocated spaces on access paths
- Responsibility for implementing requirements of the Transport Standards, including where multiple land owners may be involved in implementation requirements for access paths.

The regulatory option is widely supported by stakeholders. Stakeholder feedback indicates the specifications can be easily accommodated, provided space is available to adjust the placement of existing seats. One submission outlined that the cost of providing a footprint for resting points in most allocated spaces in line with the site specifications required (1300 millimetres long, 800 millimetres wide) is likely to be minimal in existing assets. A challenging site or significant upgrades to existing assets (such as rebuilding an over bridge), would incur additional costs. Once constructed there would be little maintenance cost beyond general cleaning and repair as per the surrounding pavement or deck.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements retrospectively with a compliance schedule timing of 5 years.

Consultation findings indicate that the requirements are already implemented as standard practice, and where adequate resting points are not installed, they should be easy to implement provided space is available to adjust the placement of existing seats. The compliance schedule proposed would allow time to negotiate with third party landowners, where relevant. This would address the primary concerns of stakeholders.

28. Requirements for handrails in over bridges and subways

Issue

The Transport Standards provide that handrails must be provided along access paths 'wherever passengers are likely to require additional support or passive guidance'. No guidance is available on where handrails may be required. While this provides flexibility to operators and providers (including designers), the lack of clarity means that many over bridges and subways do not have continuous handrails. This creates a barrier to using public transport for people who use handrails for wayfinding support.

Collective government action would improve wayfinding supports for people who use handrails and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 78: Reform options for requirements for handrails in overbridges and subways

Option	Description
Status Quo	<p>The Transport Standards will continue not to provide requirements on where handrails in over bridges and subways are required.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-regulatory	<p>Guidance would be developed to encourage the provision of continuous handrails on both sides of an over bridge and subway, broken only at entry and exit points.</p>
Regulatory	<p>The Transport Standards would be amended to include requirements for the provision of continuous handrails in over bridges and subways, including that handrails:</p> <ul style="list-style-type: none"> • must be installed on both sides • may be broken at any entry or exit points such as stairs, walkway and ramp entry points, lift doors • may be broken at facilities and fixtures such as fare gates, service counters or toilet doors. <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 79: Benefit-cost ratios for requirements for handrails in overbridges and subways

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	2.5	-	1.0	1.0 ⁱ	2.42
Regulatory	3.5	-	1.5	1.5	2.24

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

ⁱNon-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 75 per cent was applied to the non-regulatory option based on the low complexity of installing handrails along these routes. Submissions indicated this guidance may be adopted into operators and provider requirements. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option

The benefits and costs for this reform are based on limited survey responses and costs estimated by RLB, which do not reflect variation in construction or delivery costs incurred at different sites.

Installation of handrails can provide safety benefits for all public transport users.

Interdependencies

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as grabrails in allocated spaces.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 80: Qualitative benefits for requirements for handrails in overbridges and subways

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	Yes
Regulatory	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

The Transport Standards require handrails along access paths 'wherever passengers are likely to require additional support or passive guidance'. There are no further requirements or guidance regarding suitable locations for handrails. Under the status quo option, there will continue to be limited specifications or guidance as to where handrails must be provided.

People who are blind or have low vision use handrails for wayfinding support to locate stairs, ramps, lifts and tactile signs. Handrails also support people who may have limited mobility or are unsteady, particularly at busy times where they may be bumped by other passengers in crowds.

Submissions from people with disability strongly supported the use of continuous handrails in public transport sites, with the presence of handrails seen as providing a safer experience for passengers and giving greater confidence to travel.

Maintaining the status quo would continue to disadvantage people who rely on continuous handrails to support their mobility. There would be a lost opportunity to ensure improvements for safety, wayfinding and stability for passengers on over bridges and subways. Maintaining the status quo would not meet the varying needs of people with disability or the objectives of the Transport Standards to remove discrimination for people with disability in relation to public transport services.

Maintaining status quo has no new or on-going costs or regulatory and administrative burden for operators and providers, however negative impacts on community safety and accessibility would remain.

Non-regulatory

The non-regulatory option would deliver guidance to encourage continuous handrails on both sides of an over bridge and subway, broken only at entry and exit points. Advice on the design of handrails and other areas that may benefit from handrails would also be provided.

Industry and government stakeholders were divided on whether the regulatory or non-regulatory option was preferred. Those who supported the non-regulatory option noted that while they already adopt continuous handrails where possible, installing handrails can pose significant costs and challenges, such as:

- installing handrails within existing structures may not be feasible due to space constraints;
- handrails may compromise user safety and access;
- significant costs can be incurred for new infrastructure or access paths to accommodate the space required.
- Guidance would inform designers at which points along an access path a passenger is likely to require additional support or passive guidance.

To the extent that guidance is followed, costs would be incurred by operators and providers to install handrails along over bridges and subways where they are not part of the existing design. Installation may involve a minor addition to total project costs for new over bridges or subways. Submissions indicate that in over bridges or subways undergoing major refurbishment, or for one-off instalments, or installation on long subways or overpasses, greater costs may be incurred. Under the non-regulatory option, operators and providers will be able to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation.

Given this option is discretionary however, it does not provide certainty that guidance will be implemented. To the extent that guidance is followed, the installation of handrails in over bridges and subways is likely to benefit people with disability who rely on handrails for support or wayfinding, providing confidence to undertake a public transport journey. If guidance is not followed, this may reduce confidence of passengers if they are unable to safely travel along over bridges and subways.

Regulatory

The regulatory option was the preferred option for individuals, people with disability and disability organisations. Submissions from these stakeholders highlighted the importance of handrails in providing an important wayfinding feature for people who are blind or have low vision, in addition to providing safety and support for people who may experience issues with balance.

While it was acknowledged the Transport Standards require handrails, the lack of clarity about where handrails should be located creates inconsistency, ambiguity and lack of safe passage, particularly on over bridges and subways where there is additional risk of trips and falls. Stakeholders noted it is logical that continuous handrails are provided on over bridges and subways where it is safe to achieve this, to ensure people who require additional support navigating accessways can do so safely.

Industry and government stakeholders were divided on the regulatory or non-regulatory option. Those who support the regulatory option noted it is feasible to implement and represents improved accessibility for users who require the support of a handrail. The regulatory option would provide clarity currently lacking in the Transport Standards. Some concerns were raised regarding costs associated with retrofitting handrails, particularly in relation to heritage sites, as well as concerns regarding operational disruption, safe work, and unforeseen structural impacts.

The regulatory option would provide certainty in how operators and providers will install handrails. This would provide important safety, support and wayfinding benefits to people with disability, providing them confidence to undertake public transport journeys. Mandating design requirements for handrails will also provide certainty to operators and providers regarding points along an access path that a passenger is likely to require additional support or passive guidance.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is the **regulatory option**.

Industry and government were divided on the regulatory or non-regulatory option, while the regulatory option is preferred for individuals, people with disability and disability organisations.

There was broad agreement from all stakeholders that provision of handrails on access paths on subways and over bridges would assist people with disability. Additional requirements regarding points along an access path where passengers that are likely to require additional support or passive guidance will also provide greater clarity for operators and providers of the requirements under the Transport Standards.

Consultation findings indicate that while installation of handrails may involve a minor addition to total project costs for new infrastructure, upgrade costs may be high, particularly for long subways and overpasses. The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism. This would address the primary concerns of stakeholders.

While acknowledging costs will be incurred in implementing the regulatory option, the costs associated with installing and maintaining handrails for new or substantially upgraded infrastructure are outweighed by the benefits to be gained in providing an important wayfinding, safety, accessibility and support feature for people with disability.

29. Location of fare system elements

Issue

The Transport Standards contain limited information about the specific location of fare system elements to guide operators on the correct placement of devices to ensure they are located and oriented to facilitate, and not obstruct, access.

Fare system elements include validation devices such as platform access gates and platform validators, validation devices on board buses and ferries, vending machines where customers can purchase tickets or top-up tokens, and check-in elements at airports.

The inconsistent positioning of fare system elements results in people with disability encountering barriers to accessible and independent travel.

Additionally, multiple sections of the Transport Standards, which address elements of fare system requirements, rely on referenced Australian Standards, many of which have been updated. However, the Transport Standards do not reference these more recent versions. Continued reliance on out-of-date references increases the risk of inconsistent interpretation of where and how fare system elements should be located. These factors impede Transport providers and operators from meeting their obligations under the Transport Standards and the DDA.

Collective government action would ensure the fare system elements are accessibly located and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 81: Reform options for location of fare system elements

Option	Description
Status Quo	<p>The Transport Standards will continue to have limited clarity regarding the location of fare system elements.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-regulatory	<p>Guidance would be developed to provide best practice advice on location of fare system elements, including design recommendations, fare system element location, and supplementary digital and physical methods to support travel.</p>
Regulatory	<p>The Transport Standards would be amended to:</p> <ul style="list-style-type: none"> • co-locate and simplify existing requirements for location of fare system elements in the Transport Standards • include design requirements for fare system elements specifically designed as mobility aid accessible • include updated Australian Standards. <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 82: Benefit-cost ratios for location of fare system elements

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	0.2	-	33.5	33.5 ⁱ	0.01
Regulatory	55.3	-	176.9	176.9	0.31

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

ⁱNon-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 75 per cent of new assets was applied to the non-regulatory option based on the low complexity of implementing the guidance, and submissions indicating operators and providers currently install fare system elements based on accessibility concerns and meet relevant standards. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option

The benefits and costs for this reform were estimated based on a small number of survey responses proxied to estimate compliance at a national level. This implies the benefits and costs may not be fully reflective of existing compliance rates.

Upgrading fare system elements requires enhancements to fare system hardware and software with small cohort of beneficiaries experiencing improved amenity and accessibility.

Interdependencies

This is an enabling reform providing people with disability the ability to purchase public transport fares to access public transport, with accessibility benefits reliant on implementation of other reforms such as accessible fare system elements, bus, tram and light rail boarding points on infrastructure, and others.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 83: Qualitative benefits for location of fare system elements

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	Yes
Regulatory	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

Since the introduction of the Transport Standards in 2002, advances in fare system elements, such as tap on and tap off devices and fare recharge points, have provided more options for public transport owners and operators to locate fare systems. Previously, fare system elements were located at staff service point or by drivers.

The Transport Standards contain some specifications relating to the location of devices, such as minimum access paths, circulation space requirements and illumination for vending machines. Other essential factors to consider in the location of fare system elements are not included or referenced in the Transport Standards. These factors include illumination, glare, shelter, maintaining compliant reach ranges, handrails, entrapment risks, customer flow, access paths and additional manoeuvrability and circulation space requirements.

The status quo would not alter the Transport Standards and nor would it address any of the innovations in fare system elements and their location.

During consultations disability stakeholders described the issues they encountered when trying to use fare system elements and the difficulties encountered due to their location.

I sometimes don't even use the ticket on when I get on. It is not in an accessible part; it is not on a part I can tap on. I don't even bother tapping on. Because I can't. Because the bus starts moving before I have gotten the ticket in the right position to tap on.

Community workshop participant.

One disability advocacy group stated that their members had not reported issues with access and location of fare system elements because they used specially supplied disability travel passes and this meant they did not have to use the existing fare system.

An industry stakeholder told us that the main fare systems and their locations were the responsibility of the government. In situation, where the government did not control the location of fare system elements, paper-based ticketing systems were used instead, which they believed were sufficient to address access issues for people with disability.

A government stakeholder stated that provisions existed within the Transport Standards, but commented they were in different sections of the Transport Standards, which could lead to confusion in their implementation.

Maintaining the status quo does not impose any additional costs for public transport owners and operators or provide any additional benefits for people with disability. The status quo is unlikely to meet the varying needs of people with disability or meet the objectives of the Transport Standards to enable operators and providers to remove discrimination for people with disability concerning public transport services.

Non-regulatory

Submissions supporting the non-regulatory option received few responses, like the status quo option. A government submission said they already take additional steps to consider the location of fare system elements and therefore additional requirements were unnecessary.

An industry submission suggested that certain modes of transport would be impacted negatively by the regulatory option. Trams and tram stops were raised as example because they have a smaller footprint and may become non-compliant with sections of the Transport Standards, for example, 850 millimetres minimum widths to accommodate the new regulatory requirements may not be met.

The differing views from government and industry highlighted a conflict where regulation was considered unnecessary because the needs of people with disability were already considered, but industry was

Location of fare system elements

concerned that regulation would impose requirements to meet those standards and have potentially unintended consequences on elements of accessibility.

Due to the discretionary nature of this option, owners and providers who have already factored accessibility into the location of fare system elements may choose to take no further action and incur little or no additional costs. Public transport owners and providers can manage the implementation (and related costs) to suit their operational requirements, including staging the implementation.

To the extent that guidance is followed, people with disability will be supported to travel independently and safely while passing through fare system elements. Clear guidance would help operators and providers around the location of fare system elements, including the references to AS/EN 301 549 (2020).

Non-uptake by operators and providers will result in the disability community not receiving the benefits provided by the new location requirements. This may undermine the consistency and clarity across whole-of-journey travel experiences, which may undermine the benefits of inducing more people living with disability to travel on public transport.

Regulatory

The regulatory option received the most submissions, disability and government stakeholders were the stakeholders most likely to support the regulatory option. Submissions from disability and government emphasised the benefit of simplifying and co-locating the requirements in a new section of the Transport Standards. Stakeholder argued this would benefit operators and providers by providing increased clarity and consistency when locating fare system elements. Disability stakeholders stated that consistent implementation would benefit them and increase the use of public transport by people with disability.

Operators and providers, who had already factored accessibility into the location of fare system elements, told us they would incur little or no additional costs to ensure compliance with AS/EN 301 549 (2020). However, costs may be incurred by operators and providers who may need to review their current locations of fare system elements to ensure they would meet any new requirements.

Disability stakeholders tended to prefer the regulatory option to ensure that there was consistency in accessing the location of fare systems. These stakeholders also recognised additional benefits of the regulatory option for people living with a disability and, more generally, for people from culturally and linguistically diverse backgrounds.

People who are blind or have low vision often find it difficult or impossible to locate, move between, and interact with fare system elements that have a wide spatial separation, especially if they are located in a complex and busy environment such as a large transport interchange. This can result in extra stress for transport users and a loss of independence and confidence.

Vision Australia

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **regulatory option**.

The regulatory reform options amend the Transport Standards to co-locate and simplify existing requirements in a new section of the Transport Standards. This section would also contain some improved design requirements to improve accessibility.

Referencing AS/EN 301 549 (2020) would align with the adoption and use of the standard in certain jurisdictions and provide a mechanism by which the Transport Standards could be updated more quickly in the future as the standard continues to be updated and provide national consistency in requirements.

Concerns about the location of fare system elements were raised by some operators. For example, some tram stops are limited in space due to their location and meeting prescriptive requirements may not be feasible. In

Location of fare system elements

instances where individual sites could not meet specific requirements in the new standard, equivalent access solutions and unjustifiable hardship mechanisms may be the most appropriate to address those situations.

The benefit to people with disability, and other groups, would be in providing consistent standards across all fare systems at public transport sites. People with disability would have reduced risk of injury from trip and fall hazards and improved accessibility to public transport conveyances and buildings.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism.

30. Allocated spaces and priority seating in waiting areas

Issue

The Transport Standards require allocated spaces and priority seating be provided in waiting areas for premises and infrastructure. The Transport Standards specify five per cent of seats be identified, and five percent of the area be available, for passengers with disabilities, with a minimum provision of two seats and two allocated spaces. There is no clarity for operators and providers on how to manage situations where the percentage approach results in a decimal number. In situations where only a single bench seat is provided, such as at suburban bus stops, it is unclear if the entire bench seat or a proportion of the bench seat should be identified. There is also no definition of waiting area in the Transport Standards.

There is an opportunity to clarify the requirements for allocated spaces and priority seating in waiting areas, which if done through amendments to the Transport Standards or guidelines will provide consistency across operators and providers.

Collective government action would ensure adequate allocated and priority seating in waiting areas for people with disability and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 84: Reform options for allocated spaces and priority seating in waiting areas

Option	Description
Status Quo	<p>The Transport Standards will continue to not clearly define what constitutes a waiting area, how bench seats are managed and what to do if the percentage approach results in a decimal number.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-regulatory	<p>Guidance would be developed to encourage adequate provision of allocated spaces and priority seating in waiting areas.</p>
Regulatory	<p>The Transport Standards would be amended to include new requirements for the calculation of allocated spaces and priority seating in waiting areas using a ratio of 1:20. Specific requirements would also include:</p> <ul style="list-style-type: none"> the allocated space must not compromise the access path definition of a bench seat in the context of priority seating <p>A definition of waiting area will also be included.</p> <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 85: Benefit-cost ratios for allocated spaces and priority seating in waiting areas

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	65.3	-	55.2	55.2 ⁱ	1.18
Regulatory	188.6	-	77.1	77.1	2.45

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 75 per cent was applied to the non-regulatory option based on the low cost and complexity to implement the proposed change, and submissions indicating this would be easily achievable. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option

The benefits and costs for this reform were estimated based on publicly available data and survey responses, proxied to estimate compliance at a national level. This implies the benefits and costs may not be fully reflective of existing compliance rates.

The benefits associated with this reform would accrue to all people with disability and people with restricted mobility.

Interdependencies

This reform improves the amenity and safety of passengers while waiting for public transport, where accessibility benefits will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as resting points, grabrails and nominated assistance boarding points.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 86: Qualitative benefits for allocated spaces and priority seating in waiting areas

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	-
Regulatory	Yes	Yes	-	Yes	Yes	-

Analysis of submissions

Status quo

Under the status quo, the number of allocated spaces and priority seats would continue to be calculated using a percentage rule. Where the calculation results in a decimal number, this may lead to inconsistencies in interpretation as to whether the number provided should be rounded up or down. This may lead to a lower number of priority seats and allocated spaces being provided than otherwise would be provided.

Consultation findings indicated that calculating the number of priority seats and allocated spaces using a ratio method and defining a waiting area would provide greater clarity for operators and providers and greater certainty and amenity for people with disability.

Having clearly identifiable accessible spaces and priority seating in waiting areas would assist people with disability to comfortably wait for public transport.

Physical Disability Council of NSW

The status quo was only supported by one submission out of the 20 that indicated a preference for this reform. This is because the stakeholder, as an operator, provides ample priority seating and sufficient space for mobility aids in the waiting room.

Maintaining the status quo has no on-going costs for public transports operators and providers; however, negative impacts on accessibility remain. There would be lost opportunity for clarity for operators and providers on what constitutes a waiting area and how to calculate the number of allocated spaces and priority seats.

Non-regulatory

Three of eleven responses from industry and government stakeholders preferred the non-regulatory option. Those who supported the non-regulatory option noted the non-regulatory option provided the flexibility to cater for differences between modes and allow for innovation. For example, one stakeholder viewed the non-regulatory option as most appropriate for the tram environment given the competing priorities for road and/or footpath space. Another stakeholder indicated they had received feedback that some people with disability feel uncomfortable with clearly identifiable seating and spaces.

Due to the discretionary nature of this option, it does not provide certainty that operators and providers will use the ratio method when calculating the number of priority seats and allocated spaces. If guidance is not followed, the impact on people with disability would be decreased amenity through insufficient priority seats or allocated spaces in waiting areas.

To the extent that guidance is followed, costs would be incurred if the number of priority seats and allocated spaces in an existing waiting area were less than the number calculated using the ratio. Costs would also be incurred if marking for the allocated spaces and installation of signage was needed.

Regulatory

The regulatory option was the preferred option for individuals, people with disability and disability organisations. Submissions from these stakeholders highlighted the consistency, clarity and inclusion benefits that would come from this option. The importance of identifying priority seating and allocated spaces was raised, along with availability concerns. One stakeholder suggested that the ratio should be changed to 1 in 15 to futureproof the requirement. A concern was raised that braille and tactile signage should be provided, rather than provided where practicable.

A majority of government and operator and provider submissions (seven of eleven) preferred the regulatory option. Those who supported the regulatory option noted it would provide clarity for operators and providers and increase amenity for people with disability. Similar to the non-regulatory option, a government stakeholder noted that consultation with people with disability indicated some preferred not to wait in a marked allocated space. A concern was raised with having bus stops subject to the minimum requirement

Allocated spaces and priority seating in waiting areas

(two priority seats and allocated spaces) due to the limited space available at bus stops. A minimum of one priority seat and allocated space was recommended instead.

Some submissions noted that the impact of implementing this option was minimal - it may require reconfiguration of existing waiting areas or a reduction in seating capacity.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **regulatory option with revisions**.

In response to concerns regarding the limited space available at bus stops, this option will be refined to include a minimum requirement of one priority seat and one allocated space for bus stops.

The regulatory option was the preferred option amongst the stakeholders who expressed a preference during the consultation process (14 out of 20). There was agreement the regulatory option would provide clarity for operators and providers and would enhance consistency and inclusion for people with disability and carers. The costs in implementing the regulatory option were noted as minimal and likely to only involve floor marking and signage.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements retrospectively with a compliance schedule timing of 5 years.

31. Accessible toilets with equal proportion of left- and right-hand configurations

Issue

Accessible toilets are not always provided in equal proportion of left- and right-hand design, leaving some people with disability unable to use them. Where accessible toilets on conveyances with an equal proportion of left- and right-hand configurations is provided, people can choose an accessible toilet design suits their needs.

Collective government action would ensure accessible toilets are provided in equal proportion of left- and right-hand design and would promote consistency with the Premises Standards, as well as addressing key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 87: Reform options for accessible toilets with equal proportion of left- and right-hand configurations

Option	Description
Status Quo	<p>The Transport Standards will continue not to require toilets of both left- and right-hand design where a train or ferry has two or more accessible toilets.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-regulatory	<p>Guidance would be provided to include advice for equal or near equal proportions of left- and right-handed accessible toilets where a ferry or train set has more than one unisex accessible toilet.</p>
Regulatory	<p>The Transport Standards would be amended to require the following in ferries and trains:</p> <ul style="list-style-type: none"> • If toilets are provided, there must be at least one unisex accessible toilet without airlock available to passengers using wheelchairs or mobility aids. • If two or more unisex accessible toilets are provided in a set of rail cars or on a ferry, these must be of both left and right hand and provided in equal or near equal proportion. <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 88: Benefit-cost ratios for accessible toilets with equal proportion of left- and right-hand configurations

Reform option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	0.1	-	0.3	0.3 ⁱ	0.22
Regulatory	7.2	-	2.0	2.0	3.66

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 75 per cent of new assets was applied to the non-regulatory option based on the low cost and complexity of procuring both handed designs of accessible toilets where necessary. It is expected existing accessible toilets will not be upgraded due to the high cost and complexity of upgrades.

This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option

The benefits and costs for this reform were proxied based on a limited number of data points and is not fully representative of national compliance.

Retrofitting existing accessible toilets are relatively low cost in comparison to the benefits of providing increased accessibility to accessible toilets.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 89: Qualitative benefits for accessible toilets with equal proportion of left- and right-hand configurations

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	-	-	-
Regulatory	Yes	Yes	-	-	-	-

Analysis of submissions

Status quo

Consultation findings indicated that accessible toilets not being provided in equal proportions of left- and right-hand configurations disadvantage people with disability. Hemiplegia resulting from brain injury randomly affects people with roughly equal proportions, favouring either the left or right hand. Depending on which hand and arm are most functional people will choose to use a left-hand toilet (pan to the left of the wheelchair) or right-hand toilet (pan to the right of the wheelchair).

My sister is also on a wheelchair. I'm right-handed, but she's left-handed. She realised that the orientation of the handles, where the handles are - whether it's in a train or a bus or in the rest rooms at train stations, or wherever it may be that her requirements are quite different from mine... I think one thing that the [Transport] Standards should incorporate is to cater for both left- and right-handed individuals so that, you've got ability to hold on where you need to.

Physical Disability Council of NSW

Feedback from all stakeholders indicated minimal support for maintaining the status quo. Feedback from all stakeholder groups acknowledged the importance of the configuration of toilets to ensure all passengers can safely use accessible toilet facilities. Consultation found lack of access to toileting facilities is a significant barrier for people with disability to travel, with some passengers avoiding travel on public transport if they are uncertain they will be able to easily access toilet facilities.

Maintaining the status quo would continue to have negative impacts for people with disability, who favour either left- or right-hand. Therefore, this option does not support the objectives of the Transport Standards to provide equality and independence, and remove discrimination for people with disability in relation to public transport.

There are no ongoing costs for operators and providers with the status quo, however, there will continue to be negative impacts on community safety, amenity and accessibility.

Non-regulatory

The non-regulatory option would encourage operators and providers to install both left- and right-handed accessible toilets. Feedback from disability stakeholders indicated this will improve safety, access, and improve confidence for people with disability to use toileting facilities and travel on public transport. Industry and government submissions supported these anticipated outcomes.

Currently all accessible toilets on Queensland Rails suburban fleet are left hand toilets. The regulatory option and advice are welcome and will result in significant improvement. Providing both left and right options where possible can mean the difference between being able to use a toilet or not for some people.

Queenslanders With Disability Network

There was mixed support from operators and providers and governments between the regulatory and non-regulatory options. Feedback indicated there are challenges to implementing left- and right-handed accessible toilets on-board conveyances, particularly retrospectively. For example, rail car sets (e.g. 3 rail cars run together) are often used in different combinations, making it challenging to guarantee toilets of both hands would be available. There would be a high cost to retrofit and / reconfigure existing assets. In addition, upgrades would interrupt service operations (i.e. rail network operations).

Feedback from the disability community argues additional guidance alone would not be adopted in sufficient locations to address the barriers faced by people with disability. To the extent guidance is adopted, people with disability would be able to access accessible public toilets where they otherwise would not have been able to.

Accessible toilets with equal proportion of left- and right-hand configurations

Regulatory

The regulatory option would require the provision of accessible toilets in both left- and right-handed formats.

All submissions from people with disability and disability organisations support regulation on the grounds it would provide the broadest improvements for people with disability. These impacts include improved confidence to use public transport, increased safety when using accessible toilets, and increased amenity owing to greater availability of accessible toilets. These benefits are particularly important for people with disability who struggle to transition from wheelchair to toilet without the appropriate layout for their needs.

Submissions from three state governments also support the regulatory option arguing these requirements will remove discrimination from public transport services and improve consistency across the public transport network.

Providing an equal proportion of left- and right-hand configurations provides those with disabilities the freedom of feeling safe to use public transport without fear of being unable to use facilities that may not be safe or suited to their disability. Providing equal facilities helps to increase independence and inclusion.

Queensland Government Department of Transport and Main Roads

However, government submissions argue it is not feasible to have both toilet configurations available on existing conveyances, due to operational constraints and the high cost to retrofit / reconfigure existing conveyances, as discussed under the non-regulatory analysis above. Concerns were raised that regulating the proposed regulatory option would not guarantee rail car sets with both configurations of toilets. However, these challenges have not been fully quantified through consultation feedback.

Mandating the provision of left- and right-hand accessible toilets would likely lead to a greater use of accessible toilets relative to the non-regulatory option. Ensuring toilets of left- and right-hand configurations would ensure people with disability can choose an accessible toilet design suits their needs on ferries and trains and remove barriers and discrimination for people with disability on public transport.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is the **regulatory option with revisions**.

Stakeholder concerns about the retrofitting and / or reconfiguring ferries and / or trains will be resolved by only requiring the provision of both left and right-handed accessible toilets on new conveyances.

This option will ensure the safety and accessibility of people with disability will be enhanced through the provision of left- and right-hand configurations of accessible toilets and encourage operators and providers to construct multiple configurations of accessible toilets.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet new Transport Standards requirements prospectively with a trigger mechanism.

32. Emergency call buttons in accessible toilets

Issue

Emergency call buttons are not frequently installed in unisex accessible toilets. Without emergency call buttons, a person in distress may not be able to request help. If emergency call buttons are installed in accessible toilets at compliant heights (greater than 900 millimetres above floor), they may not be reachable by a person who has fallen to the floor to request help.

Collective government action would ensure people are able to signal for help in an emergency while using accessible toilets and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 90: Reform options for emergency call buttons in accessible toilets

Option	Description
Status Quo	<p>The Transport Standards would continue not to require emergency call buttons in accessible unisex toilets.</p> <p>The Transport Standards would remain unchanged and no guidance would be issued.</p>
Non-regulatory	<p>Guidance would be updated to include advice on accessible toilets, including the provision of emergency call buttons in accessible toilets, including, but not limited to, that emergency call buttons should be able to be reached from the floor and toilet pan.</p>
Regulatory	<p>The Transport Standards would be amended to include requirements for emergency call buttons in accessible toilets, including button location requirements, luminance contrast, and identification by braille and tactile signs. The regulatory option includes 2 sub-options in relation to the location of the button.</p> <p>Option 1</p> <p>One button is to be adjacent to the pan, 900 to 1200 millimetres above finished floor and within reach of a person sitting on the pan. The other button is to be at 300 to 400 millimetres above finished floor and forward of the pan.</p> <p>Option 2</p> <p>One button may share the space with the flush control adjacent to the pan as per AS1428.1 (2009) Design for access and mobility, Clause 15.2.5 Figure 40.B. The other button must be 300 to 400 millimetres above finished floor and 150 to 900 millimetres forward of the pan.</p> <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Emergency call buttons in accessible toilets

Table 91: Benefit-cost ratios for emergency call buttons in accessible toilets

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	191.1	-	2.9	2.9 ⁱ	66.78
Regulatory	1349.6	-	18.4	18.4	73.30

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform e.g. compliance is more likely to occur with new or upgraded facilities and less likely with existing assets.

Regulatory option

The benefits for this reform apply to all public transport users improving safety and amenity in accessible toilets. This reform would improve safety and amenity for all public transport users at a relatively low cost.

The costs for this reform were estimated from benchmarks for each state and jurisdiction. These cost estimates are not reflective of differences in construction or delivery costs that could be incurred at different sites.

Interdependencies

An estimated rate of uptake of 15 per cent was applied to the non-regulatory option based on the high cost and complexity of installing, operating and maintaining emergency communication systems. This reform would improve safety and amenity for all public transport users at a relatively low cost.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 92: Qualitative benefits for emergency call buttons in accessible toilets

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	-	-	-	-	-
Regulatory	Yes	-	-	-	-	-

Analysis of submissions

Status quo

Under the status quo, the requirements for accessible toilets would remain unchanged, and operators and providers would not be encouraged to install emergency call buttons. Consultation findings have indicated that under the status quo people with disability can encounter difficulties using public toilets, and when they do encounter difficulties, it can be challenging to call for assistance. In these cases where people can ask for assistance, their confidence to use public transport and their safety are improved. Some sanitary facilities have emergency call buttons installed within them, although this practice is not common, particularly for unstaffed locations.

Submissions from the disability community did not support the status quo, agreeing there are risks when transferring from and to toilets. Eight submissions from across disability community, state governments and operators and providers stressed the importance of people with disability being able to seek assistance when in need, however, did not demonstrate that lack of emergency call buttons is a barrier for people with disability to using public transport.

Maintaining status quo has no additional on-going costs for public transports operators and providers, however there are negative impacts on community safety, amenity, and accessibility.

Non-regulatory

Feedback from the disability community indicated, where guidance is adopted, it will improve safety, reduce wellbeing and security concerns for people with disability, and improve their confidence to use public transport. Submissions from industry and government, except one submission, did not oppose the provision of guidance and indicated guidance is already adopted in some jurisdictions for new builds.

Support for regulatory and non-regulatory options was mixed from operators and providers and governments. Feedback indicated there are challenges to installing emergency call buttons on-board conveyances, particularly retrospectively. Three submissions expressed concerns about intentional or unintentional misuse and vandalism of these features, reducing their effectiveness. This suggests the option requires careful co-design with people with disability to ensure its effectiveness.

TMR's engagement with the disability sector indicates that having two buttons at differing heights provides a safer option if someone falls from the pan and cannot reach a high button. Therefore, the regulatory and non-regulatory options both provide enough clarity as to not discriminate against people with disability and ensure their ability to use public transport.

Queensland Government Department of Transport and Main Roads

Power provision and communications cabling to implement emergency call buttons in accessible toilets were noted as costly and technically challenging to install in existing conveyances. Several submissions also noted staffing costs and maintenance would impose a significant cost. Finally, submissions raised concerns about how the system would be implemented in unstaffed locations. For these reasons, many submissions from government and operators and providers prefer the non-regulatory option or propose amending the regulatory option to a performance-based solution.

The non-regulatory option would offer operators and providers flexibility to manage the issue through bespoke solutions that suit their operating environment. Where installed, emergency call buttons will improve the safety of people using accessible public toilets who require assistance.

Regulatory

Submissions from governments were divided on whether emergency call buttons should be required in the Transport Standards. Submissions from industry did not raise concerns about the technical requirements for emergency call buttons, noting the additional button would not be a significant additional cost. Submissions indicated emergency call buttons are installed on an irregular basis, but are becoming more common.

Emergency call buttons in accessible toilets

All feedback from people with disability and disability organisations supported regulation on the grounds the regulatory option provides the broadest improvements in safety and accessibility for people with disability. These submissions broadly supported consistency of use and placement of emergency call buttons at reachable heights for people with disability. Submissions raised risks when transferring from transferring to and from toilets and noted concerns and difficulties for people with disability when using accessible toilets. Impacts on people with disability would include improved confidence to use public transport and increased safety when using accessible toilets. Mandating the provision of emergency call buttons in accessible toilets would likely lead to a greater confidence for people to use accessible toilets and improved safety relative to the non-regulatory option.

Safety and security are significant concerns for people with disability, particularly for people who rely on support to travel independently. It is important that emergency call buttons are placed within reach of the pan or from the floor in the incident of a fall.

Queenslanders with Disability Network

Two submissions raised concerns the proposed regulatory requirements may not offer operators and providers the flexibility to adopt the best system to ensure people with disability are able to seek assistance when using accessible toilet facilities in an emergency. The requirements are unclear for locations and conveyances which are unstaffed, or have staff who are unable to respond to provide assistance. Mandating these requirements, particularly for existing assets, is likely to have a substantial cost impact to the public transport industry, and will impose numerous technical and operational challenges that may impede adoption of the requirements, such as staffing, maintenance and cabling.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is the **non-regulatory option**.

Whilst consultation findings indicated people with disability being able to call for help in an emergency improves confidence and safety in these instances, findings did not demonstrate the absence of emergency call buttons was a barrier to accessing public transport. Consultation findings did not determine a lack of emergency call buttons was a significant safety barrier or reduced confidence to use public transport.

The non-regulatory option will provide operators and providers with best practice guidance to encourage increased usage of emergency call buttons in accessible toilets in ferries, accessible rail cars, premises, except for premises to which the Premises Standards apply, and infrastructure. This will encourage best practice where emergency call buttons are installed. Guidance will offer flexibility for operators and providers to manage unique operational and technical requirements and challenges across varying public transport modes, while increasing the safety, accessibility and amenity for people with disability.

The preferred option will be implemented through inclusion in a revised Whole Journey Guide.

33. Ambulant toilets

Issue

There are no requirements in the Transport Standards for the provision of ambulant toilets, which may present a barrier to people with ambulant disabilities in using public transport. Ambulant toilets include accessible features, such as bilateral grabrails and extra length that accommodates a walking aid.

Collective government action would improve the accessibility of toilets, promote consistency with the Premises Standards, and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 93: Reform options for ambulant toilets

Option	Description
Status Quo	<p>The Transport Standards will continue to not include provisions for ambulant toilets in conveyances, infrastructure or in premises to which the Premises Standards do not apply.</p> <p>The Transport Standards would remain unchanged and no Guidance would be issued.</p>
Non-regulatory	<p>Guidance would be updated to provide advice on the installation of ambulant toilets, including design considerations.</p>
Regulatory	<p>The Transport Standards would be amended to include requirements for the provision of ambulant toilets in ferries, accessible rail cars, infrastructure and premises except premises to which the Premises Standards apply, including compliance with relevant Australian Standards and designation requirements for unisex or gender specific toilets.</p> <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 94: Benefit-cost ratios for ambulant toilets

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	47.2	-	43.0	43.0 ⁱ	1.10
Regulatory	129.7	-	103.7	103.7	1.25

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

ⁱNon-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 50 per cent was applied to the non-regulatory option based on submissions from operators and providers indicating they would adopt the guidance as it is relatively easy to adopt where feasible, such as in infrastructure. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option

The benefits and costs associated with this reform were estimated from limited data points from the survey and publicly available data proxied to a national level. The costs were developed by RLB and are not reflective of variation in construction or delivery costs that could be incurred at different sites.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 95: Qualitative benefits for ambulant toilets

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	-	-	-
Regulatory	Yes	Yes	-	-	-	-

Analysis of submissions

Status quo

Under the status quo, there will continue to be no requirements for the provision of ambulant toilets in the Transport Standards. Consultation findings have indicated that under the status quo, people who need handrails or support to transfer to or from a toilet rely on unisex accessible bathrooms for these features,

Ambulant toilets

which only have handrails on one side. This means people who otherwise do not need accessible toilet facilities must use these toilets, rather than being able to use standard toilets. The cohort of people who use accessible toilets benefit from different features to the group that benefits from using ambulant toilets.

In cases where only standard accessible toilets are provided, people who are ambulant often choose to use the accessible toilet. Accessible and ambulant toilets serve different groups with different needs; therefore, it is optimal to provide both options.

Queenslanders with Disability Network

No submissions supported the status quo option.

Maintaining status quo negatively impacts the amenity, accessibility and other community benefits, such as enhanced independence and inclusion and improved access to services, for people with disability. The status quo does not provide equality and independence or reduce discrimination for people with disability in relation to public transport. Maintaining the status quo has no on-going costs for public transports operators and providers; however, there are negative impacts to community amenity and accessibility.

Non-regulatory

One submission from government and three submissions from industry supported the non-regulatory option. These submissions agreed that improvements to the design of ambulant toilets would result in accessibility benefits for passengers, and additional guidance would be beneficial to designers.

Two submissions from operators and providers noted, however, that the spatial constraints of conveyances must be considered. Similarly, one submission noted that the implementation of new requirements in existing infrastructure may be impacted by external factors, including engineering challenges and other regulations. For this reason, the retrospective implementation of new requirements was noted as a potential issue, which may render implementation unfeasible. These submissions favoured the non-regulatory option as it provides a greater level of flexibility to accommodate constraints, whilst allowing designers to still provide accessible facilities to passengers.

Regulatory

All submissions from individuals, people with disability and disability organisations supported the regulatory option. Submissions noted the importance of certainty regarding the provision of ambulant toilets in providing confidence to people with disability when travelling on public transport. Submissions noted currently, in most cases only a single unisex accessible toilet is provided. These facilities include different accessibility features to ambulant toilets, including only one grabrail adjacent to the pan, rather than two grabrails either side of the pan in ambulant toilets. One submission from an individual noted that the non-provision of ambulant toilets presents as a barrier to some passengers, and may deter people from using public transport. Submissions also noted the safety risks associated with people using facilities that are not fit-for-purpose, such as accessible toilets.

During consultation, participants also highlighted that consideration must be given to the needs of people with stomas. These stakeholders noted that if accessible and ambulant toilets are not designed appropriately, passengers may be subject to greater stress and the potential for medical accidents.

Across the country, disabled toilets don't cater for the needs of people with stomas, external bowel, medical appliances. But on public transport, where there are toilets, really important that the mirror comes down to the bench that, there's extra space around the bench, that there's a bin and hooks to put appliances on.

Stakeholder roundtable participant.

Four submissions from government and one submission from industry supported the regulatory option. These submissions agreed that the greater provision and consistency of design of ambulant toilets in public transport infrastructure and conveyances would provide greater accessibility for people with an ambulant disability. Submissions echoed feedback received from people with disability, noting that in circumstances where ambulant toilets are not provided, people who require ambulant toilets must use accessible toilets.

Ambulant toilets

One submission from government noted that this practice impacts the safety of passengers, whilst also reducing access to accessible toilets who specifically need that facility. All submissions from industry and government noted the retrospective implementation of the proposed requirements, particularly on conveyances, would be complex due to space constraints and potentially cost prohibitive.

Multiple submissions from industry and government suggested amendments to the proposed regulatory option. One submission suggested to support implementation, the Transport Standards be amended to include a definition for 'accessible rail car' and clearly articulate whether the requirement for an ambulant toilet is triggered by the type and number of toilets provided in totality in a train set, or only within a single accessible rail car. The submission stated that without this clarity, there is a risk of inconsistent interpretation which could result in unintended discriminatory outcomes for passengers. Similarly, the submission suggested greater clarity is required to demonstrate how the requirements would apply to booked services where there are different classes of travel. To recognise and accommodate the unique challenges of retrofit conveyances to meet new requirements for ambulant toilets, one submission from government suggested amending the proposal to shift implementation in conveyances to guidance.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is the **non-regulatory option**.

During consultation, there was widespread acknowledgement that improvements to the design of ambulant toilets would result in accessibility benefits for passengers and additional guidance would be beneficial to designers.

Industry and government provided mixed support for the non-regulatory and regulatory options, while all submissions from the disability sector supported the regulatory option. A number of concerns were raised regarding the implementation of the proposed requirements in conveyances. Multiple submissions from government and industry which supported the regulatory option suggested amendments which would substantially alter the proposal compared to what was presented in the Consultation RIS. Similarly, submissions which supported both the non-regulatory and regulatory option highlighted the substantial complexities associated with retrofitting conveyances to meet new requirements, and stated that the proposed requirements reflect use-cases in the built environment, not in conveyances.

The non-regulatory option recognises the need for flexibility to accommodate design constraints of conveyances, whilst allowing designers to still provide accessible facilities to passengers where possible. The non-regulatory option also promotes alignment with the Premises Standards in premises to which the Premises Standards do not apply. Feedback received from two government submissions noted that it is already internal practice to build these facilities to meet Premises Standards requirements, and the impact of implementation in new assets will be minimal.

The preferred option will be implemented through inclusion in a revised Whole Journey Guide.

34. Lift specifications and enhancements

Issue

The Australian Standards reference for lift requirements in the Transport Standards does not reflect current best practices and is not harmonised with current lift standards. The Transport Standard references do not include the technological advances over the last two decades, which improve accessibility features and address existing barriers to people living with disability.

The Transport Standards reference AS1735.12 (1999) Lifts, escalators and moving walks, which has been superseded by AS1735.12 (2020) Lifts, escalators and moving walks. AS1735.12 (2020) stipulates accessibility requirements for new technologies, which otherwise present barriers to people with disability.

Collective government action would ensure lift are accessible to people with disability, promote consistency with the Premises Standards, and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 96: Reform options for lift specifications and enhancements

Option	Description
Status Quo	<p>The Transport Standards would continue to reference outdated Australian Standards for requirements for lift accessibility requirements that do not consider technological advances in accessibility features.</p> <p>The Transport Standards would remain unchanged and no additional guidance would be issued.</p>
Non-regulatory	<p>Guidance would be updated to include best practice for enhanced lift accessibility, including recommended compliance with relevant Australian Standards.</p>
Regulatory	<p>The Transport Standards would be updated to include more contemporary Australian Standards references.</p> <p>Guidance would be provided to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 97: Benefit-cost ratios for lift specifications and enhancements

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	Benefit-cost ratio
Status Quo	-	-	-	-	-
Non-regulatory	0.6	-	19.6	19.6	0.03
Regulatory	27.9	-	100.0	100.0	0.28

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

⁽ⁱⁱ⁾The benefits and costs presented in the table above are rounded to two decimal places and calculated to four decimal places in the CBA workbook, which may result in zero values in the table.

Considerations to note in interpreting analysis

Limitations

Non-regulatory option

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 75 per cent for new assets was applied to the non-regulatory option based on submissions indicating many lifts are procured to meet these requirements. Existing assets were not assumed to be upgraded to implement the guidance based on the high cost and complexity upgrade. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option:

The benefits and costs for this reform were estimated using inputs from the survey and costs provided by RLB quantity surveyors. The benefits and costs do not reflect the full extent of compliance or variation in construction or delivery costs that could be incurred at different sites.

Lifts covered by the Premises Standards were compliant, implying cost implications for remaining lifts and with benefits impacting a small cohort of beneficiaries.

Interdependencies

This reform improves safety, amenity and accessibility for all public transport users. The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms relating to lift infrastructure.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 98: Qualitative benefits for lift specifications and enhancements

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	Yes
Regulatory	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

Since AS1735.12 (1999) was developed, there have been further iterations of the standard, most recently a 2020 version. If the Transport Standards continues to reference an obsolete standard, this may result in transport infrastructure that may not include best practice in lift design and features.

Governments submissions were the only stakeholders who supported the status quo, and only one provided commentary, which argued lifts in transport premises should not be treated differently to lifts in other accessible buildings.

Maintaining the status quo would retain references to a lift standard which is over two decades old. The advances in lift design and features which benefit people living with disability would not be incorporated into the Transport Standards or align with industry best practice.

The status quo does not meet the objectives of the Transport Standards to remove discrimination against people with disability concerning public transport services. Maintaining the status quo has no ongoing costs or additional regulatory burden for public transport operators and providers; however, negative impacts on community accessibility would remain.

Non-regulatory

Guidance proposed in the non-regulatory option is intended to help public transport owners and operators to reduce the barriers to accessing public transport for people living with disability. Guidance would provide information on audible wayfinding, tactile requirements, and use of hearing loops all of which have been established as barriers to people with disability using public transport.

Feedback from one government and one public transport operator supported the non-regulatory option. The government submission cited discrepancies, such as the handrail requirements in the 2020 lift standard compared with other parts of the Transport Standards. The submission raised a concern about alignment with the Premises Standards, which does not reference the 2020 lift standards at the time of writing. However, alignment in lift references in the NCC and Premises Standards is a priority. The Premises Standard review findings in 2021, stated that alignment amongst referenced standards was a key priority.

Regulatory

Since industry has moved to newer lift standards, the longer the Transport Standards lift requirements are not harmonised, features that assist people with disability to overcome barriers to using public transport will remain. Most submissions to this reform supported the regulatory option.

Submissions supporting the regulatory option were from individuals, people with disability and disability organisations, governments and transport owners and operators. A common thread amongst these different

Lift specifications and enhancements

stakeholders was the need for consistency and clarity for lift requirements, the benefits from promoting inclusion, and reducing the barriers for people with disability accessing public transport.

While the submissions converged on the need to update references with the Transport Standards to AS1735.12 (2020) edition, there were concerns raised by disability, government, and industry stakeholders.

Disability advocates identified that AS1735.12 (2020) addresses a large number of existing accessibility issues; however, the standard does not address all the barriers encountered by people who are vision impaired. For vision-impaired stakeholders, lifts that use touchscreen and more recent technologies may not provide tactile alternatives. Vision-impaired disability advocates also argued for more through cars (door on both sides) rather than turnaround lift cars. These disability advocates supported the regulatory option but recommended further consultation to address the issues they identified.

Government and industry stakeholders who supported the regulatory option specified their preferences were for amended lift references that apply to new lift installations. Their concerns related to older lift installations, especially those with smaller car sizes, which may require replacement with a wider lift shaft to accommodate the new lift standards and would be prohibitively expensive.

Many existing lifts would meet the regulatory requirements, and this would reduce the scope of lifts requiring retrofitting. For older lift installations, many of which would be operating near their end-of-life, there are equivalent access and unjustifiable hardship provisions which address those lift installations where retrofitting would be prohibitively expensive. The provision for alternative solutions would also apply to heritage transport infrastructure.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **regulatory option**.

The preferred option will ensure many safety and accessibility improvements over the last two decades are realised in transport infrastructure. The industry has been installing lifts for 5-10 years that exceed the AS1735.12 (1999) requirements. The safety and accessibility improvements would improve access and confidence in using public transport for people with disability.

The preferred regulatory option, supported by most stakeholders, ensures that barriers to accessing public transport, addressed in the updated lift standards, are implemented in all new public transport lift installations. The preferred option ensures that Transport operators and providers have greater certainty that they meet their responsibilities under the DDA.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism. This will address concerns regarding retrofitting older lifts.

Interaction with Stage 1 reform area

Table 100: Interactions with Stage 1 for lift specifications and enhancements

Stage 1 reform area	Interaction with Stage 2 reform area	Details
Chapter 5.6: Lifts	Both reform areas seek to reform lift specifications, however, reference different Australian Standards for lifts.	Stage 1, Chapter 5.6 Lifts retains AS1735.12 (1999). Stage 2, Lift specifications and enhancements, regulatory option proposes AS1735.12 (2020).

Stage 2 references to AS1735.12 (2020) would override the reference to stage 1 Chapter 5.6 in AS1735.12 (1999). Stage 1 reforms are contained and clarified in the 2020 version of the lift standard.

35. Specifications for escalators and inclined travellers

Issue

Some escalators and inclined travellers installed in public transport sites are not wide enough to be accessible to people with disability.

Transport Standards section 2.4, Minimum unobstructed width, provides a minimum unobstructed width for moving pathways (850 millimetres), it is silent on specifications for escalators and inclined travellers.

The Transport Standards and other accessible premises often specify 850 millimetres access. Where escalators and inclined travellers do not have 850 millimetre minimum widths, they are not aligned with other transport conveyances and accessible premises which may interrupt a person’s journey.

The absence of these technical specifications creates uncertainty for what a safe, accessible minimum width should be when installing escalators and inclined travellers.

Collective government action would ensure escalators and inclined travellers are accessible, promote consistency with the Premises Standards and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 99: Reform options for specifications for escalators and inclined travellers

Option	Description
Status Quo	The Transport Standards will continue not to provide specifications for minimum clear width requirements for escalators and inclined travellers. The Transport Standards would remain unchanged and no additional guidance would be issued.
Non-regulatory	Guidance would be updated to recommend a minimum width of 850 millimetres for escalators and inclined travellers, and that escalators and inclined travellers should not be the sole means of access to premises and infrastructure for passengers.
Regulatory	The Transport Standards would be amended to include minimum width specifications for escalators and moving walkways and requirement they are not to be the sole means of access to premises and infrastructure for passengers. Guidance would be provided to reflect any new requirements.

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 100: Benefit-cost ratios for specifications for escalators and inclined travellers

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	17.0	-	14.8	14.8	1.16
Regulatory	325.3	-	57.0	57.0	5.70

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽¹⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory option

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 75 per cent for new assets was applied to the non-regulatory option based on submissions indicating many escalators are procured to meet the minimum width indicated in guidance. Existing assets were not assumed to be upgraded to implement the guidance based on the high cost and complexity to upgrade. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option

The benefits and costs for this reform were estimated based on limited data from survey responses and costs estimated by RLB.

The costs for this reform reflect replacement of escalators and travellers at a small number of sites nationally, providing safety and amenity benefits to all users of public transport.

Interdependencies

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as grabrails on access paths, doors on access paths, nominated assistance boarding points and others.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 101: Qualitative benefits for specifications for escalators and inclined travellers

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	Yes
Regulatory	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

Under the status quo some passengers will continue to be unable to traverse escalators and inclined travellers where they do not have minimum accessible widths. Safety and accessibility concerns regarding narrow escalators or inclined travellers will continue. Supporting the status quo may result in escalators and inclined travellers remaining unchanged.

The status quo had support from a small number of submissions, all from government stakeholders. One government submission supported the status quo because they were no longer installing escalators or inclined travellers in new infrastructure builds due to maintenance costs and breakdowns. Another submission supported the status quo because they believed the reforms were not targeted to travellers and they did not believe escalators were an issue.

The status quo option is unlikely to involve new costs to operators and providers and would not introduce additional regulatory burdens or associated administrative costs. However, negative impacts on community accessibility would remain.

Non-regulatory

The guidance proposed in the non-regulatory option is intended to reduce barriers to accessing public transport by providing advice on minimum widths necessary to make escalators and inclined travellers accessible. Guidance would assist public transport owners and operators to consider best practice when procuring or retrofitting these goods.

The Whole Journey Guide would be updated to include guidance that recommends a minimum width of 850 millimeters for escalators and inclined travellers.

The non-regulatory option received the least support - there were no submissions supporting the non-regulatory option from disability stakeholders.

Feedback from one government and one public transport operator supported the non-regulatory option. The government submission indicated there were safety risks by encouraging people with mobility aids to use escalators. Inclined travellers posed fewer safety issues for people using mobility aids.

The width of escalators and travellers may be limited by site constraints and structural elements, such as platform widths and heritage requirements. The non-regulatory options would allow alternatives to be considered in the context of the site's constraints.

Regulatory

The requirements proposed in the regulatory option would ensure escalators and inclined travellers installed in public transport sites are wide enough to be accessible to people with disability.

The regulatory option received the most support. All disability stakeholders supported the regulatory option. Disability stakeholders emphasised the benefits of being able to use escalators and travellers, such as increased access to facilities and conveyances and improved safety.

Escalators and inclined travellers are useful for many people who are ambulant and have a disability providing they are designed appropriately and have sufficient width. People who use canes, crutches or other aids find that narrower escalators and travellers present challenges to the safe use of the aids, and similar challenges arise for people who use guide or assistance dogs in cases where the dog cannot be positioned beside them in a narrow space. Designing escalators and inclined travellers ensures most efficient and seamless movement for people who otherwise find lifts and stairs less effective for their needs

Queenslanders with Disability Network

Specifications for escalators and inclined travellers

There were concerns raised by government and industry stakeholders about the retrospective application of these requirements, which would be costly and, in many instances, technically complex to implement. The money may be better spent on improving alternative access options.

The regulatory option targets minimum requirements and would be complemented by guidance to outline best practice if transport owners and operator choose to exceed the minimum requirements. The Transport Standards Guidelines and The Whole Journey Guide would be updated to reflect new requirements and provide specific guidelines outlined in the non-regulatory options.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **regulatory option**.

The Transport Standards would include new minimum width specifications for escalators and moving walkways and that they are not to be the sole means of access.

The requirements would pertain to premises (except premises to which the Premises Standards apply) and infrastructure (except airports that do not accept regular public transport services.)

The regulatory option would be supported by updated guidance in both the Transport Standards Guidelines and The Whole Journey Guide. Updated guidance in the Transport Standards Guidelines will provide additional information to operators and providers on how new requirements in the Transport Standards can be met, and be supported by further guidance in the Whole Journey Guide where suggested guidance extends beyond what will be required in the amended Transport Standards.

The preferred option ensures people living with disability have improved safety and accessibility when using escalators and inclined travellers. The preferred option provides transport owners and providers greater certainty that they meet their responsibilities under the DDA.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism.

36. Poles, objects and luminance contrast

Issue

People with vision or cognitive impairments may inadvertently walk into or strike an object that abuts an access path, if unseen or unperceived. People with vision or cognitive impairments rely on luminance contrast to identify objects and navigate around them.

For people with vision or cognitive impairments the navigation and safety issues are compounded by the inconsistent application and effectiveness of luminance contrast solutions.

The Transport Standards set requirements for luminance contrast with a background for obstacles, but does not provide references for measuring or calculating luminance contrast. Additionally, there is not a clear definition of what constitutes a background. Pavements, walls, conveyances or even distant objects or buildings may form a background

Collective government action would ensure poles, objects and luminance contrast requirements are clear and address key stakeholder issues raised through the Transport Standards review process and promote consistency with the Premises Standards.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 102: Reform options for poles, objects and luminance contrast

Option	Description
Status Quo	<p>The Transport Standards will continue not to define a background for the purpose of measuring or calculating luminance contrast.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-Regulatory	<p>Guidance would be updated to include best practice guidance for determining the luminance contrast of poles and obstacles adjacent to access paths.</p>
Regulatory	<p>The Transport Standards would be amended to ensure poles, columns, stanchions, bollards and fixtures do not project onto an access path. There are 2 regulatory options that were consulted on, both containing sub-options.</p> <p>Option 1</p> <p>Objects that do abut an access path must:</p> <ul style="list-style-type: none"> • Sub-option 1 - Must have a luminance contrast of no less than 30 per cent when viewed against the surrounding floor or pavement or against other fixed surfaces that are within two metres of the obstacle. • Sub-option 2 - Must have a luminance contrast strip at least 75 millimetres wide of no less than 60 per cent located 900 to 1000 millimetres above ground when viewed against the surrounding floor or pavement or against other fixed surfaces that are within two metres of the obstacle. <p>Option 2</p> <p>For obstacles within public spaces, the sub-options at option 1 above. Luminance contrast testing of surfaces, objects and fixtures other than tactile ground surface indicators must be determined as per the relevant Australian Standard.</p>

Poles, objects and luminance contrast

Cost benefit analysis

Quantitative and qualitative assessment

This assessment included a high-level summary of the definitional reform and potential impacts for poles, objects and luminance contrast.

This is one of the six reforms categorised as definitional, which improves consistency and clarification of certain definitional terms and are considered minor and clarifying for providers, operators or manufacturers. As such, there are limited, or no costs and monetised benefits associated with these definitional reforms.

There are identified non-monetised benefits for people with disability associated with definitional reforms. These qualitative benefits improve outcomes for people with disability and are important for decision-makers to consider, in addition to the monetised costs and benefits.

Analysis of submissions

Status quo

People with vision or cognitive impairments rely on luminance contrast to identify objects and navigate around them. Without consistent application and measurement of luminance contrast requirements, people with vision or cognitive impairments may inadvertently walk into or strike an object that abuts an access path, if unseen or unperceived.

The status quo would ensure that the Transport Standards do not define requirements for luminance contrast tests for poles and objects adjacent to paths resulting in the suboptimal provision of luminance contrasting strips under the existing regulations.

There were no submissions in support of the status quo.

This option is unlikely to involve new costs to operators and providers and would not introduce additional regulatory burdens or associated administrative costs. However, people with vision or cognitive impairments may continue to inadvertently walk into or strike an object that abuts an access path, if unseen or unperceived.

Non-regulatory

Guidance would provide transport owners and operators with best practice information on how and when to implement and measure luminance contrast requirements. To the extent that guidance is utilised by transport owners and operators, passengers with vision or cognitive impairments would have enhanced safety while travelling or wayfinding. The likelihood of inadvertently striking an unseen or unperceived object will be diminished. Transport owners and providers will have a rigorous and more achievable methodology for ensuring objects abutting access paths' meet the luminance contrast requirements with their backgrounds.

There were no submission supporting the non-regulatory option from disability stakeholders. Government and industry submissions supporting the non-regulatory options cited the potential benefit of more innovative solutions and the flexibility of guidance for implementing luminance contrast across a range of transport infrastructure.

Implementation costs will only be incurred, and benefits achieved to the level that operators and providers implement guidance. Operators and providers can manage the implementation (and related costs) to suit their operational requirements, including staging the implementation.

The non-regulatory approach would help to address the lack of harmonisation between the disability standards sitting under the DDA, which is an essential element of the Transport Standards modernisation reform process.

Costs were not estimated as this reform was a definitional change, with no material cost implications.

Regulatory

The regulatory option would provide enhanced safety for people with vision or cognitive impairments while travelling or wayfinding. The likelihood of inadvertently striking an unseen or unperceived object will be diminished.

Transport owners and providers will have a rigorous and more achievable methodology for ensuring objects abutting access paths' meet the luminance contrast requirements with their backgrounds. However, operators and providers may face higher costs in adopting the new requirements if they have not already implemented appropriate luminance contrast requirements and measured their effectiveness.

The regulatory options would ensure the greater alignment amongst disability standards, specifically the Premises Standards, which has requirements for measuring and implementing luminance contrast. The inconsistency of the requirements for people with disability moving from conveyances and public transport infrastructure into premises compounds the safety and accessibility issue for people with disability.

The regulatory option received the most submission across all stakeholder groups. All disability stakeholders' submissions supported the regulatory option. Disability stakeholder argued that the provision of consistent luminance colour contrast requirements and measurements would result in improved navigation by people living with vision and/or cognitive impairments.

Government and industry stakeholders recognised the benefits of regulation for people with disability and they welcomed the clarity that regulation would provide for implementing and testing luminance contrast requirements. Another point raised in some of these submissions was the benefit of aligning luminance contrast requirements with building premises.

Most of the submissions from the government, industry, and some disability stakeholders, supported option 1 and sub-option 1. Sub-option 1 was the application of the luminance contrast requirements to access paths only. Broader application (option 2) was desirable but considered too complex to implement and public spaces were often outside of transport owners and provider jurisdiction. Stakeholders advised sub-option 1 was sufficiently prescriptive, but also allowed for flexible implementation, where necessary.

Some individuals living with disability and disability advocates supported option 2, which had a broader scope (into public spaces) and higher luminance contrast rates. The main reason for supporting this option was to maximise the benefits for people living with disability compared with the status quo. Several of these submissions noted the potential complexity of implementing the requirements in public space.

Costs were not estimated as this reform was a definitional change, with no material cost implications.

Preferred option

Informed by the outcomes of the consultation, impacts, cost and outcomes analysis above, the preferred option is **regulatory option 1, sub-option 1**.

Most government and industry stakeholders supported the preferred regulatory option and sub-option to improve outcomes for people with vision and cognitive impairments and to ensure consistency and clarity in meeting the objectives of the Transport Standards and ensure greater alignment with other disability standards.

While some disability stakeholders did support regulatory option 2, submissions demonstrated the complexity of implementing luminance contrast requirements in public spaces more broadly, in part due to the scope of the Transport Standards.

The definitional nature of the regulatory option and the aligning of requirements with existing practices in the NCC and the Premises Standards meant that the costs for implementing the preferred options were negligible.

The preferred option would address the navigation and safety issues associated with suboptimal implementation and measurement of luminance contrast solutions for people with vision and/or cognitive

Poles, objects and luminance contrast

impairment, and the preferred would be minor and clarifying for Transport owners and providers with little to no regulatory burden. This is because the reform area would not introduce new requirements or require upgrades to existing compliant infrastructure.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards prospectively. Although the existing requirements do not change, most government stakeholders suggested prospective implementation would be appropriate because of the existing complexity of accurately measuring and determining the appropriate background to measure against.

37. Lighting

Issue

The Transport Standards requirements for lighting do not provide adequate guidance for lighting designers to deliver appropriate lighting solutions for the diverse and nuanced needs of people with disability.

Lighting is essential to support safe movement and the ability carry out tasks necessary for people with disability to use public transport. Lighting requirements must also reflect the unique safety, contextual and operational requirements of the public transport environments.

The Transport Standards requirements ensure a light level (lux) is provided at various locations throughout public transport assets, but these requirements are not fit for purpose in the public transport context for all people with disability.

Collective government action to ensure lighting requirements are accessible and achievable and address key stakeholder issues raised through the Transport Standards review process and promote consistency with the Premises Standards.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 103: Reform options for lighting

Option	Description
Status Quo	<p>The Transport Standards will continue to provide provision for lighting that do not provide adequate requirements for lighting designers to deliver appropriate lighting solutions.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-Regulatory	<p>Guidance would be updated to include advice on lighting design within public transport environments, including a set of transport-specific technical guidelines.</p>
Regulatory	<p>The Transport Standards would be amended to ensure lighting requirements meet the unique safety, contextual and operational requirements of the public transport environments.</p> <p>There are 4 regulatory options that were consulted on.</p> <p>Guidance would be provided to reflect any new requirements.</p> <p>Option 1</p> <p>This option would require that lighting associated with a public transport facility be provided to a level appropriate to the location and to enable safe completion of tasks.</p> <p>Option 2</p> <p>This option would update Australian Standards requirements for elements specific to public transport environments.</p> <p>Option 3</p> <p>This option would update Australian Standards requirements for elements specific to public transport environments and include prescriptive requirements, specific to colour temperature.</p> <p>Option 4</p> <p>This option includes prescriptive lighting design requirements for elements within public transport environments.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 104: Benefit-cost ratios for lighting

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	116.1	-	21.8	21.8 ⁱ	5.33
Regulatory option 1	77.8	-	20.1	20.1 ⁱ	3.87
Regulatory option 2	155.5	-	29.0	29.0 ⁱ	5.36
Regulatory option 3	233.3	-	35.7	35.7 ⁱ	6.53
Regulatory option 4	311.0	-	46.3	46.3 ⁱ	6.72

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory option

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart, regulatory option 2, reflecting an assumed lower rate of compliance with the reform.

An estimated rate of uptake of 75 per cent was applied to the non-regulatory option based on submissions indicating the existing requirements for lighting are not fit for purpose and operators and providers will adopt the guidance into their internal standards. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory

The benefits and costs of these reform options were estimated from limited responses to the survey and publicly available data that were proxied to estimate compliance a national level. This means the benefits and costs may not be reflective of the extent of compliance.

Option 1 requires the lowest number of upgrades reflected in lower costs and benefits. Option 2 requires a higher number of upgrades compared to option 1, which is reflected in higher costs and benefits. Option 3 requires a higher number of upgrades compared to option 2, which results in higher costs and benefits. Option 4 requires the highest number of upgrades, which is reflected in the highest costs and benefits of all options.

Interdependencies

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as print size and format, timely provision of information and location of signs.

Lighting

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 105: Qualitative benefits for lighting

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	-	Yes	-	Yes	Yes	Yes
Regulatory option 1	-	Yes	-	Yes	Yes	Yes
Regulatory option 2	-	Yes	-	Yes	Yes	Yes
Regulatory option 3	-	Yes	-	Yes	Yes	Yes
Regulatory option 4	-	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

Since 2002, the Transport Standards requires a light level (lux) to be provided at various locations throughout public transport assets. Since these requirements were introduced, further research and standards investigations have clarified understanding of the impact of lightning temperature and uniformity, type of lights used and their placement, luminance contrast requirements, and the impacts of reflectivity and glare.

The status quo would mean these advancements in the understanding of the impact of lighting on people with disability would not be included in the Transport Standards.

The status quo received the least support in submissions. No government or disability stakeholders supported the status quo. One industry submission supported the status quo and stated that flexibility in implementing lighting solutions was the primary reason for maintaining the status quo.

The status quo option is unlikely to involve new costs to operators and providers and would not introduce additional regulatory burden or associated administrative costs. The Transport Standards would not include new information, which would accommodate the diverse and nuanced needs of people with disability.

Non-regulatory

The non-regulatory option would develop guidance for public transport owners and providers to design and implement improved lighting solutions across public transport assets. The main beneficiaries from improved lighting solutions would be people with low vision, people with mobility impairment, people with epilepsy, and people on the autism spectrum.

Improved guidance on lighting designs and solutions would result in people with disability experiencing enhanced confidence, comfort, and safety throughout their public transport journey. Improved designs and lighting solutions would benefit transport users more broadly, such as the elderly.

Lighting

The non-regulatory option is discretionary, and the impact of the non-regulatory options is dependent on the utilisation rate of the guidance. The discretionary nature of the non-regulatory option enables asset owners to prioritise areas within their assets that provide the most benefit. Retrofitting existing assets would incur financial costs, including additional lighting installations or modifications to existing lighting regimes. Costs may be incorporated into maintenance and upgrade schedules.

There were no submissions from disability stakeholders supporting the non-regulatory option. Government submissions in support stated that the regulatory option may be over-prescriptive, which may not achieve the desired outcomes and conflict with other public transport users' needs. A government submission stated they had reviewed and created their own guidance for lightning requirements across different mode of transport, and consequently regulation would be unnecessary.

Industry submissions raised their concern about prescriptive requirements and where those may interact with shared spaces. For example, where conveyances and buildings intersect with roads and public spaces, AS 1158.3.1 (2020) may have different requirements.

Regulatory

The regulatory options are designed to enhance confidence, comfort, and safety of people with disability throughout their public transport journey. Public transport owners and providers would have greater certainty in delivering fit-for-purpose lighting solutions in new transport projects, or when retrofitting sites.

The regulatory option had the most support of all the options. All disability stakeholders supported a regulatory option to meet their needs and to ensure safe and accessible public transport use. Most disability stakeholders preferred regulatory option 3, sub-option 1, which would include new Australian Standards requirements and additional prescriptive requirements for Transport infrastructure.

Lighting is as much about safety and the perception of safety as it is about wayfinding. All passengers benefit from the provision of lighting that eliminates shadows and hiding places to provide uniform and consistent ambient lighting. In addition, lighting that allows tasks to be performed where the task is required, such as reading text, boarding, or alighting should be superior to the ambient lighting of general areas and lighting should be appropriate to the task required

Queenslanders with Disability Network

Government stakeholder submissions stated they preferred a regulatory option, because building lighting requirements were not fit for purpose for transport infrastructure, such as areas with awnings, bus stops and tram stops. Government stakeholders told us regulation would ensure consistency and improve outcomes for people with disability. However, due to the complex nature and interactions with shared spaces, flexibility was important for them. Consequently, most government stakeholder supported regulation option 1, which was the removal of current requirements (deregulation) and the inclusion of guidance.

Industry stakeholders told us they were concerned about the consequences of overly prescriptive regulatory requirements and the interactions with other regulations and standards. Industry stakeholders were divided on which regulatory options they preferred. Industry submissions highlighted the benefits of deregulation option 1, option 3 for new Australian Standards requirements and additional prescriptive requirements for transport infrastructure, and option 4 for new prescriptive requirements.

Preferred option

Informed by the outcomes of the consultation, impacts, cost and outcomes analysis above, the preferred option is **regulatory option 1**.

Regulatory option 1 was considered to address the needs of disability stakeholders, who would benefit from improved safety and accessibility. The benefits would also flow through to the broader public. Removing the current requirements (deregulation) and moving to guidance would be less costly than the non-regulatory option. It is anticipated that maintaining the current requirements and working with new guidance may incur higher costs to resolve potential conflicts between legislated requirement and best practice guidance.

Lighting

Regulatory option 1 provides a balance between providing greater certainty, consistency and clarity, but would retain the flexibility in implementing lighting requirements across different modes of transport and across diverse asset holdings.

The reform does not change the existing requirements in schedule 1 of the Transport Standards. The schedule would continue to reference the need to comply with standards for lightning; however, this reform would provide a performance-based approach, which is more appropriate to address site specific lighting requirements.

The preferred option has the lowest costs but would achieve comparable benefits to the other options. The preferred option provides transport owners and providers greater certainty that they meet their responsibilities under the DDA.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards on commencement.

Part 4: Accessibility of boarding and alighting and egress of infrastructure

This Part includes the following reform areas:

38. Signals and process for requesting boarding devices
39. Notification by passenger of need for boarding device
40. Portable boarding ramp edge barriers
41. Boarding ramp and removable gangway definitions
42. Removable gangway design - ferries
43. Nominated assistance boarding points
44. Identification of lead stops
45. Pontoon boarding points on infrastructure
46. Bus, tram and light rail boarding points on infrastructure
47. Hail-and-ride boarding points on infrastructure
48. Accessible taxi ranks
49. Accessible passenger loading zones on-street
50. Accessible parking spaces in infrastructure off-street car parks

38. Signals and process for requesting boarding devices

Issue

People with disability require a means to communicate with public transport operators and providers about their need for boarding assistance. Existing requirements for signals or other processes for requesting boarding assistance in the Transport Standards are not sufficiently explicit, reference an outdated Australian Standard and may not meet the varying accessibility needs of people with disability. For example, people who are hearing impaired or deaf are at a disadvantage when communication systems require verbal interaction. If the system used to request a boarding device has a verbal component it is unlikely that deaf or hard of hearing passengers will be able to request a boarding device.

Collective government action would ensure boarding assistance is accessible to all passengers and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 106: Reform options for signals and process for requesting boarding devices

Option	Description
Status Quo	The Transport Standards requirements for signals and requesting boarding assistance would remain unclear and Australian Standards would be outdated. The Transport Standards would remain unchanged and no new or updated guidance would be issued.
Non-Regulatory	Guidance would be updated to include advice for practices for requesting boarding devices.
Regulatory	The Transport Standards would be amended to include requirements for signals and process for requesting boarding assistance that is located either in or on conveyances. Guidance would be provided to reflect any new requirements.

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 107: Benefit-cost ratios for signals and process for requesting boarding devices

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	0.5	-	21.6	21.6 ⁱ	0.02
Regulatory	203.2	-	134.6	134.6	1.51

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations

Non-regulatory option

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 75 per cent for new assets was applied to the non-regulatory option based on the low cost and complexity to implement the guidance, and submissions supporting its adoption from operators and providers of public transport. Existing assets are not expected to be upgraded, due to the high cost and complexity to undertake this work. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option

The benefits and costs for this reform were estimated from limited data provided through the survey and publicly available data proxied to understand compliance at a national level. This implies the benefits and costs may not reflect the full extent of existing and future compliance.

Interdependencies

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as nominated assistance boarding points.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 108: Qualitative benefits for signals and process for requesting boarding devices

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	Yes	Yes	-	-
Regulatory	Yes	Yes	Yes	Yes	-	-

Analysis of submissions

Status quo

Section 8.7 of the Transport Standards has generally been implemented by public transport operators and providers without difficulty. All of the conveyances listed provide devices that allow the signalling of the need for boarding devices. However, the section lacks specificity in relation to some performance requirements, which can prevent some people with disability from requesting a boarding device. The requirements also do not acknowledge face to face communication is often required to request a boarding device on platforms or in conveyances. The status quo would result in Section 8.7 remaining unchanged and no additional guidance would be provided.

Industry and government stakeholders were divided on their preferred approach in relation to this reform area; however, around 16 per cent of submissions (two submissions) from this stakeholder group expressed a preference for the status quo. One submission noted that this requirement should continue to not apply to aircraft. The other submission noted help points are available in all conveyances and staff are available at key stations and on-board services at key times. This submission further noted that additional help buttons in open areas is likely to result in ‘nuisance trips’ and impact service reliability.

Submissions from individuals, people with disability and disability organisations indicate that the status quo is not meeting the needs of people with disability. Submissions from these groups highlighted that boarding device request processes are not suitable for the deaf or those with hearing impairments and are often difficult to locate.

Submissions also noted that the existing systems often lack the flexibility required, that is available to other passengers.

But often, the existing systems, that depend on human interactions through direct assistance, lack the appropriate support or flexibility to support the community. If a person with disability wishes to change their destination, and therefore the station they require assistance, this should be available during the journey.

Queenslanders with Disability Network

The Public Transport Ombudsman in Victoria noted that boarding devices continue to be the subject of a number of complaints, highlighting that current arrangements may not be meeting the needs of people with disability. In its submission, the Ombudsman noted complaints often relate to how the device is used rather than the device itself. The submission noted this is particularly the case with bus services where drivers play a major role in both the delivery of the public transport service, as well as on the spot customer service. Operator training was noted as a major avenue through which accessible practices are developed and implemented and that one of the reasons for

Signals and process for requesting boarding devices

incidents that compromise the accessibility of a service is the failure or absence of formal practices that instruct staff when assisting passengers with a disability.

Under the status quo, the Transport Standards requirements for signals and processes for requesting boarding devices would continue to be outdated and not meet the needs of the disability community. Passengers who are hard of hearing or deaf may not be able to request a boarding device depending on the systems used. The status quo will continue to disadvantage and discriminate against people with disability, particularly those who are hearing impaired, when communication systems for requesting a boarding device require verbal interaction. Maintaining status quo does not enhance equality and independence, or reduce discrimination for people with disability in relation to public transport. The status quo has no on-going costs for public transports operators and providers, however negative impacts on community amenity, accessibility, and connection to community and place will remain.

Non-regulatory

The non-regulatory option would provide updated guidance to include advice on good practice for requesting boarding devices, including communication of the need for boarding and alighting assistance in real time (the time of need) rather than through prior booking, and highlight the importance of staff training for effective real time communication. Advice would also be provided on suitable and accessible locations for placing request signal devices, and situations where devices should be linked to hearing augmentation systems.

No submissions from individuals, people with disability or disability organisations expressed support for the non-regulatory option. Industry and government stakeholders were divided on their preferred approach in relation to this reform area; however, around 33 per cent expressed a preference for the non-regulatory option.

Two industry and government stakeholders who expressed support for the non-regulatory option noted the current requirements are fit for purpose. One submission noted there are minimal customer complaints regarding help points and call buttons, suggesting this is not an issue. Other submissions noted that additional guidance would be helpful. It was noted a non-regulatory option would provide flexibility and allow for innovative solutions to be developed that best meet the customers' needs and account for practical limitations faced by operators and providers. Submissions in support of the non-regulatory option also highlighted that some elements of the regulatory option, such as hearing loops for audio components, may not be achievable, or that significant costs would be involved in rewiring conveyances to implement the regulatory options presented.

To the extent that guidance is followed, costs would be incurred to upgrade systems to request boarding devices. One submission noted that new conveyances are likely to already comply with the requirement; however, there may be a need to retrofit any conveyances where existing controls do not meet the standards. These costs would vary with the number of affected controls. One submission indicated that retrofitting communication systems in existing assets is costly and challenging, estimating these costs to be in the tens of millions of dollars. The non-regulatory option would allow operators and providers to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation.

Given this option is discretionary, it does not provide certainty that guidance will be implemented. To the extent that guidance is followed, people with poor hand function who have found controls too hard to operate, and people who rely on hearing aids for verbal interaction, will benefit from implementation of the proposed guidance.

Regulatory

The regulatory option would amend the Transport Standards to include requirements for signal devices, and a process for requesting boarding assistance in real time. Two sub-options in relation to call and control buttons were presented. Sub-option 1 provides a discretionary option to include a continuously operating light on call and control buttons, whereas sub-option 2 made continuously operating lights mandatory.

All submissions from individuals, people with disability or disability organisations who expressed a preferred approach supported the regulatory option, with sub-option 2 being the most preferred sub-option for this stakeholder group. One submission highlighted that the use of 'should' and discretionary nature of sub-option 1 would allow transport operators to select the less accessible option.

A number of submissions from this stakeholder group outlined a number of concerns with the regulatory options presented. Two submissions noted the options continue to disadvantage the deaf and those who are non-verbal who must request assistance over a phone system. It was noted that for these passengers, their hearing may not be able to be augmented by a hearing loop system. These submissions outlined that until technology emerges that supports communication from Auslan to text / voice and vice versa it would be best if request systems were not solely reliant on verbal interaction. Another submission expressed disappointment that the regulatory options required passengers with disability to pre-book boarding assistance at stations that may be unstaffed when they wish to travel. This was viewed as discriminatory as it denied people with disability the same flexibility as other passengers. Suggestions were made that, ideally, these locations should have staff available at all times or have platforms which meet requirements for unassisted boarding. Alternatively, it was suggested vehicle drivers and guards must perform the task of providing boarding assistance.

Industry and government stakeholders were divided on their preferred approach in relation to this reform area; however, 50 per cent expressed a preference for a regulatory approach. Of these, all who expressed a preference for one of the sub-options selected sub-option 2 as the preferred sub-option. One submission outlined that consultation with people with disability indicates that not having a continuously operating light is a serious disadvantage and safety risk for people who are deaf. Submissions outlined that sub-option 2 provided consistency and certainty for customers and best addresses this risk.

A number of suggestions were made to clarify aspects of the proposed regulatory requirements. One submission outlined clarity is needed as the requirements may not be necessary for booked services where customer destination and assistance requirements are known well in advance of travel. Another submission suggested that the difference between physical and digital requirements also needed greater definition and clarity. One submission from industry did not support any of the proposed options but noted that a regulatory option would be supported if a third sub-option was available that provided for the surrounding area in a conveyance to be suitably illuminated to allow call buttons to be clearly visible. This submission noted that having multiple separately lit buttons as required in sub-options 1 and 2 would create reflection issues for drivers and would not provide an advantage in the passenger area inside a bus or coach where drivers have direct line of sight and communication with passengers.

Costs would be incurred to upgrade systems to request boarding devices. Where existing controls require excessive force to operate, or where verbal interaction is required to request the deployment of a boarding device, there may be a need to retrofit systems. One submission noted that the regulatory option would see operators and providers unaffected by any update for new conveyances as they would already comply with the requirement. However, there may be a need to retrofit any conveyances where existing controls do not meet the standards. One submission

estimated the costs of retrofitting communication systems in existing assets to be in the tens of millions of dollars. The submission recommended that the requirements should only apply to new assets. These costs would vary with the number of affected controls.

People who have poor hand function and who have found controls too hard to operate, and people who rely on hearing aids for verbal interaction will benefit from the requirements of the regulatory option.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **regulatory option with additional guidance**, with **sub-option 2** in relation to call and control buttons.

Noting AS1428.1 (2009) has now been superseded by AS1428.1 (2021), reference to AS1428.1 (2009) clause 13.5.3 and 13.5.4 will be updated with the equivalent clause reference in AS1428.1 (2021). There is no material change to the content of these updated Australian Standards clauses.

Submissions highlighted that current arrangements may not be meeting the needs of people with disability, indicating the need for a regulatory approach. Submissions noted a regulatory approach would deliver improvements for people with disability in requesting boarding assistance and sub-option 2 would ensure the greatest clarity and consistency.

Responding to concerns raised during consultation, updated guidance will stress that communication of the need for boarding and alighting assistance should be in real time (at the time of need) rather than through prior booking to ensure that people with disability have the same flexibility and amenity of travel as other passengers. Suggestions that were provided during consultation as a means to address situations where stations are unstaffed will also be included in guidance. For example, guidance will encourage transport operators and providers to have staff available or alternatively, vehicle drivers and guards could perform the task of providing boarding assistance.

While acknowledging concerns made in one submission regarding reflection concerns for bus drivers, no changes to the preferred option will be made in this regard. Noting the submission made by the Public Transport Ombudsman in Victoria indicating bus services are the subject of a number of complaints, the proposed requirements, in addition to staff training as recommended by the Ombudsman and provided by the updated guidance, are considered necessary to improve accessibility and address the issues presented by this reform area.

Concerns are acknowledged regarding the suitability of the proposed options for the deaf and those who are non-verbal who must request assistance over a help phone system. Part 34 of the Transport Standards provides for a review of the efficiency and effectiveness of the Transport Standards to be carried out every 5 years. The new requirements will be reviewed as part of the statutory review process if new technology emerges that supports non-verbal communication from Auslan to text / voice and vice versa.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism. This is to address operators and providers concerns about costly and challenging retrofitting of existing assets.

39. Notification by passenger of need for boarding device

Issue

Transport Standards Section 8.8 Notification by passenger of need for boarding device, includes specifications to enable passengers to notify operators and providers that they require a boarding device to board or alight from a conveyance. However, Section 8.8 does not specify requirements for advanced notice or booking for passengers needing access to a boarding device, and the requirements for passengers requesting boarding devices at infrastructure and in premises are conflated with the requirements relating to on board conveyances.

Collective government action would ensure boarding assistance is accessible to all passengers and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 109: Reform options for notification by passenger of need for boarding device

Option	Description
Status Quo	<p>The Transport Standards provisions will remain ambiguous of the requirement for advanced notice or booking by passengers to board or alight from a conveyance.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-regulatory	<p>Guidance would be updated to include advice for passenger notification of need for boarding device. There are 2 sub-options for consideration in relation to communication directly with staff or with automated systems:</p> <ol style="list-style-type: none"> 1. Communication of the need for boarding assistance in 'real time' for unbooked services that is at the time of need rather than through prior booking, is necessary if passengers with disabilities are to have the same flexibility and amenity of travel as other passengers 2. While some passengers who may need boarding assistance on unbooked services may choose to book the assistance, and operators may legitimately advise this, it should not be mandatory.
Regulatory	<p>The Transport Standards would be amended so passengers can communicate in real time their need for boarding assistance or a boarding device prior to boarding. Proposed amendments include:</p> <ul style="list-style-type: none"> • modes of communication with public transport staff • location of request signal device • for unbooked services, the need for prior booking (sub-option 1) or at unstaffed locations, the need to provide advanced notice (sub-option 2). • Two sub-options were presented for call and control buttons: <ol style="list-style-type: none"> 1. Call and control buttons should have an integral, continuously operating light. 2. Call and control buttons must have an integral, continuously operating light.

	Guidance would be provided to reflect any new requirements.
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Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 110: Benefit-cost ratios for notification by passenger of need for boarding device

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	0.0	-	10.3	10.3 ⁱ	0.00
Regulatory	79.8	-	71.1	71.1	1.12

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations:

Non-regulatory option:

The non-regulatory option had qualitative benefits, but there were no quantitative monetised benefits. This non-regulatory monetised benefit assumed a low take up rates for existing assets. The reform is dependent on the implementation of other reforms, such as nominated assistance at boarding points, to realise monetised benefits.

An estimated rate of uptake of 75% of new assets was applied to the non-regulatory option based on the low cost and complexity to implement the guidance, and submissions supporting its adoption from operators and providers of public transport. Existing assets are not expected to be upgraded, due to the high cost and complexity to undertake this work. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option:

The benefits and costs for this reform were estimated from publicly available data to proxy the need for boarding devices at a national level implying this reform might not reflect the full extent of national compliance.

Notification by passenger of need for boarding device

Interdependencies:

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as nominated assistance boarding points.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 111: Qualitative benefits for notification by passenger of need for boarding device

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	Yes
Regulatory	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

Maintaining the status quo would not clarify the need for passengers to have flexible options when notifying operators and providers of a need for a boarding device. Feedback provided during consultation highlighted that this may result in people who are required to book assistance in advance on unbooked services being discriminated against.

I am pretty scared to get train transport because I am on the train and it will stop when I am disembarking and there is no way I can tell them I am here with the gap if that happens. It is not that I am fragile but I have ear tremors and so I have no balance and so I cannot step over that. On the bus, I can ask them to stop for long enough but they never put the ramp out on the bus.

Community workshop participant.

Three of five submissions from industry and one of seven submissions from government supported the status quo option. Both submissions noted the role of direct assistance in supporting passengers, for example through the deployment of boarding ramps and other assistance as requested. One submission noted this system works effectively, particularly in fast-paced environments such as bus services with short dwell times. The Bus Industry Confederation noted in their submission that the proposed requirements should not apply to bus and coach services, as signal devices are not used in conveyances as the driver has a direct line of sight with all passengers who are waiting to board the conveyance. This was noted as meeting compliance with Transport Standards Section 8.8.1.

Maintaining the status quo would incur no additional costs to operators and providers.

Non-regulatory

The majority of submissions from government and one submission from industry supported the non-regulatory option. Submissions broadly agreed that all passengers, including people with disability, should be able to travel freely on unbooked services on any site without giving advanced notice. Multiple submissions from government highlighted existing internal policies relating to accessible help points and passenger communication devices, which work effectively to support passengers when requesting boarding assistance. One submission from government noted that in their experience passengers report minimal issues using these facilities, and therefore suggested regulatory amendment may be unnecessary.

Additionally, several submissions from industry and government noted that for certain service types, including ferries and buses, direct assistance works effectively to support passengers who request boarding devices. These submissions highlighted that the proposed requirement for requesting signal devices to be installed at all locations may present significant operational and technical challenges which may not result in tangible benefits to passengers – particularly if requirements are introduced retrospectively – and may be cost prohibitive. These challenges would be particularly complex at unmanned infrastructure, such as suburban bus stops. For this reason, submissions supported the non-regulatory option, outlining the value of additional guidance material to support the installation of devices where appropriate and highlight potential technological innovations to increase options for passengers.

However, a non-regulatory approach would allow for innovative solutions to be developed that best meet the customers' needs and account for practical limitations faced by operators and providers. In particular, flexibility may be needed depending upon the location and the needs of the users. Currently, staff assist people to board ferry vessels from ferry terminals.

Brisbane City Council

Similarly, two submissions from industry and government suggested that further clarity should be provided to define what 'communication in real time' relates to in the context of the proposal to avoid misinterpretation and misapplication of the requirement. Two submissions supported sub-option 1 and one submission supported sub-option 2.

Regulatory

All submissions from individuals, people with disability and disability organisations supported the regulatory option. Several submissions noted the importance of passengers who require boarding assistance being able to request assistance through multiple avenues. One submission from a disability organisation highlighted that although direct assistance provisions allow passengers to request boarding assistance, this may not be an optimal outcome for all, and may result in heightened anxiety and staff may not always be adequately trained to support people with disability. One submission from a disability organisation noted that the technology required to implement the proposed requirements is mature, however, there may be challenges relating to the provision of staff.

The ability to have clear communication with staff while riding public transport can take away a significant amount of anxiety. This anxiety can come from wondering if it is suitable for you such as making sure you are visible and the driver stops to help you on with a ramp.

Community discussion board participant

The disability sector provided mixed support for the proposed sub-options relating to requirements for advanced notice booking. The majority of submissions supported sub-option 1, as the proposal promotes a better outcome for people with disability. All submissions from the disability sector supported sub-option 2 for the proposal regarding call and control buttons.

One submission from industry supported the regulatory option, noting that the regulatory proposal aligns with current internal practices. The submission emphasised the importance of direct assistance to support passengers requiring boarding assistance for unbooked services. For this reason, the submission supported sub-option 1 for requirements relating to advanced notice booking.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is the **non-regulatory option, sub-option 1**.

There was general agreement throughout consultations that passengers, including people with disability, should be able to travel freely on unbooked services on any site without giving advanced notice. The majority of submissions from industry and government supported either the status quo or non-regulatory options, while all submissions from the disability sector supported the regulatory option.

The non-regulatory option provides clear guidance to support operators and providers to meet the needs of passengers. Although the regulatory option may provide a greater level of consistency across services, the non-regulatory option preserves necessary flexibility to account for practical limitations experienced at some locations where the installation of technology may not be feasible. The non-regulatory option also allows for direct assistance where necessary, but should be complemented with additional staff training to ensure public transport staff are equipped to support passengers when boarding.

The preferred option will be implemented through inclusion in revised Transport Standards Guidelines. This will provide clarity and additional information to operators and providers on how the existing requirements in the Transport Standards can be met.

40. Portable boarding ramp edge barriers

Issue

Provision of safer boarding ramps across modes of transport may improve safety outcomes by reducing slips, trips or falls for people with disability. Transport Standards requirements for portable boarding ramps to have edge barriers are not clearly detailed. Without an edge barrier people may misjudge and come off the side of a boarding ramp, resulting in injury. Provision of safer boarding ramps across modes of transport may improve safety outcomes by reducing slips, trips or falls for people with disability. This poses a particular risk to the safety and confidence of people who use mobility aids or are blind or vision impaired when travelling on public transport.

Collective government action would ensure boarding ramps are safe for people with disability to use and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 112: Reform options for portable boarding ramp edge barriers

Option	Description
Status Quo	<p>The Transport Standards will continue not to specify the need for edge barriers on portable boarding ramps.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-Regulatory	<p>Guidance would be updated to include advice for edge barriers on portable boarding ramps, including recommended ramp edge height, and ramp edge design, including shape and contrast.</p>
Regulatory	<p>The Transport Standards would be amended to include requirements in relation to the height and shape of edge barriers on portable boarding ramps. These requirements would pertain to buses (except dedicated school buses), trains, trams and light rail. Three regulatory options were presented for consultation.</p> <p>Option 1</p> <p>Must have vertical edge barriers of a safe height above the ramp surface on both sides.</p> <p>Option 2</p> <p>Must have vertical edge barriers 65 to 75 millimetres above the ramp surface on both sides.</p> <p>Option 3</p> <p>Must have vertical edge barriers 75 millimetres above the ramp surface and must comply with the relevant Australian Standard.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 113: Benefit-cost ratios for portable boarding ramp edge barriers

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	37.8	-	40.3	40.3 ⁱ	0.94
Regulatory options	159.7	-	90.5	90.5	1.77

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations:

Non-regulatory option:

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 75 per cent was applied to the non-regulatory option based on the low cost and complexity of procuring portable boarding ramps with edge barriers, and the strong support for this additional safety requirement in submissions from operators and providers. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory options:

Approximately 35 per cent of existing portable boarding ramps have been assumed to not be compliant and the safety and experience of all public transport users would be improved, resulting in relatively higher benefits than costs. The benefits and costs for this reform were estimated from publicly available data on the number of conveyances supplemented by data from survey. These data points were proxied to estimate compliance at a national level.

Interdependencies:

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as removable gangway design, pontoon boarding points.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 114: Qualitative benefits for portable boarding ramp edge barriers

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	Yes	Yes	Yes	-
Regulatory	Yes	Yes	Yes	Yes	Yes	-

Analysis of submissions

Status quo

Section 6.2 Boarding ramps of the Transport Standards does not specify the need for edge barriers on portable boarding ramps. While section 6.2 references AS/NZS3856.1 (1998) Hoists and ramps for people with disabilities, this Australian Standard only requires edge barriers on portable boarding ramps when the ramp’s vertical rise is greater than 400 millimetres.

A vertical rise of 400 millimetres on a boarding ramp is rarely encountered while boarding conveyances. Edge barriers are still important for ramps with a vertical rise less than 400 millimetres.

We support the inclusion of ramp barriers on all portable ramps regardless of the vertical rise, since it is always possible for passengers using assistive mobility devices to misjudge when navigating, which could result in the passenger coming off the side of a ramp and experiencing injury.

Physical Disability Council of NSW

Submissions from individuals, people with disability and disability organisations outlined the importance of edge barriers on boarding ramps as safety features, particularly for people who use mobility aids, and people who are blind or vision impaired. No submissions from individuals, people with disability or disability organisations supported maintaining the status quo.

One submission from industry supported the status quo, outlining that this option considered the unique characteristics of aircraft. The status quo option was also supported in one submission from government, which stated that edge barriers are already provided on all boarding ramps and additional guidance was not necessary.

However, consultation findings indicate that the use of edge barriers on boarding ramps is not consistent and that the absence of edge barriers on ramps poses a safety risk when boarding and disembarking conveyances. Maintaining the status quo does not enhance equality and independence, or reduce discrimination for people with disability in relation to public transport. The status quo has no ongoing costs for public transports operators and providers; however, negative impacts on community amenity, accessibility, and safety will remain.

Non-regulatory

The non-regulatory option would update The Whole Journey Guide to include advice for edge barriers on portable boarding ramps.

Portable boarding ramp edge barriers

One submission from government supported the non-regulatory option, citing concerns regarding mandatory edge barrier specifications and associated costs for replacing existing ramps to meet any new requirements and costs to retrofit assets, particularly where ramps are stored within conveyances or existing spaces within infrastructure. Staff safety was also raised as an additional concern associated with the storage of boarding ramps. This submission also noted there was little evidence of customer incidents to support the redesign of existing ramps.

One submission from industry also supported the non-regulatory option. The submission noted the non-regulatory option refers only to 'portable boarding ramps', while the three regulatory options presented refer to 'all portable ramps that are not fixed to conveyances.' This stakeholder outlined that they do not provide or operate ramps for routine boarding or disembarking their conveyances, but that exit ramps were provided for emergency situations and unplanned operational disruptions. This submission questioned whether any new regulatory requirements would apply to these ramps.

To the extent that guidance is followed, costs would be incurred by operators who update their portable boarding ramps depending on the option adopted. Submissions indicate costs may be more significant where large scale design, fit-out and modification to existing storage in conveyances or assets may be required. Under the non-regulatory option, operators and providers will be able to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation.

Given this option is discretionary, it does not provide certainty that guidance will be implemented which may reduce confidence of passengers to travel if they are unable to safely traverse boarding ramps. To the extent that guidance is followed, people with disability who use boarding ramps will benefit from greater passenger safety and confidence from the protection offered by edge barriers.

Regulatory

The regulatory approach would amend section 6.2 Boarding ramps of the Transport Standards to include requirements regarding the height of edge barriers. The majority of submissions, across all stakeholder groups, supported a regulatory approach. Three options were proposed for consideration.

All submissions from individuals, people with disability and disability organisations supported a regulatory approach, with option 3 being the preferred option. Option 3 sets a perspective requirement for edge barrier heights as per AS3856.1 (2021), clause 7.1 (b). Submissions noted this option, which cites the current Australian Standard for vehicle boarding ramps, would have little impact to providers as it reflects current industry standards, and would provide the best outcome for safe access for people who are blind or vision impaired. One government submission also supported option 3, noting it promotes safety, inclusion and consistency. However, other submissions from a government and industry stakeholder raised concerns about the ability to comply with the required 75mm edge barrier height specified by the Australian Standards referenced in option 3, including the challenges it may present regarding onboard storage spaces, or that the option relies upon an Australian Standard reference that could be superseded or withdrawn.

Options 1 and 2 were the preferred options for government and industry stakeholders who supported a regulatory approach. Regulatory option 1 was only marginally preferred over regulatory option 2. Submissions that expressed support for option 1, noted it would see an improvement to safety and accessibility, while being feasible to implement as it allowed flexibility for operators and providers to work within existing storage spaces of conveyance fleets and infrastructure. Option 1 sets a performance-based standard requiring vertical edge barriers to be a 'safe height' above the ramp surface. One submission suggested option 1 be refined to make clear

the requirement would apply to portable boarding ramps only. One submission that supported option 2, expressed concerns about the lack of specific height requirements for the edge barrier under option 1. This submission noted it would leave the requirement open to interpretation and may create a variation in edge barrier heights and safety. Those who supported option 2 outlined that it provides clarity and the most 'future proofed' option, while improving safety and confidence for people with disability. Option 2 sets a prescriptive requirement for edge barrier heights. One submission noted option 2 provides for an edge barrier height range (65 to 75 millimetres) which allows for some flexibility.

While government and industry stakeholders acknowledged a regulatory approach would ensure consistency across networks and jurisdictions, a number of submissions expressed concerns regarding safety risks for staff providing boarding assistance using portable ramps, and concerns regarding folding and stowing boarding ramps with edge barriers, particularly on conveyances. One government submission suggested clarification or additional guidance regarding the safety and importance of having an edge barrier on two sides of a ramp.

Operators who deploy ramps that have no edge barrier or an edge barrier that does not meet the requirements would be required to update their portable boarding ramp stock depending on the option adopted. Updating ramps will incur a cost. Submissions indicate costs may be more significant where large scale design, fit-out and modification to existing storage in conveyances or assets may be required.

Implementation of a regulatory option will provide greater consistency across jurisdictions, and operators and providers. Passengers would also benefit from greater certainty on services across public transport. People with disability who use boarding ramps will benefit from greater passenger safety and confidence from the protection offered by edge barriers.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is **regulatory option 2**.

The majority of submissions, across all stakeholder groups, supported a regulatory approach. A regulatory approach would ensure greater consistency across networks and jurisdictions, and address the omission of explicit requirements in the Transport Standards regarding edge ramps on portable boarding devices. People with disability who use boarding ramps will benefit from greater passenger safety and confidence from the protection offered by edge barriers. While regulatory option 3 was the preferred option amongst individuals, people with disability and disability organisations and regulatory option 1 was the preferred option from government and industry stakeholders, regulatory option 2 provides a prescriptive requirement, while still allowing for some flexibility.

Concerns were raised that option 1 was open to interpretation and created too much flexibility. While acknowledging that this option allows flexibility for operators and providers to work within existing storage spaces of conveyance fleets and infrastructure, this option also presents challenges. Option 1 is not be the best option to achieve the objects of the reform in creating certainty, both from a legal and service provision perspective, and is unlikely to achieve the best outcomes for people with disability. In comparison, option 3 stipulates clear requirements for edge barrier heights and aligns with current Australian Standards. However, submissions highlighted that the edge barrier height specifications may not be suitable or achievable when considering the design and space constraints of transport assets and infrastructure, in particular, a number of submissions from industry and government noted it may present challenges for onboard storage spaces.

Portable boarding ramp edge barriers

Regulatory option 2 may present similar storage challenges; however, it provides clear requirements to limit variations in the edge barrier heights employed by operators and providers, while allowing some flexibility to work within existing storage spaces constraints within conveyance fleets and infrastructure. This option responds to the needs of people with disability, focusing on accessibility and safety, while meeting the needs of all stakeholders by providing certainty and consistency in boarding ramp design. This option also ensures the Transport Standards remain contemporaneous by avoiding the need to reference Australian Standards which may be superseded in the future.

Costs will be incurred in updating any ramps that are not compliant if the preferred option is adopted, however, as the life span of a boarding ramp is limited, the new Transport Standards requirements will be implemented prospectively and only apply to new boarding ramps. This will address concerns of stakeholders regarding the costs associated with replacing existing ramps to meet any new requirements.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism.

41. Boarding ramp and removable gangway definitions

Issue

The Transport Standards do not differentiate between vehicle boarding ramps and removable gangways. Vehicle boarding ramps are operated in a static onshore environment and removable gangways for vessels are operated in a dynamic marine environment; however, removable gangways do not have distinct accessibility requirements in the Transport Standards. This is a risk for people with disability, as removable gangways may not be built fit for purpose with safety and support features to suit the environment.

Collective government action would ensure requirements for boarding are clear to public transport operators and providers and address key stakeholder issues raised through the Transport Standards review process.

This reform does not include design specifications for removable gangways. This issue is covered in Reform 42: Removable gangway design - ferries.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 115: Reform options for Boarding ramp and removable gangway definitions

Option	Description
Status Quo	The Transport Standards will continue not to differentiate between vehicle boarding ramps and removable gangways. The Transport Standards would remain unchanged and no new or updated guidance would be issued.
Non-regulatory	Guidance would be included that provides distinction between vehicle boarding ramps and removable gangways.
Regulatory	The Transport Standards would be updated to include new definitions for boarding ramps and removable gangways. Guidance would be provided to reflect any new requirements.

Cost benefit analysis

Quantitative and qualitative assessment

This assessment included a high-level summary of the definitional reform and potential impacts for defining boarding ramps and removable gangways.

This is one of the six reforms categorised as definitional, which improves consistency and clarification of certain definitional terms and are considered minor and clarifying for providers, operators or manufacturers. As such, there are limited, or no costs and monetised benefits associated with these definitional reforms.

There are identified non-monetised benefits for people with disability associated with definitional reforms. These qualitative benefits improve outcomes for people with disability and are important for decision-makers to consider, in addition to the monetised costs and benefits.

Analysis of submissions

Status quo

Under the status quo option the Transport Standards would continue to be silent on the difference between removable gangways and boarding ramps. The current requirements for boarding ramps are suitable for a static environment applicable to conveyances such as trains and buses. No submissions received during the public consultation period supported the status quo option.

Submissions outlined that a distinction was required between the two terms. This would allow proper differentiation of the two different devices, with the defining characteristics that are necessary to ensure the amenity, convenience and safety of people with disability, in the environment in which the devices are deployed.

Both the ferry deck and pontoon boarding points may be rising and falling vertically while the ferry is simultaneously moving laterally. As a result, removable gangways must be able to maintain two points of contact on moving pontoons and ferry decks. They must also accommodate lateral movement of the ferry to and from the pontoon. This cannot be achieved with a flat boarding ramp as required by the Transport Standards and the specifications in AS/NZS3856.1 (1998). A convex profile is required. Further, removable gangways are always longer than the 1520 millimetre maximum permitted for boarding ramps as outlined in section 6.4(b) of the Transport Standards. Removable gangways necessarily exceed these specifications to achieve a safe overlap of both decks due to the risk posed by lateral movement of the ferry while berthed.

The definitional distinction between boarding ramps and removable gangways is important because the circumstances in which boarding ramps are used are quite different, and present different challenges for people with a disability, from those in which removable gangways are used – a train or bus operates in a completely different environment from a ferry.

Vision Australia

Under the status quo there would continue to be a lack of clarity in regards to the difference between removable gangways and boarding ramps in the Transport Standards, and operators and providers may continue to be unable to comply with the technical requirements. The status quo will continue to pose a risk to the safety, amenity and confidence of all people while boarding or alighting if removable gangways are not differentiated from boarding ramps and continue to have design, safety and support features that are not suited to the environment in which they are used. The risk of both falls and injury are greater for people with disability. The status quo has no ongoing costs for public transport operators and providers, however negative impacts on community amenity, accessibility, and safety are high.

Non-regulatory

The non-regulatory option would provide guidance distinguishing between vehicle boarding ramps and removable gangways.

Industry and government stakeholders were divided on whether they supported the regulatory or non-regulatory option. Industry and government stakeholders who expressed support for the non-regulatory option noted that it would provide guidance on the design specifications for removable gangways and flexibility for operators and providers to manage the implementation and associated

Boarding ramp and removable gangway definitions

costs to suit their operational requirements. One submission considered that there was already sufficient industry regulation and adequate distinction between gangways and boarding ramps through the National Standard for Commercial Vessels (NSCV) and that further regulation through the Transport Standards was not necessary.

The non-regulatory option would provide greater guidance and clarity on the difference between removable gangways and boarding ramps, however, the current requirements in the Transport Standards would remain. Without differentiating the terms in the Transport Standards, there would continue to be a lack of clarity. Operators and providers may continue to face uncertainty of their obligations and be unable to comply with the requirements of the Transport Standards for ferries, as the current specifications for boarding ramps will continue to be unsuited to the marine environment in which they are deployed.

To the extent that guidance is followed, operators and providers may incur some costs to audit and upgrade or replace boarding ramps and gangways in line with the definitional guidance distinguishing removable gangways and boarding ramps. Operators and providers would be able to manage these costs to suit their operational requirements, including through staging the implementation. Given this option is discretionary, it does not provide certainty that guidance will be implemented. Benefits may be achieved to the extent that operators and providers implement any changes to services, in line with the definitional changes. People with disability may experience an improvement in the safety of the devices in service.

Regulatory

The regulatory option would amend the Transport Standards to include new definitions for boarding ramps and removable gangways.

The regulatory option was the preferred option for all individuals, people with disability and disability organisations. The regulatory option was supported as it recognises the clear distinction in operating environment between vehicle boarding ramps and removable gangways, to ensure gangways have the necessary design and safety features suited to the dynamic marine environment. One submission noted that conflating the two terms makes it more difficult to define the characteristics that are necessary for the amenity, convenience and safety of people with a disability.

Industry and government stakeholders were divided on whether they supported the regulatory or non-regulatory option. Industry and government stakeholders who expressed support for the regulatory option highlighted that it promoted consistency and greater clarity to support the design process. One submission also noted there would be no challenges to implement the regulatory option.

Another submission from a government stakeholder who did not express a preference for any of the options presented, outlined that if a regulatory approach is selected and developed effectively, it could assist with ensuring consistency across networks of multiple jurisdictions, providing clear guidance for operators and providers, and minimum requirements to ensure user safety. However, the submission highlighted that consideration should be given to the possibility that there is no one-size-fits-all solution. This submission noted a number of factors influence boarding accessibility and gangway slope and stability, including the level of fuel, water and waste water; wave action during boarding activity; and the number and distribution of passengers onboard. The submission recommended guidance which includes tolerances that recognise the dynamic marine environment.

This reform involves proposed definitional change to the Transport Standards. As there are no changes to assets, no costs would be incurred in adopting the regulatory approach. However, operators and providers may incur some cost if they choose to audit and upgrade or replace

Boarding ramp and removable gangway definitions

boarding ramps and gangways in line with the definitional guidance distinguishing removable gangways and boarding ramps. The regulatory option would provide greater guidance and clarity, and remove uncertainty in the Transport Standards on the difference between removable gangways and boarding ramps. Benefits may be achieved to the extent that operators and providers implement any changes to services, in line with the definitional changes. People with disability may experience an improvement in the safety of the devices in service.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is the **regulatory option**.

This option will provide clarity to the Transport Standards by providing a definitional distinction between removable gangways and boarding ramps. This will provide operators and providers greater compliance certainty in meeting existing technical requirements relating to boarding ramps, which remain unsuited and unfeasible to meet in the marine environment in which removable gangways are deployed.

This reform involves proposed definitional change to the Transport Standards. As there are no changes to assets, no costs would be incurred adopting the regulatory approach. The definitional change to the Transport Standards would apply on commencement.

42. Removable gangway design – ferries

Issue

As there is currently no differentiation in the Transport Standards between vehicle boarding ramps and removable gangways for vessels, the specifications for removable gangways are not fit for purpose with safety and support features to reflect a dynamic operating marine environment. This is a risk for people with disability due to the risk of falling into the water while boarding or alighting.

Collective government action would ensure requirements for boarding are clear to public transport operators and providers and ensure all passengers can access services without discrimination, and would address key stakeholder issues raised through the Transport Standards review process.

This reform does not include how removable gangways and boarding ramps are defined in the Transport Standards. This issue is covered in Reform 41: Boarding ramp and removable gangway definitions.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 116: Reform options for removable gangway design – ferries

Option	Description
Status Quo	<p>The Transport Standards will continue not to differentiate between vehicle boarding ramps and removable gangways for vessels.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-regulatory	<p>Guidance would be updated to include advice on removable gangways, including, but not limited to:</p> <ul style="list-style-type: none"> removable gangway design, including dimensions, grabrail and contrast recommendations maximum gradient for independent access luminance contrast recommendations bilateral handrails and edge barriers (kerbs) on removable gangways
Regulatory	<p>The Transport Standards would be amended to include requirements for the design and construction of removable gangways, including profile, luminance contrast, and handrails. These requirements would pertain to ferries and pontoon wharves.</p> <p>The Whole Journey Guide would be updated to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 117: Benefit-cost ratios for removable gangway design – ferries

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	-	-	-	-	-
Regulatory	0.8	-	1.0	1.0	0.87

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

Considerations to note in interpreting analysis

Limitations:

Non-regulatory option:

There are no costs and benefits associated with the non-regulatory reform. The compliance rate defined by the Department reflects an assumption that the guidance aligns with current industry practice.

Regulatory option:

The benefits and costs for this reform were estimated from publicly available data on the number of ferries and survey data. This identified a small number of ferries not compliant at a national level which may not reflect the full extent of existing and future compliance.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 118: Qualitative benefits for removable gangway design – ferries

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	Yes	Yes	Yes	-
Regulatory	-	-	-	-	-	-

Analysis of submissions

Status quo

Under the status quo option the Transport Standards would continue to be silent on separate design specifications for removable gangways. The current requirements are suitable for a static

environment applicable to conveyances such as trains and buses. Under the status quo operators and providers may continue to be unable to comply with the requirement for ferries, or specifications for gangway design for ferries will continue to be unsuited to the dynamic operating marine environment in which they are deployed, creating a safety risk for passengers. No submissions received during the public consultation period supported the status quo option.

Both ferry deck and pontoon boarding points may be rising and falling vertically while the ferry is simultaneously moving laterally. As a result, removable gangways must be able to maintain two points of contact on moving pontoons and ferry decks. They must also accommodate lateral movement of the ferry to and from the pontoon. This cannot be achieved with a flat boarding ramp suited to buses and trains. A convex profile is required. Further, removable gangways are always longer than the 1520 millimetre maximum permitted for boarding ramps as outlined in section 6.4(b) of the Transport Standards. Removable gangways necessarily exceed these specifications to achieve a safe overlap of both decks due to the risk posed by lateral movement of the ferry while berthed.

It's clear that the provisions of the Transport Standards as they currently stand do not reflect best practice design and safety for people with disabilities. The Standards need to reflect practical requirements around safety of passengers, including the need for sufficient overlap of the gangplank over both decks and the provision of bilateral handrails and edge barriers.

Physical Disability Council of NSW

Submissions outlined that change from the status quo is required to ensure the two different devices (boarding ramps and gangways) have the characteristics that are necessary for the environment in which they are used, to ensure the amenity, convenience and safety of people with disability.

Under the status quo there would continue to be a lack of clarity in regards to the difference between removable gangways and boarding ramps in the Transport Standards and operators and providers may continue to be unable to comply with the technical requirements. The status quo will continue to pose a risk to the safety, amenity and confidence of all people while boarding or alighting if removable gangways do not have the necessary design, safety and support features that suit the environment in which they are used. The risk of both falls and injury are greater for people with disability. The status quo has no on-going costs for public transports operators and providers, however, negative impacts on community amenity, accessibility, and safety will remain.

Non-regulatory

The non-regulatory option would provide updated guidance on removable gangways, including advice regarding gangway design and adopting requirements in the NSCV.

No submissions from individuals, people with disability or disability organisations expressed support for the non-regulatory option. Industry and government stakeholders were divided on whether they supported the regulatory or non-regulatory option. One government stakeholder who expressed support for the non-regulatory option noted that it would provide flexibility for operators and providers to address the difficulties in interfacing varying vessel and jetty infrastructure design. Another submission considered that there was already sufficient industry regulation and requirements under the NSCV and that further regulation through the Transport Standards was not necessary. This submission noted that further regulation in the Transport Standards may cause conflicting requirements, particularly regarding handrail specifications referenced in AS1428.1 (2009), or inconsistencies in industry regulations in the future if the NSCV is amended. This submission recommended that guidance be included regarding the safe deployment of gangways through the addition of '*a gangway should be mechanically secured at the upper end.*'

To the extent that guidance is followed, operators and providers may incur some cost to audit and upgrade or replace boarding ramps and gangways in line with the recommended specifications, including installing or replacing handrails, and installing contrasting handrails and contrasting strips at the entry points of the gangway. However, operators and providers are already required to comply with the NSCV and operators whose gangways already have these features will be unaffected. Operators and providers would be able to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation.

Given this option is discretionary, it does not provide certainty that guidance will be implemented. To the extent that guidance is followed, the non-regulatory option would provide greater guidance and clarity on the different specifications required for the dynamic marine environment in which removable gangways are deployed and would align with current industry standards and requirements for gangway design in the NSCV. Passengers would benefit from handrails and leading edges with improved luminance contrast. This will enhance safety for all passengers, particularly those with vision impairment, by reducing incident such as slips, trips and falls. This may also improve passenger confidence and increase patronage.

Regulatory

The regulatory option would amend the Transport Standards to include design specifications for removable gangways, including compliance with the National Standard for Commercial Vessels and handrail design specifications referenced in AS1428.1 (2009).

The regulatory option was the preferred option for all individuals, people with disability and disability organisations. These submissions highlighted particular safety concerns for wheelchair users and ambulant passengers who have balance or vision impairments, if the requirements for boarding ramps outlined in the Transport Standards are used in the design of removable gangways.

One submission raised concerns that a 30 per cent luminance contrast with surfaces on which gangways are deployed is considered insufficient for people who are blind or vision impaired. This is a recurring concern where luminance contrast is an element of a reform area. The submission stressed that further consultation and evidence is needed before a final decision is made for this area of reform, particularly when considered in the dynamic environment of a ferry.

Industry and government stakeholders were divided on whether they supported the regulatory or non-regulatory option. One government stakeholder who expressed support for the regulatory option acknowledged they did not operate a passenger ferry service, however, noted the regulatory option should ensure clarity around requirements for public transport gangways. The other government stakeholder who expressed support for the regulatory option noted their current arrangements are already similar to the proposed regulatory approach so the change would likely result in minimal impact to current planning and delivery. This submission did note however, that increased weight requirements under regulatory options may result in manual handling risks and operational delays.

Another government submission that did not express a preference for any of the options presented, outlined that if a regulatory approach is selected and developed effectively it could assist with ensuring consistency across networks of multiple jurisdictions, providing clear guidance for operators and providers, and minimum requirements to ensure user safety. However, the submission highlighted that consideration should be given to the possibility that there is no one-size-fits-all solution. The submission recommended that the Transport Standards need to clarify the distinction between gangplanks and gangways (static and articulated) and that incorporating safety barriers onto gangplanks should be considered. It was also noted that small marine facilities are not able to support an articulated gangway, presenting a challenge to operators and providers.

The regulatory option would provide greater guidance and clarity on the different specifications required for the dynamic marine environment in which removable gangways are deployed. Operators and providers may incur some cost to audit and upgrade or replace boarding ramps and gangways in line with the recommended specifications. Since the release of the Consultation RIS, the Australian Maritime Safety Authority (AMSA) has commenced a full review of NSCV Part C1 Standards. The proposed amendments include reforms to provisions that currently regulate the design of removable gangways, including design specifications intended to improve the safety and accessibility of removable gangways for people with disability. As the proposed amendments to the NSCV are performance based, operators whose gangways align with current industry standards and requirements for gangway design are unlikely to be affected. Some extra costs on the current standard product may be imposed by the need to have contrasting strips at the entry points to the gangway and contrasting handrails where gangways do not already have these features.

By defining removable gangways distinct from boarding ramps, currently safe and fit for purpose gangways would be made compliant with the Transport Standards. Implementation of the regulatory option will improve unassisted access and accessibility for people with disability on removable gangways. Installing luminance contrasting handrails and leading edges will enhance safety for vision impairment and reduce incidents such as slips, trips and falls. This may also improve passenger confidence and increase patronage.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is to support a **regulatory option in-principle, with further consultation, investigation and research recommended** to develop revised options.

The majority of stakeholders supported a regulatory approach for this reform area. Consultation demonstrated that the inclusion of new requirements to improve safety, and provide greater guidance and clarity on the different specifications required for the dynamic marine environment in which removable gangways are deployed, is welcomed by all stakeholder groups.

The regulatory option presented in the Consultation RIS includes requirements to comply with the NSCV Part C1 (Design and construction - Arrangement, accommodation and personal safety) standards. Since the release of the Consultation RIS, the AMSA has commenced a full review of NSCV Part C1 Standards. The proposed amendments include reforms to provisions that currently regulate the design of removable gangways, including design specifications intended to improve the safety and accessibility of removable gangways for people with disability.

As the regulatory option proposed adopting NSCV requirements and these are going to be amended, there is a risk that the adoption of this option will not result in the expected benefits many stakeholders anticipated, undermining the reforms. For this reason, this Decision RIS proposes the establishment of a working group consisting of disability community representatives, subject matter experts, public transport operators and providers and governments. Further consultation with community representatives and subject matter experts is required to develop a revised regulatory option for reform to address this issue.

While the revised option is being developed, clarity will be provided in the Transport Standards through the definitional distinction between removable gangways and boarding ramps in reform area 41. This will provide operators and providers greater compliance certainty in meeting existing technical requirements relating to boarding ramps, which remain unsuited and unfeasible to meet in the marine environment in which removable gangways are deployed.

43. Nominated assistance boarding points

Issue

Areas for accessing public transport conveyances, such as a train platform, can be large, long, and crowded. This can make it difficult for people with disability to know where to go to seek direct assistance for boarding, a boarding ramp to assist with boarding, directions to accessible facilities or other information.

Collective government action would ensure requirements would provide certainty on how to provide assistance points to public transport operators and providers and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 119: Reform options for nominated assistance boarding points

Option	Description
Status Quo	<p>The Transport Standards would continue to specify provisions for when boarding devices must be provided and notification by passenger/s of need for a boarding device. Ambiguity will remain for people with disability in knowing where to seek direct boarding assistance and for public transport staff in locating people with disability requiring direct assistance.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-regulatory	<p>Guidance would be provided on assistance points to facilitate boarding, including, but not limited to:</p> <ul style="list-style-type: none"> • solutions to facilitate independent boarding • solutions for when independent boarding cannot be provided, such as providing a nominated assistance point or direct assistance procedures • case studies of how to provide a nominated assistance points.
Regulatory	<p>The Transport Standards would be amended to include new requirements for nominated assistance points. There were two regulatory options consulted on:</p> <p>Option 1</p> <ul style="list-style-type: none"> • Independent boarding should be provided at all accessible entrances to a conveyance • Direct assistance requirements where independent boarding is not available • Option 1 proposed 5 sub-options to define an accessible door: <ul style="list-style-type: none"> – 1 (access to a seat), 2 (access to a priority seat), 3 (access to an allocated space), 4 (access to other accessible facilities, where available), 5 (all of the above). <p>Option 2</p> <ul style="list-style-type: none"> • It must be possible for a passenger waiting to board a conveyance to notify the operator that he or she needs a boarding device. • Request signal devices must be located on the conveyance or at the boarding point

Nominated assistance boarding points

	<ul style="list-style-type: none"> • Requirements for nominated assistance points • These requirements would apply to buses (except dedicated school buses), coaches, ferries, trains, trams, light rail, premises and infrastructure (except airports that do not accept regular public transport services). • Any proposed option will need to consider interactions with other relevant parts of the Transport Standards, such as consolidation of on-board facilities. <p>The Whole Journey Guide would be updated to reflect any new requirements.</p>
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Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 120: Benefit-cost ratios for nominated assistance boarding points

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	-	-	-	-	-
Regulatory option 1	29.9	-	7.5	7.5 ⁱ	3.98
Regulatory option 2	18.2	-	2.4	2.4	7.64

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations:

Non-regulatory option:

The non-regulatory option was not costed, on the basis that regulatory option seeks to introduce certainty for operators and providers that the provision of nominated assistance points is not discriminatory. The non-regulatory option would not provide this certainty and as a result, it is not expected to be adopted.

Regulatory option 1:

The benefits and costs of this reform were estimated through limited data provided through the survey and costs developed by RLB proxied to understand compliance at a national level. This implies the benefits and costs may not reflect the full extent of existing compliance, and costs are not reflective of variation in construction or delivery costs that could be incurred at different sites.

Nominated assistance boarding points

This reform option relates to the provision of assistance at nominated boarding points and accessible features next to conveyance doors.

Regulatory option 2:

The benefits and costs of this reform were estimated through limited data provided through the survey and costs developed by RLB proxied to understand compliance at a national level. This implies the benefits and costs may not reflect the full extent of existing compliance, and costs are not reflective of variation in construction or delivery costs that could be incurred at different sites.

This reform option relates to the provision of assistance at nominated boarding points reflecting lower costs and benefits compared to regulatory option 1.

Interdependencies:

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as signals and process for requesting boarding devices.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 121: Qualitative benefits for nominated assistance boarding points

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	-	-	-	-	-	-
Regulatory option 1	Yes	Yes	Yes	Yes	-	-
Regulatory option 2	Yes	Yes	Yes	Yes	-	-

Analysis of submissions

Status quo

The Transport Standards require that a manual or power assisted boarding device be available at an accessible entrance to a conveyance, where entrance to the conveyance presents gaps in excess of specified dimensions. The Transport Standards also outline requirements to enable passengers to notify the operator of a conveyance of the need for a boarding device to board or alight from a conveyance.

Submissions received during the public consultation period outlined that nominated assistance points are an important means for people with a range of disabilities to board conveyances safely and confidently, with appropriate support where required. However, consultation findings indicate that nominated assistance boarding points are often not appropriate.

Nominated assistance boarding points

Submissions received from organisations representing the blind community and those with low vision highlighted that the inconsistency in locality of boarding points for different transport options creates challenging wayfinding conditions. These submissions highlighted the need for nominated assistance points near fixed and predictable reference points, such as on access paths.

Consultation findings also indicated that nominated assistance boarding points are often unstaffed or staff are not sufficiently trained for assisting people with disability.

Staff will sometimes insist that the door adjacent to the nominated assistance point is the only door through which people who require assistance are allowed to board...People will then be crammed into an overloaded vestibule or area of one carriage while allocated spaces and priority seats are vacant in other carriages. This can leave people using mobility aids parked in vestibules with no access to the grabrails and communication devices located in the occupied allocated spaces.

Queenslanders with Disability Network

The Public Transport Ombudsman in Victoria noted that nominated assistance points continue to be the subject of a number of complaints. This further indicates that current arrangements may not be meeting the needs of people with disability.

One submission from a government stakeholder expressed support for maintaining the status quo. The submission noted that while they strive to ensure that every door on their services is accessible, provision of a ramp at every door would be burdensome and likely to result in reduction of accessible doors on services.

The status quo has no ongoing costs for public transports operators and providers, however, negative impacts on community amenity, accessibility, and safety will remain. The status quo does not enhance equality and independence, or reduce discrimination for people with disability in relation to public transport. There would continue to be a lack of clarity about where and how passengers can seek information, timely boarding assistance, the provision of a boarding ramp or directions to accessible facilities.

Non-regulatory

The non-regulatory option would update The Whole Journey Guide to include advice on assistance points to facilitate boarding and encourage operators and providers to provide independent boarding where possible.

One submission from government supported the non-regulatory option, stating that assistance points are already provided for relevant services. The submission outlined that guidance will provide clarity for operators and providers while providing necessary flexibility to ensure operational requirements are considered for all transport modes and legacy conveyances, including locations where accessible boarding facilities may not be achievable or where there may be impediments to disembarking, particularly at legacy networks. It was suggested that guidance should also support managing customer expectations, for example, by outlining that passengers should arrive with sufficient time to allow boarding with assistance.

This submission also noted that the regulatory and non-regulatory options should only apply to train stations as it is not appropriate for other conveyances. The submission recommended that changes be made to clarify that boarding devices do not need to be physically located on the conveyance, and can be available or located on infrastructure and premises. Support for the non-regulatory option by this submission also centered around concerns regarding the impact on staffing, operational running of services and costs associated with regulatory option 1 and 2. These concerns are outlined further below in the analysis of the regulatory options presented. Another submission from an industry stakeholder that supported the non-regulatory option echoed

Nominated assistance boarding points

concerns expressed in this submission about the value and appropriateness of nominated assistance points in the service environment for certain conveyances.

To the extent that guidance is followed, costs to public transport operators and providers would be incurred in providing signage and / or markings on a platform to identify an assistance point, as well as updating existing website and passenger information. Costs would also be incurred for undertaking consultation with people with disability to develop appropriate direct assistance boarding procedures and to train staff in these procedures. Costs would depend on the adequacy of current procedures and capability. Operators and providers will be able to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation.

Given this option is discretionary, it does not provide certainty that guidance will be implemented. To the extent that guidance is followed, consistent identification of boarding points between modes, networks, and jurisdictions will benefit passengers. A single information point where passengers can obtain advice and information from a public transport employee when independent boarding is not possible for conveyances, would provide clarity about boarding assistance and where to seek directions to accessible facilities and other information. Equipping passengers with the necessary information to make informed travel decisions and receive boarding assistance will ensure passengers can access the support and information they need to complete their journey with safety, confidence, and dignity.

Regulatory

A regulatory approach would amend the Transport Standards to include new requirements for nominated assistance points. Two regulatory options relating to the provision of nominated assistance points were presented for consideration.

All submissions from individuals, people with disability and disability organisations supported a regulatory approach. Many submissions from individuals, people with disability and disability organisations stressed the importance of staff training. Amongst this stakeholder group, opinions were divided on whether option 1 (new section for nominated assistance points with 5 sub-options relating to accessibility features) or option 2 (amendment to existing section 8.8 Notification by passengers of need for boarding device for nominated assistance points) was the preferred option.

Sub-option 5 was the most widely supported sub-option by individuals, people with disability and disability organisations who expressed support for option 1 and also expressed a preference for a sub-option. Sub-option 5 would require all of the accessibility features outlined in regulatory option 2 to be available where a door on a conveyance is marked as accessible. Notably, sub-option 5 would require access to a seat, a priority seat, an allocated space and to other accessible facilities such as an accessible toilet, where available. These submissions noted this sub-option would best ensure that operators and providers maximise the accessibility of their infrastructure, conveyances and operational practices by connecting all facilities by an access path to an accessible door.

Sub-option 1 was the preferred sub-option in one submission from this stakeholder group. Sub-option 1 would require access to a seat where a door on a conveyance is marked as accessible. This submission recommended that nominated assistance points include power points for charging wheelchairs.

The majority of submissions from industry and government stakeholders also supported a regulatory approach. These stakeholder groups were divided on whether option 1 or option 2 was the preferred option. Sub-option 5 was also the most widely supported sub-option by industry and government stakeholders who expressed a preference for regulatory option 1. Two submissions noted that this option presented clear requirements and would result in consistency across networks, while recognising the constraints faced by operators and providers in providing choice

Nominated assistance boarding points

on whether or not to nominate an assistance point. One of these submissions suggested that further clarification is required regarding implementation of a request signal device for commuters while waiting at the boarding point.

One industry submission that supported regulatory option 1, expressed a preference for sub-option 3. Sub-option 3 would require access to an allocated space where a door on a conveyance is marked as accessible. This submission noted that this sub-option generally reflected their current operations and would promote a nationally consistent approach to nominated assistance points. This submission also noted however, that having nominated assistance points does not mitigate the risk of a passenger not being seen by staff and being left behind where they cannot board independently. The submission highlighted that the outcomes for reforms 7 (real time communication), 38 (signals and process for requesting boarding devices) and 39 (notification by passenger of need for boarding device) will be critical to managing this risk.

Two submissions expressed a preference for regulatory option 2. One government stakeholder who supported regulatory option 2 cited concerns that sub-options 1 and 2, presented in regulatory option 1, would mean that all doors on trains and trams would be classified as accessible, requiring boarding ramps to then be deployable at all doors. The submission noted that while this would be technically feasible, it would pose issues with on-time running across the network as a whole, as drivers would have to walk along a railcar carrying the boarding ramp, or alternatively incur significant cost in deploying additional staff on all services to fulfil this role. One industry stakeholder also supported regulatory option 2 with suggestions made to clarify the related changes to the Guidelines. This submission noted that this reform area is not really relevant for bus and coach travel as independent travel is somewhat assured noting there are no barriers such as turnstiles to access boarding points, and ticketing validation is deployed on the conveyance.

A number of submissions in support of a non-regulatory option made similar suggestions - that a regulatory approach to this reform area should only apply to trains as it is not appropriate for other conveyances (including trams or light rail). One submission recommended that changes be made to clarify that boarding devices do not need to be physically located on conveyances, and can be available or located on infrastructure and premises. Support for the non-regulatory option by this stakeholder centred around concerns regarding the impact on staffing, operational running of services and costs associated with regulatory option 1 and 2.

Costs would be incurred by public transport operators and providers in providing signage and / or markings on a platform to identify an assistance point, as well as updating existing website and passenger information. Costs would also be incurred in undertaking consultation with people with disability to develop appropriate direct assistance boarding procedures and to train staff in these procedures. Costs would depend on the adequacy of current procedures and capability. If regulatory option 1 is the preferred option, operators and providers would also incur costs to audit and identify accessible doors based on the definition in the preferred sub-option.

Equipping passengers with the necessary information to make informed travel decisions and receive boarding assistance would ensure passengers can access the support and information they need to complete their journey with safety, confidence, and dignity. A single information point where passengers can obtain information from a public transport employee when independent boarding is not possible, would provide clarity about boarding assistance, the provision of a boarding ramp or other boarding assistance, direction to accessible facilities, and to seek information from staff. Consistent identification of boarding points and use of terminology across jurisdiction and modes will benefit passengers and public transport operators and providers alike.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is **regulatory with revisions option 1**, with **sub-option 5** in relation to defining the features of an accessible door.

Following feedback through the Consultation RIS, the features for this option have been refined to apply only to trains. A number of submissions outlined that it was not appropriate for some conveyances, particularly trams and light rail, and not applicable to other conveyances, such as buses and coaches, as there are no barriers such as turnstiles to access boarding points, and ticketing validation is deployed on the conveyance.

Submissions highlighted that current arrangements may not be meeting the needs of people with disability, indicating the need for a regulatory approach. Submissions indicated wide support for the preferred option. Submissions noted that a regulatory approach would ensure greater consistency in locality of assistance boarding points across networks and jurisdictions and provide an important and appropriate means for people with a range of disabilities to board conveyances safely and confidently, with support where required. Consistent identification of boarding points and use of terminology across jurisdiction will benefit passengers and public transport operators and providers alike. Submissions noted that sub-option 5 presented clear requirements, would best ensure consistency across networks and would enable operators and providers to maximise the accessibility of their infrastructure, conveyances and operational practices, while also recognising the constraints faced by operators and providers by providing choice on nominating an assistance point.

Costs would be incurred by train operators and providers in providing signage and / or markings on a platform to identify an assistance point, as well as updating existing website and passenger information. Costs would also be incurred in undertaking consultation with people with disability to develop appropriate direct assistance boarding procedures and to train staff in these procedures. Costs would depend on the adequacy of current procedures and capability. Costs may also be incurred to audit and identify accessible doors that already meet the definition provided in sub-option 5.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism. This would address the primary concerns of stakeholders.

44. Identification of lead stops

Issue

The Transport Standards have no technical specifications for how people with disability can identify lead stops at bus stations, bus interchanges and bus zones. A lead stop is a bus stop which is designed to have a single platform boarding point for passengers where buses queue behind each other, as opposed to independent designated stops for different services. Lead stops can be typical for bus stops with a high frequency of services passing through and are designed to reduce dwell times. Lead stops have been highlighted by people with disability as problematic when it comes to service recognition, moving to the right location on the platform and hailing the driver. Addressing lead stops in either the Transport Standards or guidance can provide a nationally consistent approach and reduce discrimination for people with disability.

Collective government action would ensure requirements for boarding are clear to public transport operators and providers and ensure all passengers can access services without discrimination. This would also address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 122: Reform options for identification of lead stops

Option	Description
Status Quo	<p>The Transport Standards will continue not to include provisions for how people with disability can identify lead stops at bus stations, interchanges and zones.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-regulatory	<p>Guidance would be updated to provide advice on technical specifications for how people with disability are able to identify lead stops at bus stations, bus interchanges and bus zones, including, but not limited to, definition of a lead stop, how to make a lead stop clearly identifiable, and bus driver training.</p>
Regulatory	<p>The Transport Standards would be amended to include new requirements for lead stop identification at bus stations, bus interchanges and bus zones. This includes where passengers board at a lead stop, the lead stop must be clearly identifiable by people with disability. If a bus station, interchange or zone has multiple lead stops each must be identifiable and distinguishable from the others.</p> <p>The Whole Journey Guide would be updated to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Identification of lead stops

Table 123: Benefit-cost ratios for identification of lead stops

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	0.3	-	12.9	12.9 ⁱ	0.03
Regulatory	1.4	-	26.8	26.8	0.05

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations:

Non-regulatory option:

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 50 per cent was applied to the non-regulatory option based on the low cost and complexity of identifying lead bus stops in many, but not all locations. Submissions indicated 'lead stop' is not a term used in some jurisdictions, this may limit the effectiveness of guidance. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option:

Upgrades to lead stops benefits users with vision impairments to identify boarding points but it does not impact timetabling or the configuration of bus stops, maintaining existing arrangements assists a small cohort of beneficiaries but would impact a large number of bus stops.

Interdependencies:

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as better communication of accessibility features, print size, letter heights and luminance contrast of signs and others.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 124: Qualitative benefits for identification of lead stops

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	Yes	Yes	Yes	-
Regulatory	Yes	Yes	Yes	Yes	Yes	-

Analysis of submissions

Status quo

Under the status quo the Transport Standards would continue to not contain specifications for identifying lead stops, leaving the responsibility with operators and providers. Consultation findings indicate that identifying lead stops is a significant issue for people with visual impairments. If a lead stop is not identified, passengers can struggle to identify the correct location to board the bus they want to catch. One submission noted that the ad-hoc solutions currently being used are inconsistent and unpredictable, often relying on staff or driver training.

It is not uncommon for people who are blind or have low vision to be directed to the incorrect stop, and to be ignored by drivers because they are not at the lead stop.

Vision Australia

The status quo was not supported by any stakeholders, noting only 15 submissions discussed this reform area. Three stakeholders indicated that they did not use the terminology lead stop, or were unaware of the existence of them, indicating that the use of lead stops, and/or the terminology, may vary across jurisdictions and operators and providers.

Maintaining the status quo continues to accept a low level of accessibility for people with disability, as poorly identified lead stops create challenges in identifying boarding locations and in hailing the driver. The status quo does not enhance equality and independence, or reduce discrimination for people with disability in relation to public transport. Maintaining the status quo will have no additional costs for public transports operators and providers.

Non-regulatory

The non-regulatory option would provide guidance to operators and providers on what a lead stop is, how to make a lead stop clearly identifiable and training requirements for bus drivers. This may make it easier for people with disability to successfully catch buses where lead stops are used.

There was minimal support for the non-regulatory option, with only one stakeholder supporting it out of the 15 who expressed a preference. This stakeholder supported the non-regulatory option because they did not see the need to distinguish between lead stops and regular bus stops.

Due to the discretionary nature of this option, it does not provide certainty that operators and providers will follow the guidance on how to identify lead stops at bus stations, interchanges and zones. If the guidance is not followed, the impact on people with disability would be a lack of certainty in identifying where bus services will stop, impacting on the ability to successfully

Identification of lead stops

undertake travel. To the extent that guidance is followed, costs would be incurred if lead stops needed additional identifying features installed.

Regulatory

The regulatory option was supported by all individuals, people with disability and disability organisations who indicated a preferred option. Their submissions highlighted the clarity and predictability that would come from this option, making independent travel easier and reducing anxiety for people using large bus interchange hubs. In particular, submissions acknowledged the benefit of this reform for passengers with visual impairment. Two stakeholders also pointed out the benefit to people with mobility aids who might not be able to identify and hail the bus they need at bus interchanges. Two stakeholders raised that the regulatory option needs to be accompanied by a greater promotion of lead stop boarding so passengers know how to use them.

The majority of government and industry stakeholders preferred the regulatory option (six of seven). Those who supported the regulatory option noted it would result in the clear identification of lead stops and provide clear guidance for operators and providers. One government stakeholder advised that it already identified lead stops through various means (coloured poles and uprights with letters and stop numbers, with some including electronic displays and audio announcements). Another advised that the issue was not the identification of the lead stop, but the operation of buses at lead stops.

Two stakeholders noted the requirement for lead stops to be 'clearly identifiable to passengers with disability' needs to be defined better or further guidance provided. This is because 'clearly identifiable' could be different for different types of disability. The flexibility of guidance to address this was noted. One stakeholder raised that references to platforms should be removed to avoid any confusion with train platforms.

The impact of implementing this option was seen as being dependant on the extent of the requirements. One government stakeholder noted that the regulatory option was not consistently implementable, with implementation issues arising when third parties own the relevant infrastructure or in regional or remote areas if supporting electronic or communications infrastructure was not readily available.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **regulatory option with additional guidance**.

There was a clear preference for the regulatory option amongst the stakeholders who expressed a preference during the consultation process (14 out of 15). There was agreement that the regulatory option would assist people with disability to identify lead stops, particularly people with visual impairments, and increase the ability to travel independently. The costs of implementing this option were not covered in detail by stakeholders, but are likely to be modest given the identification methods currently being used to identify lead stops.

The implementation of the regulatory option would need to be accompanied by an awareness campaign for passengers to ensure the full benefits of the option are achieved. To address concerns regarding the meaning of 'clearly identifiable' the guidance would be developed in consultation with people with disability and operators and providers to ensure the methods used to identify lead stops cater for the needs of all people with disability.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements retrospectively with a compliance schedule timing of 5 years.

45. Pontoon boarding points on infrastructure

Issue

Currently, boarding points are required to have a firm and level surface where boarding devices can be deployed. However, there is uncertainty in what is meant by ‘firm and level’ in relation to pontoon boarding points as these are affected by wash, wave and wind action in a dynamic marine environment. This may result in pontoons that are not fit for purpose with design features that allow for maximum stability to ensure people with disability can board and alight ferries safely.

Collective government action would ensure requirements for boarding are clear to public transport operators and providers and ensure all passengers can access services without discrimination. This would also address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 125: Reform options for pontoon boarding points on infrastructure

Option	Description
Status Quo	<p>The Transport Standards will continue to require boarding points to have a firm and level surface where boarding devices can be deployed. However, will not define ‘firm and level’ in relation to pontoon boarding points.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-regulatory	<p>Guidance would be updated to include advice on pontoon boarding points, to ensure they have maximum stability and the lowest possible gradients in their operating environment.</p>
Regulatory	<p>The Transport Standards would be amended to provide requirements for pontoon boarding points, including:</p> <ul style="list-style-type: none"> • Pontoons must have a flat and stable surface to which a removable gangway or other boarding device can be deployed. • Ferry pontoon design must minimise vertical, horizontal and rocking movement of the boarding point as per the relevant Australian Standard. <p>The Whole Journey Guide would be updated to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Pontoon boarding points on infrastructure

Table 126: Benefit-cost ratios for pontoon boarding points on infrastructure

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	-	-	-	-	-
Regulatory	26.5	-	78.1	78.1	0.34 ⁱ

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾The benefits and costs presented in the table above are rounded to two decimal places and calculated to four decimal places in the CBA workbook, which may result in zero values in the table.

Considerations to note in interpreting analysis

Limitations:

Non-regulatory option:

There are no costs and benefits associated with the non-regulatory reform. The non-regulatory option was not costed, as submissions, indicated maritime design standards already implement these requirements.

Regulatory option:

The benefits and costs for this reform were developed based on a limited number of survey responses and may not fully capture the extent of national compliance.

The compliance cost associated with retrofitting existing pontoons vary greatly between different marine environments and would require consideration of dynamic environments.

Interdependencies:

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as removable gangway design and stairs on ferries.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 127: Qualitative benefits for pontoon boarding points on infrastructure

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	Yes	Yes	-	-
Regulatory	-	-	-	-	-	-

Analysis of submissions

Status quo

Section 8.1 of the Transport Standards requires boarding points to have a firm and level surface to which a boarding device can be deployed. The section does not include environment-specific solutions or requirements, or guidance specific to each type of conveyance. Under the status quo option the Transport Standards would continue to be silent in relation to pontoons and how the section is to be applied to the dynamic operating marine environment in which they used. No submissions received during the public consultation period supported the status quo option.

Pontoon boarding points may be rising and falling vertically while the ferry is simultaneously moving laterally. Submissions outlined that change from the status quo is required to ensure that pontoons have the characteristics that are suited to the environment in which they are used, to ensure the amenity, convenience and safety of people with disability.

Under the status quo there would continue to be a lack of clarity in the Transport Standards. Operators and providers may continue to be unable to comply with the requirements, or will comply with requirements which are not suited to the marine environment. Pontoons that do not have the necessary design, safety and support features that suit the environment in which they are used will continue to pose a risk to the safety, amenity and confidence of all people while boarding or alighting. This risk of both falls and injury are greater for people with disability. The status quo has no ongoing costs for public transport operators and providers; however, negative impacts on community amenity, accessibility, and safety will remain.

Non-regulatory

The non-regulatory option would provide updated guidance on pontoon boarding points to ensure they have maximum stability and the lowest possible gradients that consider the dynamic operating marine environment in which they used. This may include advice on pontoon design.

No submissions from individuals, people with disability or disability organisations expressed support for the non-regulatory option. Industry and government stakeholders were largely divided on their preferred option; however, the non-regulatory option had a slight majority amongst those who expressed a preference. One submission outlined that a number of unique factors in the marine environment, such as vessel stability, wake from passing vessels and variable loading of vessels, create challenges with meeting the 'firm and level' requirement under the status quo. This submission noted that these challenges are not captured in the options so the non-regulatory option was the preferred option by this stakeholder. This submission also highlighted that retrofitting pontoons to meet the proposed regulatory option is highly complex and, in many cases, cost prohibitive due to many operational and technical variables, including vessel size, operations and environmental factors. Submissions indicated the non-regulatory option would provide greater flexibility to address such challenges. Another submission noted that guidance could also recognise that operators may not own the pontoons from which services are boarded.

To the extent that guidance is followed, the non-regulatory option would provide greater guidance and clarity on the characteristics required for pontoons that are suited to the environment in which they are used. One submission indicated that existing assets are likely to already be compliant and not require replacement so the cost impact should be minimal. However, another submission indicates that retrofitting existing pontoons can be highly complex and, in many cases, would be cost prohibitive. Operators and providers will be able to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation.

Pontoon boarding points on infrastructure

Given this option is discretionary, it does not provide certainty that guidance will be implemented. To the extent that guidance is followed, people will benefit from minimised pontoon movement, particularly people with disability. This will enhance passenger safety and confidence to board and alight ferries by improving accessibility at pontoons.

Regulatory

The Transport Standards would be amended to provide requirements for pontoon boarding points, including design requirements referencing AS3962 (2020) Marina Design, Section 4 Loading and stability.

The regulatory option was the preferred option for all individuals, people with disability and disability organisations. Slightly less than half of government stakeholder submissions also expressed support for the regulatory option. Submissions from individuals, people with disability and disability organisations expressed the need for separate prescribed guidelines for pontoon boarding points. Two submissions expressed particular concern with smaller pontoons which rock considerably in adverse conditions. These submissions noted small pontoons prevent people with reduced mobility from using affected services due to anxiety and fear of an accident occurring.

One organisation representing the blind and vision impaired, while expressing support for a regulatory approach in providing consistency and certainty for people with disability, noted they did not fully support the option presented. This submission noted that given the unique hazards for pontoon boarding, the stakeholder would also like to see specific guidance included on appropriate placement of TGSIs, and a requirement for braille and tactile signage that provides information about the site, the manner in which functional stability has been achieved, any unique hazards that a passenger should be aware of, and clearly identifies the entry point.

Government stakeholders who expressed support for the regulatory option highlighted that separate requirements for modes is preferred and clarity for pontoons was required to recognise the dynamic environment in which they are used. It was noted that pontoon boarding points do not currently comply with the Transport Standards as they are not static structures, and accordingly, the Transport Standards should be amended to ensure they are fit for purpose. However, this submission recommended that reference to AS3962 (2020) should not be referenced in the Transport Standards as it might lead to a lack of harmonisation in the future if the Australian Standard is amended. This submission recommended that AS3962 (2020) should instead be included in guidance, along with additional guidance regarding gradients of gangway and cross fall.

Another submission from a government stakeholder who did not express a preference for any of the options presented, outlined that if a regulatory approach is selected and developed effectively it could assist with ensuring consistency across networks of multiple jurisdictions. However, the submission highlighted that consideration should be given to the possibility that there is no one-size-fits-all solution and the regulatory approach would need to allow for flexibility to adapt to changing circumstances within the marine environment and clear guidance for operators and providers. The submission noted the challenges posed for the provision of ferry services in a dynamic nature of the marine environment, and that a level surface may not be able to be provided.

The regulatory option would provide greater clarity on the characteristics required for pontoons that are suited to the environment in which they are used. Operators and providers would have requirements that are fit for purpose and technically feasible for pontoon stability. One submission indicated that existing assets are likely to already be compliant and not require replacement so the cost impact should be minimal. However, another submission indicates that retrofitting existing pontoons can be highly complex and, in many cases, would be cost prohibitive. Minimising pontoon

Pontoon boarding points on infrastructure

movement will benefit all users, but particularly people with disability, through improved safety and confidence to travel.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **non-regulatory option**.

Submissions highlighted that designing fit-for-purpose pontoons is difficult to achieve without flexibility to adapt to the various environmental and operational factors. This includes contending with high and king tides, as well as different vessel sizes and stability, wake from passing vessels, varying freeboards of the ferry/pontoon, variable loading or the numbers of people on the ferry and waiting on pontoons. While a regulatory approach was preferred amongst the majority of stakeholders, due to these complexities, submissions indicated that the regulatory option is unlikely to be flexible enough to adequately address stability and the current uncertainty.

The non-regulatory option would provide clear guidance on the characteristics required for pontoons that are suited to the environment in which they are used. Minimising pontoon movement will benefit all users, but particularly people with disability, through improved safety and confidence to travel. It is likely that pontoons that do not meet the requirement of AS3962 (2020) will need to be upgraded as a matter of public safety, regardless of the requirements under the Transport Standards. Any additional impacts of the non-regulatory option on users, operators and providers is therefore likely to be minimal as the proposed option seeks to strengthen and encourage the application of the existing industry standard.

The non-regulatory option provides a balance of improvement for all ferry users, but particularly for people with disability, while encouraging the design of pontoons that will benefit all users through maximum stability and lowest possible gradients in their operating environment. Providing guidance will seek to address the current uncertainty in the Transport Standards.

The preferred option will be implemented through inclusion in a revised Whole Journey Guide.

46. Bus, tram and light rail boarding points on infrastructure

Issue

There are currently no requirements for bus, tram and light rail boarding points in the Transport Standards. Large gradient and cross fall changes between bus stops and roads can reduce accessibility for people with disability, and make boarding and alighting from conveyances unsafe.

Collective government action would ensure requirements for boarding are clear to public transport operators and providers and ensure all passengers can access services without discrimination. This would also address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 128: Reform options for bus, tram and light rail boarding points on infrastructure

Option	Description
Status Quo	<p>The Transport Standards would continue not to include requirements for bus, tram and light rail boarding points (explicit gradient and crossfall provisions) to ensure they are accessible for people with disability.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-regulatory	<p>Guidance would be updated to include advice on bus, tram and light rail boarding points, including design requirements, locations where compliant boarding points are not achievable, and navigating intersections of boarding points and shared pathways.</p>
Regulatory	<p>The Transport Standards would include new requirements in relation to bus, tram and light rail boarding points. There were 2 regulatory options consulted on.</p> <p>These requirements would pertain to premises and bus, tram and light rail boarding points on infrastructure.</p> <p>Option 1</p> <ul style="list-style-type: none"> • Boarding points must have a flat and stable surface to which a boarding device can be safely deployed and have a gradient no steeper than 1:40 • The camber (crossfall) of a boarding point must be no steeper than 1:40, except for bitumen surfaces, where 1:33 is permitted. <p>Option 2</p> <ul style="list-style-type: none"> • Boarding points must have a flat and stable surface to which a boarding device can be safely deployed and have a gradient no steeper than 1:40 • The camber (crossfall) of a boarding point must be no steeper than 1:40, except for bitumen surfaces where 1:33 is permitted. • Where road gradient is at a gradient steeper than 1:40 and a 1:40 boarding point gradient would prevent safe deployment of a boarding device, the boarding point gradient may match that of the road. <p>The Whole Journey Guide would be updated to reflect any new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 129: Benefit-cost ratios for bus, tram and light rail boarding points on infrastructure

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	Benefit-cost ratio
Status Quo	-	-	-	-	-
Non-regulatory	1.4	-	10.0	10.0 ⁱ	0.14
Regulatory	1568.9	-	431.2	431.2	3.64

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations:

Non-regulatory option:

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 75 per cent was applied to the non-regulatory option based on submissions which indicated many operators and providers of public transport have adopted this guidance into their internal design documents and are progressively upgrading bus stops. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option:

The benefits and costs of this reform were estimated through limited data provided through the survey and costs developed by RLB proxied to understand compliance at a national level. This implies the benefits and costs may not reflect the full extent of existing compliance, and costs are not reflective of variation in construction or delivery costs that could be incurred at different sites.

This reform provides safety, amenity and accessibility benefits for all public transport users through the provision of step-free access.

Interdependencies:

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as stairs of buses and stairs on trains.

Bus, tram and light rail boarding points on infrastructure

Qualitative assessment:

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 130: Qualitative benefits for bus, tram and light rail boarding points on infrastructure

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	Yes	Yes	-	-
Regulatory	Yes	Yes	Yes	Yes	-	-

Analysis of submissions

Status quo

The Transport Standards do not contain explicit gradient and crossfall provisions for bus, tram and light rail boarding points.

One submission from a government stakeholder supported the status quo and considered that the requirements were already adequately covered by design guidelines developed by the stakeholder and the progressive upgrade of its public transport infrastructure.

However, many submissions noted the lack of clarity in the Transport Standards and the need for change with a prescriptive gradient for infrastructure boarding points. Submissions outlined many conveyance stops are affected by a steep gradient which impacts passenger safety and confidence, and poses a barrier to accessible public transport.

Many people with disability will avoid these stops, especially given they are limiting their ability to access the whole of the transport network.

Queenslanders with Disability Network

The status quo maintains a level of safety, amenity and accessibility that continues to inhibit independence and safety of people with disability when boarding a bus, tram or light rail. Passengers will not benefit from level boarding points to access buses, trams and light rail, which may present a barrier to public transport use under extreme gradients. The status quo does not enhance or increase equality and independence, or reduce discrimination for people with disability in relation to public transport. The status quo has no ongoing costs for public transports operators and providers; however, negative impacts on community amenity, accessibility, and safety would remain.

Non-regulatory

The non-regulatory option would provide updated advice on bus, tram and light rail boarding points, including advice on design requirements.

One submission from a government stakeholder supported the non-regulatory option noting it would allow for site-specific solutions which best meet customers' needs and accounted for

Bus, tram and light rail boarding points on infrastructure

topographical constraints faced by operators and providers, such as slopes, verge width, underground services, trees or other verge infrastructure. The submission expressed concerns about the cost of ensuring bus stops were compliant.

To the extent that guidance is followed, costs would be incurred to meet the new gradient and crossfall guidance, where they are not compliant with the guidance, including costs to audit and upgrade existing boarding points. Operators and providers will be able to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation. Operators and providers will also benefit from better guidance, addressing concerns raised in a number of submissions regarding the lack of clarity and ambiguity surrounding current requirements.

Due to the discretionary nature of this option, it does not provide certainty that guidance will be implemented, particularly in existing areas where topography makes providing accessible boarding points more challenging and costly. To the extent that guidance is followed, people who require the use of boarding ramps when boarding or alighting will benefit from certainty that boarding points at bus, tram and light rail stops will be firm and aligned with the conveyance. Guidance will enhance passenger safety and confidence to board and alight conveyances by improving accessibility at stops that currently have steep gradients and crossfall.

Regulatory

The regulatory option would amend the Transport Standards to include new requirements in relation to bus, tram and light rail boarding points. Both options had similar requirements with Option 2 including additional requirements for roads with a gradient steeper than 1:40.

The majority of submissions across all stakeholder groups expressed support for regulatory option 2, recognising that it presented the most viable solution as many stops may present a gradient steeper than 1:40. One submission estimated that 30 per cent of the nation's bus stops are impacted by topographical constraints making option 1 unviable.

However, one submission from a disability organisation expressed support for regulatory option 1 citing concerns that option 2 posed an unacceptable risk of injury to passengers who use mobility aids. One submission from a government stakeholder also expressed support for regulatory option 1. The submission outlined that the option should be a minimum requirement with extra guidance provided where topography and road gradients prevent the deployment of boarding devices. This stakeholder outlined that retrofitting could be cost prohibitive; however, also noted that the requirements would not change the status quo as the requirements align with the Premises Standards and NCC.

Submissions from individuals, people with disability and disability organisations in support of regulatory option 2 were cognisant of the topographical limitations posed by option 1. Clear specifications in the Transport Standards on gradient and crossfall at boarding points was welcome, particularly in relation to providing clarification where road gradient poses additional safety considerations. This sentiment was echoed by submissions from government and industry stakeholders who also supported regulatory option 2.

Submissions from government and industry noted that option 2 provides clarity and consistency, with minimal impacts, and would avoid localised inconsistencies where stops are located on longitudinal grades steeper than 1:40. One submission from a government stakeholder suggested clarifying where requirements relate to a "longitudinal gradient" (as opposed to just referring to a 'gradient'), noting that gradient specifications can be applied to the crossfall or transverse slope as well as the longitudinal section of a bus stop or railway station.

Bus, tram and light rail boarding points on infrastructure

Operators and providers will incur costs to meet the crossfall and gradient requirements where they are not compliant, including costs to audit and upgrade existing boarding points. Costs may be greater if upgrading existing boarding points. This will vary depending on factors such as topography, existing infrastructure or street verge width. Collaboration with local authorities may also be required in upgrading infrastructure which submissions note can pose challenges.

People who require the use of boarding ramps when boarding or alighting will benefit from certainty that boarding points at bus, tram and light rail stops will be firm and aligned with the conveyance. This will enhance passenger safety and confidence to travel by improving accessibility at stops that currently have steep gradients and crossfall. Clear regulatory requirements will address concerns raised about the lack of requirements in the Transport Standards and provide greater certainty for operators and providers. Some uncertainty would remain under regulatory option 1 where road gradient is at a gradient steeper than 1:40. This would make providing accessible boarding points more challenging.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is **regulatory option 2**.

Noting AS1428.1 (2009) has now been superseded by AS1428.1 (2021), reference to AS1428.1 (2009) clauses 6.5.1 and 10.1 will be updated with the equivalent clause reference in AS1428.1 (2021). There is no material change to the content of these updated Australian Standards clauses.

Submissions expressed support for addressing the current ambiguity in the Transport Standards with prescriptive gradient requirements and noted that a regulatory approach provides certainty for operators and providers, as well as people with disability. The majority of submissions across all stakeholder groups expressed support for regulatory option 2, recognising that it presented the only viable regulatory solution. It was noted that many conveyance stops are located on sloping roads presenting a gradient steeper than 1:40, making regulatory option 1 unfeasible.

While regulatory option 2 may be more costly as it stipulates additional requirements for road gradients where the gradient is steeper than 1:40, a number of submissions noted that this option considers common site complexities and is already the industry approach when constructing boarding points at difficult locations.

Regulatory option 2 will provide greater clarity for all topography and sites, and better meets the needs of people with disability, as well as the constraints faced by operators and providers. Regulatory option 2 will deliver the greatest improvements to accessibility at stops that currently have steep gradients and crossfall, with resultant improvements to passenger safety and confidence to travel.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism. This would address the primary concerns of stakeholders.

47. Hail-and-ride boarding points on infrastructure

Issue

Currently, people with disability may be unable to access hail-and-ride services due to a lack of clearly identified accessible boarding points for these services. Two issues have been identified with the current requirements of the Transport Standards:

- Transport Standards section 8.4 Hail-and-ride services, sets requirements for hail-and-ride boarding, but does not set performance requirements for nominated accessible boarding points.
- Whilst Transport Standards section 8.1 Boarding points and kerbs, does require boarding points to have a firm and level surface to which a boarding device can be deployed it does not specify how this must be achieved if the boarding point is on the carriageway.

These issues are particularly problematic for rear loading wheelchair accessible taxi services where there is no break in the kerb permitting access to the carriageway.

Collective government action would ensure requirements for boarding are clear to public transport operators and providers and ensure all passengers can access services without discrimination. This would also address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 131: Reform options for hail-and-ride boarding points on infrastructure

Option	Description
Status Quo	<p>The Transport Standards will continue to provide provision for hail-and-ride services. However, these provisions may continue to limit opportunity for people with disability to board and alight at clearly identified accessible hail-and-ride pick up locations.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-regulatory	<p>Guidance would be updated to include advice on good practice for hail and ride boarding points, including location of boarding devices, responsibilities of vehicles, operator and provider, and passenger.</p>
Regulatory	<p>The Transport Standards would be amended to include requirements for hail-and-ride boarding points, including:</p> <ul style="list-style-type: none"> • Passengers must be able to hail the service at accessible hail-and-ride boarding points where boarding devices can be deployed. • Accessible boarding points must offer equal access to public transport services. <p>These requirements would pertain to hail-and-ride services, (except dedicated school buses.)</p> <p>The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect new requirements.</p>

Cost benefit analysis

Quantitative and qualitative assessment

This assessment included a high-level summary of the definitional reform and potential impacts for hail-and-ride boarding points on infrastructure.

This is one of the six reforms categorised as definitional, which improves consistency and clarification of certain definitional terms and are considered minor and clarifying for providers, operators or manufacturers. As such, there are limited, or no costs and monetised benefits associated with these definitional reforms.

There are identified non-monetised benefits for people with disability associated with definitional reforms. These qualitative benefits improve outcomes for people with disability and are important for decision-makers to consider, in addition to the monetised costs and benefits.

Analysis of submissions

Status quo

A hail-and-ride service is operated by a conveyance, such as a bus or wheelchair accessible taxi, that follows a set route, but may stop for passengers at any safe point on the route.

The status quo would see the current requirements of the Transport Standards remain, and the identified issues persisting. No submissions received during the public consultation period supported the status quo option.

The status quo option is unlikely to involve any new costs to operators and providers and would not introduce additional regulatory burden or associated administrative costs. However, operators and providers would continue to face uncertainty about their obligations, and where responsibility lies in accessing hail-and-ride services.

The status quo maintains a level of safety, amenity and accessibility that continues to inhibit independence and safety of people with disability when attempting to use hail-and-ride services. People with disability will continue to face accessibility issues when accessing hail-and-ride services. The status quo does not enhance or increase equality and independence, or reduce discrimination for people with disability in relation to public transport. While the status quo has no ongoing costs for public transports operators and providers, regulatory uncertainty and negative impacts on community amenity, accessibility, and safety will remain.

Non-regulatory

The non-regulatory option would provide updated advice on good practice for hail-and-ride boarding points and the responsibilities of operators, providers, and passengers.

No submissions from individuals, people with disability or disability organisations expressed support for the non-regulatory option. Industry and government stakeholders were largely divided on their preferred option; however, the non-regulatory option had a slight majority in support amongst those who expressed a preference. These submissions outlined that the non-regulatory option should provide greater innovation in conveyances and flexibility for operators and providers in providing hail-and-ride service, particularly in instances where a third party owns relevant assets or land from which a user is hailing and boarding the service. Advice regarding customer responsibility in choosing safe boarding points, including considerations of stops and road rules was welcome.

Hail-and-ride boarding points on infrastructure

A number of submissions recommended that hail-and-ride services be better defined, and that guidance also include clarity regarding the number of accessible locations that should be included along a route. It was noted in one submission that any upgrades to boarding points would incur costs and these are usually located on the land of local authorities.

To the extent that guidance is followed, the non-regulatory option would provide greater clarity regarding the roles and responsibilities of operators, providers and users alike. Operators would benefit from clarity regarding the requirements to ensure their service is accessible and may result in them being able to offer their service to a greater customer base.

Given this option is discretionary however, it does not provide certainty that guidance will be implemented which may reduce confidence of passengers to board and alight safely when accessing hail-and-ride services. To the extent that guidance is followed however, people with disability would have greater clarity on good practice for hail-and-ride boarding points and would benefit from being able to board and alight safely when accessing these services. For example, people with mobility aids who cannot currently cross a kerb to board a rear loading accessible conveyance would be able to access this service.

Regulatory

The regulatory option provides additional flexibility to both users, as well as operators and providers, and better reflects the nature of hail-and-ride services.

Under the regulatory option, removing the need for 'nominated' accessible boarding points from the Transport Standards and providing additional guidance would clarify that operators and providers would not be expected to nominate or identify accessible boarding points, rather, the expectation is that a user could hail and board a service at any safe location along the route. This better reflects the intended use of hail-and-ride services. Guidance would also specify that conveyances may have either side or rear loading boarding devices and that the accessible boarding points must offer equal access to the hail-and-ride. For example, passengers with mobility aids should be able to cross kerbs to board rear loading conveyances. This may be achieved through the use of portable ramps or by using existing kerb ramps at or adjacent to the boarding point. Guidance would be provided that it is the passengers responsibility to select a boarding point that is accessible and at which a hail-and-ride conveyance can safely and lawfully stop. It would be the responsibility of the operator to ensure that the passenger is able to board the vehicle from this accessible boarding point.

All submissions from individuals, people with disability or disability organisations expressed support for the regulatory option. Slightly less than half of industry and government stakeholder submissions also expressed support for the regulatory option. Submissions from individuals, people with disability or disability organisations noted the benefits of flexible and spontaneous public transport provided through hail-and-ride services. One submission noted that hail-and-ride and on-demand-transport services are slowly expanding in outer suburban areas where route bus services are not viable and these services work best in a contained catchment that focuses on core destinations such as rail stations and shops. Another submission noted that people with disability must often meticulously plan journeys, including boarding points, to ensure that their accessibility needs are met, and that it is important that the Transport Standards regulate, to the greatest extent possible, to ensure that people with disability have greater travel flexibility. This submission outlined that the regulatory option proposed was a good compromise in relation to hail-and-ride services.

The regulations proposed are a good compromise in that whilst they acknowledge that many elements of street infrastructure will not be in the control of the transport provider, drivers are expected to provide hail and ride services to people with disability where safe to do so and provide portable ramps or other loading boarding devices.

Physical Disability Council of NSW

One submission that supported the regulatory option expressed the need for additional measures to be included. The submission noted that no detail was provided regarding how accessible boarding points are chosen, and has no requirements for these boarding points to be clearly identifiable to people who are blind or vision impaired. Another submission also recommended the need for significant training across the public transport sector. The submission noted instances where public transport providers ignore or refuse to accept hail-and-ride requests from users with disability.

Submissions from industry and government stakeholders who expressed support for the regulatory option expressed support for the Transport Standards being 're-defined' by updating the requirement for a 'nominated boarding point' to an 'accessible boarding point', recognising that it ensures boarding devices are able to be deployed at an accessible boarding point. However, concerns were raised about the infrastructure costs in making all boarding points accessible for hail-and-ride services. Submissions noted that clarification is required on the application of hail-and-ride services. One submission outlined that guidance is not clear and passengers may not always be able to adequately identify an 'accessible location' or one that is safe for stopping, with drivers ultimately deciding where it is safe to stop. This submission noted that the onus should be on the type of conveyance used for the service and ensuring it is accessible.

The benefits of the regulatory and non-regulatory options are largely the same; however, the regulatory option provides greater certainty and clarity regarding the obligations of operators and providers and offers a recourse for people with disability where they experience discrimination. The regulatory option may result in operators being able to offer their service to a greater customer base. Updated guidance provided under the regulatory option will provide greater clarity regarding the roles and responsibilities of operators, providers and users alike. People with disability would benefit from being able to board and alight safely when accessing hail-and-ride services.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **regulatory option with additional guidance**.

Submissions noted that hail-and-ride services fill an important public transport 'gap' in outer suburban areas where route bus services are not viable, but it was widely acknowledged that the status quo was not meeting the needs of people with disability and failed to provide operators and providers with certainty or clarity regarding their obligations. The non-regulatory option also fails to address the identified issues that this reform area seeks to address.

Maintaining a regulatory approach is the most effective way of achieving consistency and certainty for operators, providers and users, and improving accessibility for people with disability. Removing the need for 'nominated' accessible boarding points from the Transport Standards and providing additional guidance clarifies that the expectation is that a user could hail and board a service at any location along the route where a conveyance may safely and lawfully stop, and it would be the responsibility of the operator to ensure that the passenger is able to board the vehicle from this

Hail-and-ride boarding points on infrastructure

accessible boarding point, for example, by deploying an accessible boarding ramp. This better reflects the intended nature of hail-and-ride services.

Following feedback through the Consultation RIS, the updated guidance in the Transport Standards Guidelines and /or The Whole Journey Guide will seek to clearly define hail-and-ride services and the roles and responsibilities of users and operators and providers. Guidance would be provided regarding matters to consider in choosing an accessible boarding point such as stops, road rules, safety, comfort and easily identifiable waiting space with clear sightlines for conveyance operators. Ensuring the user is able to board the conveyance from this point may involve the operator deploying a built in or portable ramp. The guidance will also recommend training be provided to operators and providers about the use of hail-and-ride services by people with disability.

Consistent with other reform areas where multiple land owners may be responsible for ensuring accessibility, clearer guidance will also be provided regarding who is responsible for assets, infrastructure and pedestrian precincts surrounding and servicing hail-and-ride service routes. Local authorities currently have obligations under the DDA to maintain access paths under their jurisdiction in an accessible state. Including better guidance will highlight these obligations and encourage all landowners to provide continuous accessibility. This emphasises cooperation and a focus on people's accessibility needs across their whole journey, and acknowledges that the public transport journey is managed and affected by a range of stakeholders.

There is little material change to the intent of the Transport Standards, so the impact on users, and operators and providers will be minimal. The preferred approach would provide greater certainty and clarity regarding the obligations of operators and providers and offers a recourse for people with disability where they experience discrimination. The regulatory option may result in operators being able to offer their service to a greater customer base. Updated guidance provided under the regulatory option will provide greater clarity regarding the roles and responsibilities of operators, providers and users alike, and emphasise peoples' accessibility needs across their whole journey and the need for cooperation between asset and landowners.

The regulatory option provides greater clarity on accessibility of boarding points for hail and ride services and would not introduce new requirements or require upgrades to existing infrastructure. As there is little material change to the intent of the Transport Standards, the changes to the Transport Standards would apply on commencement.

48. Accessible taxi ranks

Issue

Section 1.18 of the Transport Standards lists taxi ranks as infrastructure and boarding points. However, the Transport Standards does not include requirements on how to make taxi ranks accessible.

Mobility aid passengers and WAT drivers encounter a number of barriers when using taxi ranks, including matters relating to unbroken kerbs, kerb ramps, the location of taxi ranks and signage.

Collective government action to introduce requirements for accessible taxi ranks would modernise the Transport Standards and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 132: Reform options for accessible taxi ranks

Option	Description
Status Quo	<p>The Transport Standards will continue not to contain accessibility provisions for taxi ranks.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-Regulatory	<p>Guidance would be updated to include advice on accessibility specifications for taxi ranks, including, but not limited to:</p> <ul style="list-style-type: none"> • Safe movement of mobility aids from the carriageway to the taxi • Specifications, location, and design of accessible taxi ranks • Ratio of accessible taxi ranks. There are 3 non-regulatory sub-options that were consulted on in relation to the ratio of accessible spaces if there is more than 1 space: <ol style="list-style-type: none"> 1. The first and last vehicle space must be accessible. 2. The first, second and last vehicle space must be accessible. 3. Where there are more than five spaces the first and last vehicle space must be accessible. In addition, one space for every four spaces between the first and last space must be accessible.
Regulatory	<p>The Transport Standards would be amended to include requirements for accessible on-street taxi ranks to ensure on-street taxi ranks will be accessible to passengers with mobility impairments, including:</p> <ul style="list-style-type: none"> • Taxi ranks are boarding points that must connect to accessways. • Ratio of accessible taxi ranks. There were 3 regulatory sub-options consulted on, if the taxi rank has more than one vehicle space: <p>Sub-option 1: The first and last vehicle space must be accessible.</p> <p>Sub-option 2: The first, second and last vehicle space must be accessible.</p>

	<p>Sub-option 3:</p> <p>Where there are more than five spaces the first and last vehicle space must be accessible. In addition, one space for every four spaces between the first and last space must be accessible.</p> <ul style="list-style-type: none"> • Accessible taxi spaces within a rank must conform to the requirements for disability parking spaces as per the relevant Australian Standards. • Kerb ramps must be placed to the rear of the accessible taxi space. • If an accessible taxi space is at the same grade as the adjacent footpath, bollards and warning TGSIs as per the relevant Australian Standard and must be installed for the length of the same grade section. <p>These requirements would pertain to infrastructure.</p> <p>The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect new requirements.</p>
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Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 133: Benefit-cost ratios for accessible taxi ranks

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	0.9	-	0.8	0.8 ⁱ	1.08
Regulatory	7.3	-	5.6	5.6	1.31

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations:

Non-regulatory option:

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 15 per cent was applied to the non-regulatory option based on high volume of taxi ranks which require upgrading, and the high cost burden on local governments to implement the guidance. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Accessible taxi ranks

Regulatory option:

The benefits and costs of this reform were estimated from survey responses proxied to a national level, potentially not reflecting the full extent of existing and future compliance.

Interdependencies:

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as rideshare and accessible passenger loading zones on-street.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 134: Qualitative benefits for accessible taxi ranks

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	Yes
Regulatory	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

Under the status quo, the Transport Standards would continue to not specify requirements for the design of taxi ranks or what proportion of spaces in the rank should be accessible to people who use mobility aids. The status quo does not enhance or increase equality and independence, or reduce discrimination for people with disability in relation to public transport.

During consultation, issues with using taxis were raised by several participants, in particular accessibility at taxi ranks and getting into and out of taxis. Safety was a concern for a few participants, who highlighted the issue of loading in and out of vehicles in loading zones and onto busy streets.

An issue important for passengers of wheelchair-accessible taxis, is loading and unloading. I believe there are issues of using loading zones as an appropriate place to load and unload, problems being in bigger built-up city areas. It is often very difficult to try and find a place, and a safe place to load and unload.

Stakeholder roundtable participant.

No submissions supported the status quo option.

Maintaining the status quo would incur no additional costs to operators and provider or infrastructure owners, and would not address barriers identified to the safe use of taxi ranks by people with disability.

Non-regulatory

Throughout consultation, there was broad acknowledgement that taxi ranks are an important public transport interface through which people with disability access essential services such as airports, hospitals and shopping centres. When designed with accessibility in-mind, taxi ranks were noted as providing a safe and convenient option for passengers with disability. During consultation, multiple participants from both industry and government highlighted that taxi ranks are generally a local council responsibility, and constraints such as topography, adjacent built form, sightlines and traffic conditions make it difficult to apply specific design requirements consistently.

Three submissions from government and one submission from industry supported the non-regulatory option. The development of guidance material was identified as a practical step towards delivering a consistent and equitable outcome for passengers with disability. Submissions noted that the non-regulatory option provides important flexibility that accommodates the needs of passengers while accounting for practical limitations faced by operators and providers, depending on the location of the taxi rank. For example, one submission noted there are some high-capacity ranks, particular in city centres and at major venues, where providing multiple accessible access points may not improve access to wheelchair taxis. In these circumstances, taxi queues may inhibit WATs from accessing nominated spots, and impact on the overall efficient operation of the rank.

One submission from government supported the non-regulatory option, as they held concerns with the inclusion of references to AS2890.5 (2020) Clause 4.5.2 in the regulatory option. This submission stated that the inclusion of this reference would severely restrict where both permanent and temporary taxi ranks could be placed. For example, the requirements for longitudinal gradients in Clause 4.5.2 could potentially necessitate the relocation of many taxi ranks, given no exceptions for topography are provided.

Submissions also noted that the non-regulatory option should allow for the staged implementation of upgrades based on demand and the operational requirements of ranks.

A number of challenges with implementing the proposed regulatory option were also identified. For example, the poorly delineated operational responsibilities at taxi ranks – such as who is responsible for providing information. There are additional challenges relating to ongoing challenges with WAT response times also impacts the overall effectiveness of improvements to the accessibility of taxi ranks.

Regulatory

All submissions from individuals, people with disability and disability organisations supported the regulatory option. There was mixed support for the regulatory option by industry and government. Across all submissions, the regulatory option was identified as an important step in providing consistency of service to passengers across all jurisdictions and at important inter-modal hubs.

During consultation, people with disability noted that inconsistency in the provision of accessible taxi ranks can cause significant anxiety and impact the ability to plan and complete a journey. For this reason, the regulatory option was viewed as an important step to ensuring infrastructure is designed with accessibility considered, including the different configurations of WATs used.

Accessible taxi ranks are extremely important in ensuring that passengers can safely enter and exit taxis. It is important that the number of accessible taxi ranks meets demand and that people with disability are guaranteed a consistent (and importantly safe!) standard across all accessible ranks including temporary taxi ranks.

Physical Disability Council of NSW

Similarly, submissions from government and industry that supported the regulatory option noted that the proposed requirements are feasible, represents a functional accessibility improvement to people with disability, and will address current gaps in the Transport Standards. One submission from industry highlighted that the continuation of the status quo is unacceptable, and the expectation that infrastructure owners will voluntarily remedy the accessibility limitations of their taxi ranks is unlikely. During consultation, a number of stakeholders also noted that taxi ranks are generally owned by local government and used by a variety of operators and providers. Complexities in implementing the regulatory option may arise where additional lane width is required to accommodate accessible taxi rank spaces, particularly if requirements are implemented retrospectively.

Three submissions from industry and government supported sub-option 1, noting the importance of introducing a balanced approach that accommodates locations which serve multiple uses. For example, one submission from industry highlighted that in some cases, taxi ranks are used for boarding and alighting of rail replacement bus services during service disruption, and that inappropriate placement of kerb ramps can introduce accessibility, safety and operational challenges. The proposed requirements were also highlighted as a tangible pathway to promote consistency and universal accessibility of taxi ranks.

Three disability community and one government submissions supported sub-option 2. These submissions noted the relative strength of sub-option 2 to compared to sub-option 1, resulting in a greater net-benefit to people with disability. The greater provision of accessible spaces was also identified as providing more options to support drivers who are assisting passengers to disembark.

Sub-option 3 was supported by one government and three disability community stakeholders. These submissions agreed that in all circumstances, the first taxi rank space should always be accessible. The submission from government highlighted the value of providing a scalable design that ensures accessibility at key points across a bay, whilst providing flexibility to consider site constraints.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is **regulatory option, sub-option 1**.

During consultation, there was agreement across all stakeholder groups that inconsistency in the provision of accessible taxi ranks can cause significant anxiety and impact the ability to plan and complete a journey for people with disability. Industry and government provided mixed support for the non-regulatory and regulatory options, while all submissions from the disability sector supported the regulatory option.

Feedback from some stakeholders raised concerns about the application of these requirements to temporary taxi ranks, where infrastructure changes may not be possible or reasonable for short-term arrangements. As such, temporary taxi ranks will be excluded from these requirements.

The regulatory option will support consistency of service to passengers across all jurisdictions and produce tangible accessibility benefits, particularly at inter-modal terminals. The regulatory option will also align design requirements with the recommended regulatory option in Chapter 49 Accessible passenger loading zones on-street. Ongoing collaboration between operators and providers and infrastructure owners must continue to manage implementation challenges.

Accessible taxi ranks

There was mixed support for the three proposed regulatory options. Option 1 will provide consistency in the design and accessibility of taxi ranks, while accommodating locations with multiple uses and environmental constraints.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements retrospectively with a compliance schedule timing of 10 years.

Interaction with Stage 1 reform area

Table 135: Interactions with Stage 1 for Accessible taxi ranks

Stage 1 reform area	Interaction	Description
Chapter 5.15: Passenger loading areas	Propose design requirements for the number of accessible car spaces to be provided at a site.	The two proposals refer to loading zones in two discrete and different locations. The design requirements for the number of accessible spaces recommended in Stage 1, Chapter 15 and Stage 2, Chapters 48 and 49 align.

49. Accessible passenger loading zones on-street

Issue

The Transport Standards do not recognise passenger loading zones located on-street as boarding points for wheelchair accessible taxis (WATs) and small conveyances. Consequently, the Transport Standards do not detail accessibility specifications for on-street passenger loading areas.

On-street passenger loading zones are often used as a pickup and drop-off point by WATs. Consequently, people with disability, particularly those who use mobility aid devices, may encounter accessibility and safety barriers when boarding at these locations.

Collective government action to introduce requirements for accessible on-street passenger loading zones would address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 136: Reform options for accessible passenger loading zones on-street

Option	Description
Status Quo	<p>The Transport Standards will continue not to include accessibility provisions for on-street passenger loading areas.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-Regulatory	<p>Guidance would be updated to include advice for on-street passenger loading zones pertaining to infrastructure, and would encourage operators and providers to ensure on-street passenger loading zones be recognised as WAT and small conveyance boarding points with specific technical requirements.</p> <p>The non-regulatory option proposed 3 sub-options for the ratio of passenger loading zones, where there is more than one vehicle space.</p>
Regulatory	<p>The Transport Standards would be amended to include new requirements for on-street passenger loading zones, including:</p> <ul style="list-style-type: none"> On-street passenger loading zones are boarding points for WAT and other public transport conveyances. The regulatory option proposed 3 sub-options for the ratio of passenger loading zones, where there is more than one vehicle space. <p>Sub-option 1</p> <p>Accessible passenger loading spaces must conform to the requirements for on-street disability parking spaces as per the relevant Australian Standard.</p> <p>Sub-option 2</p> <p>If a kerb ramp is installed in an accessible passenger loading zone vehicle space, it must be placed to the rear of the accessible vehicle space.</p> <p>Sub-option 3</p>

Accessible passenger loading zones on-street

	<p>If an accessible passenger loading zone vehicle space is at the same grade as the adjacent footpath, bollards and warning TGSIs as per the relevant Australian Standards and must be installed for the length of the same grade section.</p> <p>These requirements would pertain to infrastructure.</p> <p>The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect new requirements.</p>
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Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 137: Benefit-cost ratios for accessible passenger loading zones on-street

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	BCR
Status Quo	-	-	-	-	-
Non-regulatory	1.5	-	3.0	3.0 ⁱ	0.51
Regulatory	12.9	-	20.5	20.5	0.63

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations:

Non-regulatory option:

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 15 per cent was applied to the non-regulatory option based on high volume of passenger loading zones which require upgrading, and the high cost burden on local governments to implement the guidance. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option:

The benefits and costs of this reform were estimated from survey responses proxied to a national level, potentially not reflecting the full extent of existing and future compliance.

A material number of assets would need to be upgraded leading to higher substantive compliance costs in comparison to the benefits.

Accessible passenger loading zones on-street

Interdependencies:

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as accessible taxi ranks and rideshare.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 138: Qualitative benefits for accessible passenger loading zones on-street

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	Yes
Regulatory	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

Currently, the Transport Standards do not include design specifications to ensure the accessibility of on-street passenger loading zones.

During consultation, people with disability identified that the accessibility of on-street passenger loading zones varies. In locations where pickup and drop-off areas have been designed with consideration of accessibility, one submission noted that the experience for passengers is positive. In circumstances where accessibility has not been considered, however, passengers may experience barriers to safety and an accessible 'whole of journey' experience. Similarly, inconsistency in the design of on-street passenger loading zones was noted as a barrier to effective journey planning.

No submissions supported the status quo option.

The status quo does not enhance or increase equality and independence, or reduce discrimination for people with disability in relation to public transport. Maintaining the status quo would incur no additional costs to public transports operators and providers.

Non-regulatory

Three submissions from government supported the non-regulatory option. All three submissions noted that on-street passenger loading zones are primarily the responsibility of local councils. Similarly, all three submissions noted that the unique operating environment of these locations presents challenges to meeting the proposed requirements, for example relating to competing road rules, topography, adjacent built structures and traffic conditions. In particular, one submission outlined that compliance with AS2890.5 (2020) could restrict where permanent and temporary passenger loading zones could be placed. For this reason, the non-regulatory option was favoured as it would allow for innovative solutions to be developed meet both the needs of

Accessible passenger loading zones on-street

passengers and account for practical limitations faced by operators and providers. One submission also noted the benefit of the non-regulatory option in allowing infrastructure owners to manage costs, as retrofitting may be cost prohibitive.

To provide greater clarity, one submission suggested additional guidance material be included relating to the interaction between the Transport Standards and other road rules, the style of parking to be provided and accompanying symbols.

One submission supported sub-option 2, stating it is likely to deliver the greatest benefit to people with disability. The other two submissions did not state a preference for a sub-option.

Regulatory

All submissions from individuals, people with disability and disability organisations supported the regulatory option. There was general agreement among these responses that the non-provision of accessible spaces in on-street passenger loading zones produces negative outcomes for people with disability. These spaces were identified as important pickup and drop-off locations for WATs, and the inaccessibility of spaces, particularly relating to kerbs and spacing, as being both unsafe and a barrier to spontaneous travel. Similarly, one submission noted the importance of increasing the availability of accessible spaces to meet the needs of people with disability. The regulatory option was preferred by these submissions, noting it would provide a greater level of certainty than the non-regulatory option.

In terms of the number of accessible on-street passenger loading zones, we are keen to see the number of given spaces increased substantially. One in every 5 on-street passenger loading zones should be accessible in line with national data on the prevalence of disability as a proportion of the overall population.

Physical Disability Council of NSW

Three submissions from industry and three submissions from government supported the regulatory option. These submissions agreed that the regulatory option will provide certainty to people with disability that public transport will be accessible from on-street passenger loading zones. One submission from industry noted the proposed requirements are feasible to implement, and would result in practical improvements to the accessibility of sites for passengers. One submission from industry noted, however, that the cost to implement proposed requirements retrospectively would be significant, and the feasibility may be impacted by external factors such as topography, other interacting infrastructure and road passengers. Similarly, one submission from government noted that the successful implementation of the proposed requirements is dependent on effective collaboration between infrastructure owners, people with disability and operators and providers.

One submission from government highlighted the importance of aligning the outcomes of this reform area with Chapter 48 (Accessible taxi ranks) for consistency and regulatory clarity. The submission noted that this is particularly important in facilities where the taxi rank and loading zone are designed or operated as one continuous zone.

The majority of submissions from industry and government supported sub-option 1. These submissions noted the specified requirements will provide certainty to people with disability and are feasible to implement, whilst providing a balanced approach to accommodate different operating environments. One submission from industry suggested that the sub-option may also avoid the potential for designers to limit zones to four spaces or less, to avoid additional compliance costs.

One submission from an individual and one submission from a disability organisation supported sub-option 2. Both submissions highlighted the value of consistency in design and the provision of a greater number of accessible spaces compared with sub-option 1.

Accessible passenger loading zones on-street

The majority of submissions from the disability community and one submission from government supported sub-option 3. The submission from government highlighted that sub-option 3 provides scalable requirements which would ensure there are accessible spaces at both key points of the loading zone, and along the length of the bay as necessary. This was identified as both beneficial in terms of accessibility outcomes, but also in minimising regulatory burden that would result from fixed placement requirements. The submission provided this support, pending further clarity on the requirements applicable in circumstances where less than five spaces are provided.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **regulatory option, sub-option 1**.

During consultation, there was agreement across all stakeholder groups that inconsistency in the provision of accessible spaces in on-street passenger loading zones produces negative outcomes for people with disability, particularly when travelling in a WAT. Industry and government provided mixed support for the non-regulatory and regulatory options, while all submissions from the disability sector supported the regulatory option.

Feedback from some stakeholders raised concerns about the application of these requirements to temporary passenger loading zones, where infrastructure changes may not be possible or reasonable for short-term arrangements. As such, temporary passenger loading zones will be excluded from these requirements.

The regulatory option will introduce regulatory clarity regarding the role of on-street passenger loading zones, and ensure a greater level of consistency and accessibility for passengers who board and disembark from these locations. The regulatory option will also align design requirements with the recommended regulatory option in Chapter 48 (Accessible taxi ranks). Ongoing collaboration between operators and providers and infrastructure owners must continue to manage implementation challenges.

There was mixed support for the three proposed sub-options. The layout for accessible spaces proposed in sub-option 1 will provide certainty to people with disability and is feasible to implement, whilst providing a balanced approach to accommodate different operating environments.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements retrospectively with a compliance schedule timing of 10 years.

Interaction with Stage 1 reform area

Table 139: Interactions with Stage 1 for Accessible passenger loading zones on-street

Stage 1 reform area	Interaction	Description
Chapter 5.15: Passenger loading areas	Propose design requirements for the number of accessible car spaces to be provided at a site.	The two proposals refer to loading zones in two discrete and different locations. The design requirements for the number of accessible spaces recommended in Stage 1, Chapter 15 and Stage 2, Chapters 48 and 49 align.

50. Accessible parking spaces in infrastructure off-street carpark

Issue

Public transport infrastructure, such as train stations, ferry terminals and bus interchanges, often have dedicated off-street parking areas. In some cases, this infrastructure is located off-premises, and therefore falls under the remit of the Transport Standards, rather than the Premises Standards.

The Transport Standards do not specify requirements for off-street parking areas associated with public transport infrastructure, including specifications for accessible parking spaces or access paths connecting to infrastructure. This may result in situations where off-street carpark infrastructure is inaccessible to people with disability, and does not provide regulatory clarity to infrastructure owners.

Collective government action to introduce requirements for accessible parking spaces in public transport infrastructure off-street carpark would address key stakeholder issues raised through the Transport Standards review process, and promote consistency through alignment with requirements in the Premises Standards.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 140: Reform options for accessible parking spaces in infrastructure off-street carpark

Option	Description
Status Quo	<p>The Transport Standards will continue not to include provision for accessible off-street parking.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-Regulatory	<p>Guidance would be provided to include advice for off-street parking areas, including, but not limited to layout and dimensions consistent with the Premises Standards, location and ration of parking spaces.</p>
Regulatory	<p>The Transport Standards would be amended to include requirements for off-street parking areas associated with public transport infrastructure and premises (to which the Premises Standards do not apply), including:</p> <ul style="list-style-type: none"> Off-street public parking areas must provide one accessible parking space for every 50 parking spaces where there are more than five parking spaces. In addition, there are 2 regulatory sub-options that were consulted on in relation to the number of designated accessible parking spaces. <p>Sub-option 1</p> <p>Accessible parking spaces must be located as close as practicable to accessible entrances and connected to via accessways.</p> <p>Sub-option 2</p> <p>Accessible parking spaces must conform with the relevant Australian Standards. The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 141: Benefit-cost ratios for accessible parking spaces in infrastructure off-street carparks

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	Benefit-cost ratio
Status Quo	-	-	-	-	-
Non-regulatory	9.2	-	150.2	150.2 ⁱ	0.06
Regulatory	76.8	-	556.7	556.7	0.14 ⁱ

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations:

Non-regulatory option:

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 15 per cent was applied to the non-regulatory option based on high volume of parking spaces which require upgrading, and the high cost burden on local governments to implement the guidance. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option:

The benefits and costs of this reform were estimated through limited data provided through the survey and costs developed by RLB proxied to understand compliance at a national level. This implies the benefits and costs may not reflect the full extent of existing compliance, and costs are not reflective of variation in construction or delivery costs that could be incurred at different sites.

This reform impacts a small cohort of beneficiaries relative to a potentially large number of upgrades required.

Quantified benefits associated with this reform does not capture the full extent of benefits including improving ease of access and confidence to access public transport services when travelling by car for users with disability.

Accessible parking spaces in infrastructure off-street carparks

Interdependencies:

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as boarding points on infrastructure, passive and active restraints, and others.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 142: Qualitative benefits for accessible parking spaces in infrastructure off-street carparks

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	Yes
Regulatory	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

Currently, the Transport Standards do not include requirements for off-street parking areas associated with public transport infrastructure and have no requirements or specifications for accessible parking spaces.

One submission from government supported the status quo option. This submission outlined their internal practices, which used the requirements for car parks included in the Premises Standards to determine the design of car parks in off-street facilities associated with public transport infrastructure. This submission advocated for the continuation of the status quo and suggested to avoid regulatory confusion, the Transport Standards should not apply to general public car parking.

Maintaining the status quo would not enhance or increase equality and independence, or reduce discrimination for people with disability in relation to public transport. The status quo presents no additional costs for public transports operators and providers.

Non-regulatory

Two submissions from government supported the non-regulatory option. These submissions agreed on the importance of providing accessibility parking facilities to remove discrimination for people with disability, and supported car park design that supports continuous accessibility from the parking space to the public transport facility.

One submission noted that in their jurisdiction, where a carpark is associated with a public transport facility, the facility is designed in compliance with the requirements included in the Premises Standards. The submission highlighted that whilst additional guidance would be beneficial, regulatory reform is not required. Similarly, the other submission noted the importance of incorporating flexibility into the requirements for car park design – for example in locations where parking may not always be feasible to be provided.

Benefits will be achieved to the extent that operators and providers implement the updated guidance. Improving the accessibility of parking spaces in off-street carparks will benefit people with disability, through improved safety and confidence to travel.

Regulatory

All submissions from individuals, people with disability and disability organisations supported the regulatory option. These submissions raised concerns that due to the absence of specifications in the Transport Standards, off-street car parks may be designed inconsistently and result in reduced confidence to travel. For this reason, submissions supported the regulatory option, noting the reliability of availability and design will result in a greater level of accessibility for people with disability across all jurisdictions.

There needs to be reliability - both that accessible parking spaces will be available and that these parking spaces will have reliable specifications. We agree that Accessible parking spaces should be located as close as practicable to the accessible entrance to improve amenity for people with disability.

Physical Disability Council of NSW

The majority of submissions from industry and government supported the regulatory option. Submissions echoed the importance of accessible design and the value of harmonising requirements between the Premises Standards and the Transport Standards. Three submissions noted that it is already internal policy and best practice to provide accessible parking spaces in off-street carparks, and that the proposed requirements would be feasible to implement.

Similarly, submissions also acknowledged the value of aligning requirements in the Transport Standards and Premises Standards – although, one submission noted that the number of facilities covered by the Transport Standards is likely to be minimal. Multiple submissions from government suggested amendments to the proposed regulatory option. One submission suggested an amendment to explicitly state that attached kerb ramps are not permitted to be placed inside of the shared area adjacent to accessible parking spaces. One submission also suggested greater clarity be provided to differentiate whether non-public parking spaces, such as those reserved for maintenance vehicles, should be counted in the total number of spaces. One submission from government noted that at some locations, constraints relating to site topography and other built infrastructure may impact the installation of accessible car park spaces. In these circumstances, the submission noted the important role of consultation with both land owners and people with disability to develop an alternative solution.

There was mixed support for the proposed sub-options. The majority of submissions from industry and government and one submission from an individual supported sub-option 1, noting that the proposal would harmonise requirements with the Premises Standards. A number of amendments were suggested to provide greater clarity regarding the intent of the sub-option. Two submissions raised concerns regarding the potential outcome that would result under sub-option 2, where if a carpark contained five spaces, all spaces would need to be designated as accessible. These submissions highlighted that while this would produce a positive outcome for people with a disability, it may extend beyond the purpose of the Transport Standards and privilege disability parking permit holders rather than provide equality with other passengers. This was also noted to be in conflict with requirements included in the Premises Standards, potentially creating confusion for all stakeholders. Similarly, four submissions suggested amendments to sub-option 1 to ensure that at least one accessible space would be provided, regardless of the total number of spaces available, to enable greater accessibility for passengers. In this case, the sub-options would become redundant.

The majority of submissions from the disability community supported sub-option 2. These submissions highlighted the value of consistency and predictability, which would result in a greater level of confidence for passengers. Submissions that supported sub-option 2 also noted the relative strength compared to sub-option 1, resulted in a greater net benefit to people with disability.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **regulatory option, sub-option 1 with additional guidance**.

During consultation, there was agreement across all stakeholder groups that the Transport Standards should be reformed to include requirements for the inclusion of accessible car parking spaces in off-street car parks, to which the Premises Standards do not apply. The majority of submissions from all stakeholders supported the regulatory option.

The regulatory option will improve the consistency in design and availability of accessible off-street parking areas, and will result in a greater level of accessibility for people with disability across all jurisdictions. The regulatory option will also support harmonisation with the Premises Standards. Ongoing collaboration between operators and providers and infrastructure owners must continue to manage implementation challenges, and will be supported by additional guidance material.

There was mixed support for the three proposed sub-options. The provisions included in sub-option 1 provide a balanced approach to meet the needs of all passengers in circumstances where less than five total spaces are available, and align with requirements in the Premises Standards. To support additional passenger benefit in circumstances where less than five spaces are provided, additional guidance will be provided in The Whole Journey Guide to note that in all circumstances, one non-designated off-street accessible parking space should be provided as close as practicable to accessible entrances of the premises or infrastructure, and should conform to the requirements of AS/NZS 2890.6 (2009). Similarly, additional guidance will be provided to address stakeholder concerns regarding the placement of kerb ramps, scope of the requirements and interaction with the surrounding environment.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements retrospectively with a compliance schedule timing of 10 years.

Part 5: Accessibility in conveyances

This Part includes the following reform areas:

51. Grabrails on access paths
52. Grabrails in allocated spaces
53. Mobility aid movement in allocated spaces – passive restraints
54. Mobility aid movement in allocated spaces – active restraints
55. Appropriate seats on booked services
56. Conveyance dwell times at stops
57. Stairs on trains
58. Stairs on ferries
59. Stairs on buses
60. Doorway contrast and height

51. Grabrails on access paths

Issue

The Transport Standards have no requirements or guidance to provide grabrails along access paths on board conveyances. As a result, grabrails are not consistently provided along conveyance access paths, posing a risk to the safety of people with ambulant disabilities using public transport.

Collective government action would ensure passengers traverse access paths on board conveyances safely and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 143: Reform options for grabrails on access paths

Option	Description
Status Quo	<p>The Transport Standards does not include provision for grabrails along conveyance access paths, except that they must have a luminance contrast with a background by at least 30 per cent.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-regulatory	<p>The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to include advice on luminance contrasting grabrails on conveyances. Specific guidance may include the following:</p> <ul style="list-style-type: none"> • Grabrail location and design • Compliance with other Australian Design Rules, including not encroaching on the head impact zone.
Regulatory	<p>The Transport Standards would be amended to include new technical specifications for grabrails beside access paths on conveyances with accessibility for buses, coaches, ferries, trains, trams and light rail, including:</p> <p>Grabrails that conform to the requirements of AS1428.1 (2009) must be provided at all locations where passengers require support or stability during boarding, alighting or transit.</p> <p>Grabrails may have a combination of horizontal, vertical or angled alignment but apart from attachment points may not be closer than 50 millimetres to an adjacent surface or obstruction. Grabrails must have a luminance contrast with surfaces by at least 30 per cent.</p> <p>The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 144: Benefit-cost ratios for grabrails on access paths

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	Benefit-cost ratio
Status Quo	-	-	-	-	-
Non-regulatory	0.1	-	0.9	0.9 ⁱ	0.15
Regulatory	11.2	-	5.0	5.0	2.22

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations:

Non-regulatory option:

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 50 per cent of new assets was applied to the non-regulatory option based on the moderate cost and complexity of designing and implementing new grabrail layouts along conveyance access paths. It was not expected that existing conveyances would be upgraded to implement the guidance. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option:

The benefits and costs for this reform were estimated based on publicly available data and survey responses, proxied to estimate compliance at a national level. This implies the benefits and costs may not be fully reflective of existing compliance rates.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 145: Qualitative benefits for grabrails on access paths

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	Yes
Regulatory	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

Grabrails provide enhanced safety and amenity for people with disability, minimising the risk of injury and improving confidence to use certain types of conveyances. The status quo stipulates luminance contrast requirements for grabrails, but does not require that grabrails be provided along conveyance access paths.

One submission from government supported the status quo on the grounds that further guidance is not considered necessary, as grabrails and handles were already installed along access paths within conveyances. However, other submissions contradicted this, noting that further guidance or a regulatory approach would assist with ensuring consistency across networks of multiple jurisdictions, and provide clear guidance for manufacturers and operators and a more predictable experience for users.

Submissions from individuals, people with disability and disability organisations highlighted that grabrails along conveyance access paths provide vital support for people with reduced mobility or stability, as well as people who are blind or vision impaired who use grabrails for wayfinding. Submissions noted they are more than just an accessibility issue, but also a safety issue for people with disability. Grabrails also provide general support to passengers standing while conveyances are in motion.

Maintaining the status quo would result in the safety and amenity of people with disability continuing to be negatively impacted by the lack of guidance or requirements encouraging the use of grabrails along conveyance access paths. Passengers will not have confidence knowing where support can be found when standing in or moving along an access path. This will reduce their confidence to use public transport and maintain a level of accessibility that will continue to inhibit independence and safety of people with disability when using public transport services.

The status quo has no ongoing costs for public transport operators and providers; however, inconsistencies will remain and negative impacts on community amenity, accessibility, and safety will remain. The lack of clarity for manufacturers, operators and providers will also remain.

Non-regulatory

Under the non-regulatory option, the Transport Standards Guidelines and /or The Whole Journey Guide would be updated to include advice on luminance contrasting grabrails on conveyances and guidance on the importance of grabrails, their location and design, and compliance with state requirements, such as not encroaching on the head impact zone.

Industry and government stakeholders who preferred the non-regulatory option considered that adequate support was already being provided without the need for a regulatory approach, or cited concerns regarding cost and internal conveyance design limitations if the regulatory approach was adopted and applied retrospectively. Some viewed the regulatory option as too broad and without the specificity required for operators to feel assured of their compliance in determining all locations where grabrails would be required. One submission expressed concern that the breadth of the regulatory option presented the potential for unintended consequences, such as the requirements conflicting with ADR 58. Some jurisdictions noted that they already maximise grabrails and handrails in conveyances as part of their procurement processes and that further guidance in the Whole of Journey Guide and Transport Standards Guidelines would suffice.

To the extent that guidance is followed, costs would be incurred by operators and providers to provide grabrails along access paths where they are not already provided. Costs would also be incurred to ensure grabrails meet luminance contrast requirements. A non-regulatory option would allow operators and providers to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation. For operators and providers who already provide adequate grabrails, there will be no impact or material change.

Given this option is discretionary, it does not provide certainty that guidance will be implemented which may reduce confidence of passengers to travel if they are unable to safely use and locate grabrails. To the extent that guidance is followed, people will benefit from well positioned grabrails, and people with low vision will benefit from the adoption of luminance contrast requirements which will assist with locating grabrails. Both of these outcomes promote the safe travel of people on public transport.

Regulatory

The regulatory option would amend the Transport Standards to include new technical specifications for grabrails on conveyance access paths to ensure they meet the needs of people with disability. The Transport Standards Guidelines and /or The Whole Journey Guide would also be updated to reflect the new requirements.

The regulatory option was the preferred option for individuals, people with disability and disability organisations. Grabrails along conveyance access paths provide vital support for passengers who have balance issues as well as general support to passengers who are standing while the conveyance is in motion. It was also noted that access paths in conveyances are often narrow so people who use walking sticks, crutches or other assistance must seek other support in these constrained circumstances. Similarly, people with vision impairments who use canes, use grabrails for both support and guidance.

Colour and luminance requirements for grabrails were also noted as important to people with vision impairments, to provide high visibility and contrast. One submission noted, however, that references to luminance contrast stipulating a measure of "at least 30 per cent" should be regarded as a minimum standard. This submission noted that anecdotally, 30 per cent luminance contrast is

considered insufficient for people who are vision impaired. This is a recurring concern where luminance contrast is an element of a reform area.

It was noted that the adoption of the regulatory option will ensure that the benefit to the amenity and safety of passengers who are blind or have low vision is maximised.

To provide people with disability equal access to public transport it is integral that access paths are truly accessible. The implementation of grabrails on access paths is more than just an accessibility issue, it is also a safety issue for people with disability. As Transport Standards currently stand, there is no requirements for support grabrails along conveyance access paths apart from luminance requirements. This is an issue that needs amending for the safety of people with disability at risk of falls and injury due to instability and transport infrastructure that does not suit their needs.

Physical Disability Council of NSW

Industry and government stakeholders who preferred the regulatory option noted it would help ensure consistent accessibility across networks and provide clear guidance for manufacturers and operators. Some limitations were noted where grabrails impact the useable space for access paths or manoeuvrability, and suggestions were made for guidance or clarification to address these concerns. One submission noted that while a grabrail in a certain location may provide support and stability, it may also be in a head impact zone creating a safety concern for passengers. Another submission noted that there are often limitations in internal conveyance design which may impact retrofitting grabrails to meet the requirements. It was noted that the requirement for grabrails “at all locations where passengers require support or stability” failed to acknowledge other considerations such as appropriate loadings and forces, variance of internal designs, circulation space or manoeuvrability and ensuring access paths are not compromised.

A number of submissions from industry and government stakeholders indicated that, where possible, grabrails are already installed along conveyance access paths. Where they are not, costs would be incurred by operators and providers to procure compliant grabrails for their new conveyance or to provide them along access paths where they are not already provided. There would also be maintenance costs associated with ensuring grabrails meet luminance contrast requirements.

Passengers who require support while passing along access paths will benefit from enhanced safety and confidence, and consistency across providers if the regulatory option is adopted. The benefits would also extend to other passengers will also be able to find support while standing during peak times and while conveyances are in motion.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is the **regulatory option with revisions**.

Industry and government were divided on whether the regulatory or non-regulatory option was preferred. The regulatory option is the preferred option for individuals, people with disability and disability organisations. Overall, the regulatory option was the preferred option amongst stakeholders who expressed a preference on options put forward during consultation.

In response to consultation feedback, reference to “at all locations where passengers require support or stability” and relevant Australian Standards in the preferred regulatory option will be refined with an intention to increase alignment with existing regulation (i.e. Australian Design Rules). Refinements will ensure industry and government stakeholders’ concerns are adequately addressed, such as feasibility concerns regarding the breadth and lack of clarity this phrase entails, design and space constraints, and potential conflicts with existing safety or other requirements (such as ADR 58). Noting AS1428.1 (2009) has now been superseded by AS1428.1 (2021), reference to AS1428.1 (2009) clauses 17 and Appendix B will be updated with equivalent references in AS1428.1 (2021). There is no material change to the content of these updated Australian Standards clauses.

While acknowledging concerns from organisations representing the blind community and those with low vision regarding the proposed luminance contrasting requirements, these requirements have been developed by Standards Australia technical committee to ensure products, services, and systems are safe, consistent, and reliable. The objective of the referenced Australian Standards is to provide design requirements to enable access for people with disabilities. The Australian Standards note that the design requirements should be regarded as a minimum. The regulatory approach reiterates that this requirement should be regarded as a minimum and this will be further emphasised in updating the Transport Standards Guidelines and /or The Whole Journey Guide to reflect the new requirements.

The new Transport Standards requirements would apply to new conveyances and would not be retrospective. Consultation findings indicate that most access paths should already be compliant and those that are not, are difficult or not feasible to retrofit into existing conveyances due to conveyance space and design constraints, or conflicting safety concerns. This would address the primary concerns of stakeholders.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism.

52. Grabrails in allocated spaces

Issue

Grabrails are useful for people with disability to support their balance, reduce fatigue, hold their weight while manoeuvring, and can enable people to stop themselves from falling. The Transport Standards do not provide sufficient guidance or clarity on the layout of grabrails in allocated spaces, and have no requirements for grab-rails to have sufficient luminance contrast. If grabrails are not adequately luminance contrasted, people who have low vision may have difficulties identifying and locating grabrails, creating a safety risk for these passengers when in transit.

Collective government action would ensure mobility aid users remain safe onboard conveyances and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 146: Reform options for grabrails in allocated spaces

Option	Description
Status Quo	<p>The Transport Standards requires grabrails in all allocated spaces to comply with AS1428.2 (1992) Clause 10.2, Grabrails.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-regulatory	<p>Guidance would be updated to encourage operators and providers to include a variety of grabrails with various orientations in allocated spaces and that they should be luminance contrasted, including:</p> <ul style="list-style-type: none"> • Grabrail location and installation, including alignment. • Grabrail distance from adjacent surface or obstruction, such as a wall or pole • Grabrail luminance and contrast.
Regulatory	<p>The Transport Standards would be amended to include the following requirements for buses, coaches, ferries, trains, trams and light rail, including:</p> <ul style="list-style-type: none"> • Grabrails in allocated spaces must comply with AS1428.1 (2009). • Grabrails may have a combination of horizontal, vertical or angled alignment as the use of the space dictates but apart from attachment points may not be closer than 50 millimetres to an adjacent surface or obstruction. • Grabrails must have a luminance contrast of at least 30 per cent. <p>The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 147: Benefit-cost ratios for grabrails in allocated spaces

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	Benefit-cost ratio
Status Quo	-	-	-	-	-
Non-regulatory	0.0	-	0.0	0.0 ⁱ	0.02
Regulatory	0.7	-	1.1	1.1	0.65

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations:

Non-regulatory option:

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 50 per cent of new assets was applied to the non-regulatory option based on the moderate cost and complexity of designing and implementing new grabrail layouts with luminance contrast in allocated spaces. It was not expected that existing conveyances would be upgraded to implement the guidance. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option:

The benefits and costs for this reform were estimated using publicly available data and survey responses to proxy the level of compliance at a national level. This implies the benefits and costs may not be fully reflective of differences by state and jurisdiction.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 148: Qualitative benefits for grabrails in allocated spaces

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	Yes
Regulatory	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

Grabrails provide enhanced safety and amenity for people with disability, minimising the risk of injury and improving confidence to use public transport. However, the Transport Standards do not provide guidance or clarity on the layout of grabrails in allocated spaces nor that grabrails must be luminance contrasted. Additionally, the technical specifications of AS1428.2 cited in the Transport Standards are not fit-for-purpose as they do not allow for differences in position and layout of allocated spaces across different modes of transport.

One submission from government supported the status quo on the grounds that further guidance is not considered necessary, as grabrails were already installed in allocated spaces within conveyances. However, other submissions noted that the layout and design of many grabrails are not appropriate.

Submissions noted that further guidance or a regulatory approach would assist with ensuring consistency across networks of multiple jurisdictions, provide clear guidance for manufacturers and operators, and a more predictable experience for users with the installation of suitable grabrails, including a greater diversity of height and angles.

The status quo has no ongoing costs for public transports operators and providers; however, negative impacts on community amenity, accessibility, and safety are high. Under the status quo option, the arrangement of grabrails in allocated spaces will not be fit-for-purpose and not accommodate the different layouts across public transport modes. This will continue to reduce the support people with disability are able to access while travelling in allocated spaces and maintains a level of safety, amenity and accessibility that will continue to inhibit independence and safety of people with disability when using public transport services.

Non-regulatory

Under the non-regulatory option, guidance would be updated to encourage operators and providers to include a variety of grabrails, include advice on appropriate orientation and layout of grabrails in allocated spaces and advice on grabrail luminance contrast. The guidance would pertain to buses, coaches, ferries, trains, trams and light rail.

While most industry and government stakeholders preferred the regulatory option, those who preferred the non-regulatory option cited concerns regarding cost and internal conveyance design limitations if the regulatory approach was adopted. It was noted that the non-regulatory option provided greater flexibility where requirements can't be applied retrospectively. Another submission noted that grabrails are already installed in allocated spaces as a safety feature which provides support to all passengers including those with disability, but stated that further guidance in the Whole of Journey Guide and Transport Standards Guidelines would be welcome.

To the extent that guidance is followed, costs would be incurred to reconfigure grabrails in allocated spaces to meet the suggested requirements. Costs would also be incurred to make grabrails adequately luminance contrasted with background surfaces. A non-regulatory option should allow operators and providers to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation.

Given this option is discretionary, it does not provide certainty that guidance will be implemented which may reduce confidence of passengers to travel if they are unable to safely use and locate grabrails while in transit. To the extent that guidance is followed, people using mobility aids and allocated spaces will benefit from well positioned grabrails that are fit-for-purpose for bespoke modes of public transport, and people with low vision will benefit from the adoption of luminance contrast requirements which will assist with locating grabrails. Both of these outcomes promote the safe travel of people with disability on public transport.

Regulatory

Under the regulatory option, the Transport Standards would be amended to include further detail regarding the required luminance contrast and the location and orientation of grabrails in allocated spaces. The requirements would pertain to buses, coaches, ferries, trains, trams and light rail. The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect the new or amended requirements.

The regulatory option was the preferred option for individuals, people with disability and disability organisations, to ensure that the Transport Standards remain fit-for-purpose and to avoid confusion and promote consistency.

Current transport standards are outdated in their guidance in the layout of grabrails in allocated spaces and their luminance contrast in these areas. There is a need for amendments to the standards in this area and regulations to be implemented to avoid confusion and promote consistency among transport services and accessibility requirements.

Physical Disability Council of NSW

However, submissions received from organisations representing the blind community and those with low vision highlighted concerns with the luminance contrast requirements proposed under the regulatory option. The requirement for the luminance contrast to be "at least 30 per cent" was considered insufficient for people who are vision impaired. It was recommended that this be increased, or at the very least, guidance provided about the insufficiency of 30 per cent as a minimum figure. It was recommended that a co-design process be conducted to establish an appropriate baseline measurement for people who are vision impaired.

If a person with low vision is unable to detect a grabrail because of inadequate luminance contrast it could put them at significant risk of falling and thus have a negative, and possibly catastrophic, impact on their safety while travelling.

Vision Australia

Most submissions received from industry and government stakeholders also preferred the regulatory option, noting it clarifies obligations and requirements for manufacturers and operators, and would provide a consistent level of accessibility to those who benefit from grabrails in allocated spaces on conveyances. Some submissions cited concerns regarding cost, operational impacts and internal conveyance design limitations.

Particular challenges were raised by the coach and bus industry in relation to meeting the proposed requirements and providing appropriate features for all users. It was noted that the grabrail design needs to be functional and safe for all configurations where seats are adjustable and that horizontal and vertical oriented grabrails are important for people who have limited dexterity or usage in hands or arms. One submission suggested that an extract from the proposed guidelines referenced in the Consultation RIS regarding padded grabrails should be incorporated as a clause in the amended Transport Standards to address concerns about encroachment into head impact zones.

As grabrails are already required under the Transport Standards, additional costs will be incurred to the extent that the layout of grabrails does not comply with the new configuration requirements or luminance contrast requirements. Costs to modify one or both design elements to comply with the new requirements would vary depending on the nature of the work required and the size of the fleet.

Clear requirements will provide consistency and increase confidence of passengers while updated technical specifications will provide flexibility for operators and providers and encourage compliance with the Transport Standards. The new requirements will be more appropriate and fit-for-purpose, accounting for differences in position and layout of allocated spaces across different modes of transport. People using allocated spaces will benefit from well positioned grabrails that are fit-for-purpose for modes of public transport, and people with low vision will benefit from the adoption of luminance contrast requirements to assist with locating grabrails. Both of these outcomes promote the safe travel of people on public transport.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is the **regulatory option with revisions**.

The regulatory option was the preferred option for individuals, people with disability and disability organisations. Most submissions received from industry and government stakeholders also preferred the regulatory option, with those who supported both the regulatory and non-regulatory options both citing concerns regarding cost and internal conveyance design limitations in adopting the regulatory approach.

In relation to concerns regarding internal conveyance design constraints, updated technical specifications will provide certainty for industry and government regarding their obligations, but allows sufficient flexibility to address design and space constraints within different modes of transport by providing that grabrails can be positioned as the use of space dictates. This is reiterated in the updated guidance proposed under the regulatory option which highlights that the most functional outcome can be achieved through a process of consultation and co-design. Noting AS1428.1 (2009) has now been superseded by AS1428.1 (2021), reference to AS1428.1 (2009) clause 17 will be updated with equivalent clause reference in AS1428.1 (2021). There is no material change to the content of these updated Australian Standards clauses.

While acknowledging concerns regarding the cost of implementation, many submissions outlined that grabrails are already provided for in conveyance design. As grabrails are already required under the Transport Standards, any additional costs will be incurred to the extent that the layout of grabrails does not comply with new configuration or luminance contrast requirements. Costs to modify one or both design elements to comply with the new requirements would vary depending on the nature of the work required and the size of the fleet; however, the important safety feature provided by grabrails in moving conveyances cannot be overlooked.

While acknowledging concerns from organisations representing the blind community and those with low vision regarding the proposed luminance contrasting requirements, these requirements have been developed by a Standards Australia technical committee to ensure products, services, and systems are safe, consistent, and reliable. The objective of the referenced Australian Standards is to provide design requirements to enable access for people with disabilities. The Australian Standards note that the design requirements should be regarded as a minimum. The regulatory approach reiterates that this requirement should be regarded as a minimum and this will be further emphasised in updating the Transport Standards Guidelines and /or The Whole Journey Guide to reflect the new requirements.

Clear requirements will provide consistency and increase the safety and confidence of passengers who will benefit from being able to locate well positioned grabrails that are fit-for-purpose for bespoke modes of public transport.

The new Transport Standards requirements would apply to new conveyances and would not be retrospective. Consultation findings indicate that most conveyances should already be compliant and those that are not are difficult or not feasible to retrofit due to conveyance space and design constraints. This would address the primary concerns of stakeholders.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism.

53. Mobility aid movement in allocated spaces – passive restraints

Issue

Uncontained mobility devices in allocated spaces on conveyances can topple or slide, particularly if a bus executes a turn at speed or is displaced laterally due to kerb strike, or due to the lateral displacement forces caused by necessary acceleration or deceleration. This puts the occupant of the mobility aid at risk, as well as passengers who may be struck by the sliding or toppling wheelchair or scooter. The Transport Standards require an allocated space must contain movement of a mobility aid towards the front and sides of a conveyance, but do not provide information on how this can be done. This lack of information creates uncertainty for operators and inconsistency for people with disability.

Collective government action would ensure allocated spaces on board conveyances are safe and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 149: Reform options for mobility aid movement in allocated spaces – passive restraints

Option	Description
Status Quo	<p>The Transport Standards require that an allocated space must contain movement of a mobility aid towards the front and sides of a conveyance only.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-regulatory	<p>Guidance would be updated to include more refined advice for containment of mobility aids in allocated spaces for buses, ferries, trams and light rail.</p>
Regulatory	<p>The Transport Standards would be amended to include more defined requirements for containment of mobility aids in allocated spaces and define passive restraint systems. The Transport Standards would also include new requirements for buses, trams and light rail for mobility aids in allocated spaces including:</p> <ul style="list-style-type: none"> • Each allocated space to contain movement of a mobility aid towards the front, rear and sides of a bus. • Each allocated space must contain movement of a mobility aid towards the front, rear and wall side of a tram or light rail car. <p>The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 150: Benefit-cost ratios for mobility aid movement in allocated spaces – passive restraints

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	Benefit-cost ratio
Status Quo	-	-	-	-	-
Non-regulatory	0.0	-	6.3	6.3 ⁱ	0.00
Regulatory	2.7	-	43.7	43.7	0.06

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations:

Non-regulatory option:

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart. reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 75 per cent of new assets was applied to the non-regulatory option based on submissions which have indicated guidance will be incorporated into operator and provider asset standards. Existing assets were not expected to be upgraded. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option:

The benefits and costs were estimated from small number of data points from the survey and proxied at a national level meaning the results may not fully reflect the existing levels of compliance.

This reform results in safety benefits for a single cohort of beneficiaries at a single point in their journey, whereas the costs in retrofitting existing conveyances with passive restraints applies to a high proportion of conveyances.

Interdependencies:

The accessibility benefits associated with this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as bus, tram and light rail boarding points and identification of lead stops.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 151: Qualitative benefits for mobility aid movement in allocated spaces – passive restraints

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	Yes
Regulatory	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

Section 9.11 of the Transport Standards requires that an allocated space must contain the movement of a mobility aid towards the front and sides of buses (except dedicated school buses), trams and light rail.

The status quo option was supported by one of the 15 stakeholders who indicated a preferred option. This submission from a bus industry stakeholder outlined that the status quo provides bus operators the flexibility required to meet the needs of people with disability. The submission noted that the majority of bus designs have not explicitly incorporated the need to include structural capacity to retrofit passive restraint systems at the time of contract. The submission noted feedback from manufacturers is that vehicle design configurations would need to be assessed to ensure capacity to retrofit any passive restraint system. Identifying passive restraint solutions would require significant investigation of options to identify those that best suit particular bus designs, which the submission highlighted may differ not only across the bus network, but within an operator’s fleet. The submission also expressed concerns there would be significant costs associated with retrofitting passive restraints, and that installation of passive restraint systems within allocated areas may impact space and access for other passengers.

A number of submissions from other stakeholders expressed significant safety concerns and the need for greater clarity in containing the movement of mobility aids. Submissions from industry and government stakeholders, as well as individuals, people with disability and disability organisations all recounted instances of mobility aids tipping and sliding during transit. Instances of these incidents resulting in significant injury were also highlighted in submissions.

A few years ago, a PDA member using a motorised wheelchair on a bus was thrown from his wheelchair and partially crushed by it when the bus he was travelling on negotiated a corner at a speed less than the designated limit for that section of the route. As a result, he suffered injuries that resulted in further functional impairments and the need for more attendant care and assistive technology to help him live a (somewhat) ordinary life.

Physical Disability Australia

Submissions from individuals, people with disability and disability organisations expressed that sometimes the fear of tipping or past experiences of tipping, leads to avoiding further travel. This was highlighted by the Public Transport Ombudsman in Victoria, who noted it has received several complaints from consumers who have felt unsafe or have tipped over while travelling in wheelchairs on buses. The submission agreed with the issues that arise from a lack of guidance in this area and supports reforms that would provide greater clarity.

Submissions highlighted that the status quo is not meeting the needs of people with disability and creates significant safety concerns. Maintaining the status quo continues to risk the safety of people with disability when using mobility aids on public transport. The status quo does not enhance or increase equality and independence, or reduce discrimination for people with disability in relation to public transport. The status quo has no ongoing costs for public transport operators and providers, however negative impacts on community amenity, accessibility, and safety are high.

Non-regulatory

The non-regulatory option would update guidance to provide modal specific advice for containment of mobility aids in allocated spaces and a definition for passive restraint systems.

Seven industry and government stakeholders expressed support for the non-regulatory option. Submissions acknowledged that improved guidance would provide more clarity to the status quo and highlighted perceived limitations with the regulatory option which rendered the option unfeasible.

Key concerns outlined in submissions that supported the non-regulatory option centred on the design constraints that make containment of lateral movement with passive constraints unfeasible in some conveyances and the technical and cost concerns in retrofitting suitable constraints. One submission noted installation of passive restraints into a low-floor conveyance would require the redesign of the passenger saloon to accommodate the required number of allocated spaces with consideration for maintaining an access pathway, manoeuvring area and circulation space. A number of submissions also raised concerns with the range of mobility aids used and the difficulty in designing and installing restraints that suit all mobility aids of varying size, height and weight configurations. Submissions noted the non-regulatory option provides the flexibility to incorporate guidance into asset standards while allowing for consideration of these concerns.

To the extent that guidance is followed, costs may be incurred to install adequate passive containment systems on buses, trams, light rail and ferries to the extent that they do not already comply with the proposed guidance. Costs may be greater to retrofit certain constraints or certain conveyances. Operators and providers will be able to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation.

As this option is discretionary, it may not provide the certainty that operators and providers will install passive containment systems on conveyances. However, where passive containments are installed, safety for passengers traveling with a mobility aid will be improved and they will benefit from greater confidence and may travel more frequently and independently. If mobility aids are adequately contained in allocated spaces, safety for other passengers and staff will also be improved. Additional guidance around the use and definition of passive restraints will assist operators and providers ensure the containment systems used on conveyances are appropriate, effective and do not contravene any other sections of the Transport Standards.

Regulatory

The regulatory option would amend the Transport Standards to provide a definition for passive restraint systems and modal specific requirements for containment of mobility aids in allocated spaces in buses, trams and light rail.

Seven stakeholders expressed support for the regulatory option. These submissions were from individuals, people with disability and disability organisations. Submissions highlighted significant safety concerns due to the risk of tipping when travelling using mobility aids. Submissions highlighted the risk was particularly great when travelling in buses.

One submission contradicted claims made in another submission regarding passive restraints presenting a barrier to manoeuvring into allocated space, instead stating the main limitations to manoeuvrability are aisle width and the size of the allocated space.

The passive restraints provided are an effective measure to prevent mobility device movement on the front and wall side of the bus. However, movement of the mobility device to the aisle side of the bus can occur particularly for passengers who do not have sufficient upper body and arm strength to brace themselves with the handrail on the window ledge. Anecdotal feedback suggests mobility device users do not always position their device in the correct location or orientation for the passive restraints to be effective. This increases the risk of the mobility device moving, particularly when forward facing in the current fleet configuration.

Brisbane City Council

Echoing concerns in other submissions, one industry stakeholder noted they could support the regulatory option for accessible low floor conveyances if approved mobility devices are used. Three out of 15 submissions expressed concerns about the limitations posed by the variability in the design and size of mobility aid devices.

If mobility aids are adequately contained in allocated spaces, this would limit the movement of mobility aids during transit, improving safety for people with disability who use mobility aids, as well as other passengers and staff. The safety and confidence of people with disability who travel with mobility aids will be significantly improved by passive containments in allocated spaces. Improved regulatory clarity around the use and definition of passive restraints will also assist operators and providers and ensure the containment systems used on conveyances are appropriate, effective and do not contravene any other sections of the Transport Standards.

Costs will be incurred to install adequate passive containment systems on conveyances to the extent that they do not already comply with the proposed requirements. Installation costs will vary

depending on the type of conveyance, the type of passive restraint (such as ironing boards versus aisle-side restraints in buses) and the extent to which retrofitting is required.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **non-regulatory option**.

There was a clear split amongst stakeholders, with the regulatory option being supported by all individuals, people with disability and disability organisations stakeholders (seven in total) and the non-regulatory and status quo options being supported by all industry and government stakeholders (eight in total).

A number of key issues were presented as impacting the feasibility of an effective passive restraint. While submissions highlighted the particular safety risks associated with the movement of mobility aids while in transit, submissions also highlighted that the variability in the design configurations of mobility aids render the development of specifications for passive restraints that would suit the array of different devices available, as unfeasible. Three submissions indicated that without a national standard for mobility device design, it isn't possible to design suitable passive constraints that would be adequate for containing all mobility devices that are currently available on the Australian market.

Submissions also highlighted the complexity with developing suitable constraints in some conveyances, particularly buses which present the greatest risk for mobility aid movement due to lateral movements. It is these movements that also make the installation of suitable passive restraints particularly challenging. Submissions indicate that the regulatory options presented are unlikely to address this risk.

The non-regulatory option would allow consideration of design constraints to ensure passive restraints are located in suitable positions in each conveyance type, considering access pathways, manoeuvring areas as well as the topography or environment in which a conveyance is used. The non-regulatory option allows investigation of passive restraint solutions that best suit particular conveyance designs, which one submission highlighted may differ not only across networks, but within an operator's fleet.

Part 34 of the Transport Standards provides for a review of the efficiency and effectiveness of the Transport Standards to be carried out every 5 years. This reform area should be reviewed as part of the statutory review process if new technology or design standards emerges that addresses the challenges posed by varying mobility device designs.

The preferred option will be implemented through inclusion in a revised Whole Journey Guide.

54. Mobility aid movement in allocated spaces – active restraints

Issue

Unrestrained mobility devices in allocated spaces on conveyances can topple or slide, particularly if the conveyance executes a turn at speed, is displaced laterally due to kerb strike, or due to the lateral displacement forces caused by necessary acceleration or deceleration. This puts the occupant of the mobility aid at risk, as well as passengers who may be struck by the sliding or toppling wheelchair or scooter. The Transport Standards do not include technical requirements for active restraints, which results in a lack of clarity for operators.

Collective government action would ensure active restraints used on conveyances are appropriate for mobility aids and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 152: Reform options for mobility aid movement in allocated spaces – active restraints

Option	Description
Status Quo	<p>The Transport Standards will continue not to define active restraints, or requirements of their use.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-regulatory	<p>Guidance would be updated to include advice on active restraints on public transport conveyances, including:</p> <ul style="list-style-type: none"> • Safe use of active restraints, including seat belts. • Ensuring mobility aids meet safety requirements and deciding whether to travel on services without seatbelts. • Operators can choose to comply with ASNZS10542.1 (2015).
Regulatory	<p>The Transport Standards would be amended to include new technical requirements for active restraints, define active restraining systems, and specify where active restraining systems are mandatory for all conveyances.</p> <ul style="list-style-type: none"> • Active restrains must comply with ASNZS10542.1 (2015). • Passengers may choose to travel facing towards the front. • Active restraint systems must be operator deployable as default, rather than passenger deployable. <p>The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 153: Benefit-cost ratios for mobility aid movement in allocated spaces – active restraints

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	Benefit-cost ratio
Status Quo	-	-	-	-	-
Non-regulatory	0.0	-	0.3	0.3 ⁱ	0.00
Regulatory	0.8	-	22.7	22.7	0.03

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations:

Non-regulatory option:

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart. An estimated rate of uptake of 75 per cent was applied to the non-regulatory option based on submissions that indicated coaches and taxis typically installs active restraining systems that meet the guidance. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option:

The benefits and costs were estimated from small number of data points from the survey and proxied at a national levee meaning the results may not fully reflect the existing levels of compliance.

This reform results in safety benefits for a single cohort of beneficiaries at a single point in their journey, whereas the costs in retrofitting existing conveyances with active restraints applies to a high proportion of conveyances.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 154: Qualitative benefits for mobility aid movement in allocated spaces – active restraints

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	Yes
Regulatory	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

Under the status quo the Transport Standards would continue to not define active restraints, provide technical standards for their use, or clearly state where they are necessary on conveyances.

During consultation, there was some misinterpretation of the scope of the proposed reform options. The regulatory option includes provisions for active restraint systems in allocated spaces on conveyances ‘if safety belts are compulsory under legislation in a conveyance’. Some of the feedback received during consultation relates to conveyances outside of the scope of this proposal, such as on standard route bus services.

Feedback from the disability sector highlighted the risks associated with travelling using mobility aids on public transport. Multiple submissions noted that where fitted (primarily, wheelchair accessible taxis and school buses) active restraints are an effective way to mitigate safety risks. One submission from a disability organisation noted that these risks are more significant on bus services, due to the potential for unexpected braking and lateral movement.

One submission from government and one submission from industry supported the status quo. Both submissions highlighted that generally, buses are not designed to incorporate the structural features required to install active restraint systems. Both submissions highlighted the significant challenges associated with retrospective application of the proposed regulatory requirements, which may be unfeasible or cost prohibitive. Similarly, both submissions raised concerns regarding the impact of fitting active restraint systems in buses used on route services, including impacts on the efficiency of service and safety implications relating to the various designs of mobility aids, and suggested the flexibility of the status quo allows operators and providers to meet the needs of passengers.

Council believes that passive restraints provide a better overall experience for all passengers compared to active restraints in an urban bus fleet while maintaining the travel efficiencies of a public transport system.

Brisbane City Council

Maintaining the status quo would not address issues identified during consultation relating to risk to the safety of passengers who use mobility aids on public transport. The status quo does not enhance or increase equality and independence, or reduce discrimination for people with disability in relation to public transport.

Non-regulatory

Two submissions from industry and four submissions from government supported the non-regulatory option. The provision of best practice guidance material was well supported among these stakeholders, although several submissions emphasised the importance of incorporating guidance into ongoing staff training to ensure systems are used safely and as intended.

In recognition of the variety of mobility aids and use cases relevant to the use of active restraints, these submissions noted the value of flexibility provided through the non-regulatory option. Two submissions from government noted that design requirements, where they are mandatory, already meet ADRs and other applicable Australian Standards, and therefore additional regulation through the Transport Standards would be unnecessary. Similarly, three submissions from government discussed the potential implications of the installation of active restraint systems on bus services – particularly relating to interruptions to service and liability. The non-regulatory option was identified by these submissions as a suitable compromise, where best practice would benefit conveyance designers, operators and providers and people with disability, whilst recognising the need for flexibility.

Multiple submissions from government noted that the retrospective application of the proposed requirements would incur significant additional operational costs and upgrade costs.

Regulatory

All submissions from individuals, people with disability and disability organisations supported the regulatory option. These submissions emphasised the role that active restraint systems can play in improving the safety of public transport services for people who use mobility aids, and highlighted that passenger safety must be paramount when decisions are made on configuring seating arrangements and utilising restraints. There were mixed views shared regarding how the proposed requirements should be applied. Some submissions supported the fitting and consistency of design of active restraint systems in conveyances where already mandated, such as WATS, but noted that the application of the requirement across all conveyances may not deliver an optimal outcome for all passengers. Conversely, some stakeholders advocated for the mandatory fitting of active restraint systems in conveyances outside the scope of the proposed option, such as public route buses.

Whilst we support the use of active restraints as the safest way to travel when using a mobility aid, mandating their use would limit the independence of people with disability and be problematic across forms of public transport which run to set timetables, such as trains, trams, and buses, or where there are limited staff and the potential of one or more people needing help to restrain their assistive aids.

Where active restraints have been mandated, for example, across all Wheelchair Accessible Taxis (WATS) time pressures are less of a problem and there is only a single passenger to help at any one time.

Physical Disability Council of NSW

The regulatory option was favoured by the disability sector to provide a greater level of consistency and certainty across services and jurisdictions. Two submissions from people with disability noted that all drivers of WATs are already trained in the use of active restraint systems, and the impact on operators and providers is likely to be minimal.

Four submissions from industry and one submission from government supported the regulatory option. One submission from industry noted that the proposed regulatory option is feasible to implement and would result in tangible improvements to passenger's accessibility and safety when travelling on coach services. Similarly, two submissions outlined that the majority of WAT services are already compliant with the proposal, and the regulatory option would support national consistency. One submission emphasised that any new regulations must be accompanied by staff training to guarantee safety and accessibility benefits are achieved. One submission from industry noted that further clarity should be provided regarding the fitment of active restraint systems to non-certified anchorage points on mobility devices, and the potential for the introduction of a national labelling system to identify safe anchorage points. One submission from industry noted that costs would be incurred if the requirements were applied retrospectively and a conveyance required upgrade.

Costs will be incurred to install active restraint systems on conveyances where they are required, to the extent that they do not already comply with the proposed requirements. Installation costs will vary depending on the extent to which retrofitting is required.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is the **non-regulatory option**.

During consultation, there was widespread agreement that the risks associated with travelling on conveyances when using mobility aids can be mitigated through the use of active restraint systems, where fitted. Submissions from government and industry provided mixed support for the status quo, non-regulatory and regulatory options, while all submissions from the disability sector supported the regulatory option.

Stakeholders shared diverse views on the scope of conveyances in which active restraint systems should be installed, but agreed that the safe use of these features, particularly in WATs and coaches, must be recognised. Several submissions noted there are current ADRs which prescribe the design and use of active restraint systems to ensure safety for passengers, including in WATs. To complement these requirements, the non-regulatory option will provide best practice guidance to support operators and providers to safely fit and operate active restraint systems where they are required, while recognising existing provisions required through other regulations such as ADRs to which conveyances must already meet.

Multiple submissions from both industry and the disability sector discussed the provision of active restraint systems in conveyances in which safety belts are not mandatory. These suggestions fall outside the scope of the proposed reforms. Additional guidance regarding the importance of staff training will be provided to ensure the ongoing safety of use of fitted active restraint systems.

The preferred option will be implemented through inclusion in a revised Whole Journey Guide.

55. Appropriate seats on booked services

Issue

The Transport Standards require accessible seats to be held until last in the booking process. However, the definition of an ‘accessible seat’ is unclear and does not recognise the diversity of needs of passengers. In some cases, this may lead to a discriminatory outcome whereby people with disability do not have access to a seat that meets their needs, posing a risk to their health and safety.

Collective government action would ensure people with disability can access seats suitable for their needs and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 155: Reform options for appropriate seats on booked services

Option	Description
Status Quo	<p>The Transport Standards requires accessible seats to be kept for passengers with disabilities and that operators must allocate unbooked accessible seats to other passengers only after all other standard seats are filled.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-regulatory	<p>Guidance would be updated to include advice on booking seats appropriate to a passenger’s needs and is pertinent to booked services on aircraft, coaches, ferries, dial-a-ride services and trains.</p>
Regulatory	<p>Transport Standards would be amended to include requirements for booking seats appropriate to a passenger’s needs and specify the nature of appropriate versus accessible seating for people with disability, for aircraft, coaches, ferries, dial-a-ride services and trains including:</p> <ul style="list-style-type: none"> • Passengers with disabilities must be able to book seats that are located in parts of the conveyance that are appropriate for their travelling needs. • Operators and providers must appropriately accommodate passengers based on their needs unless all seats on the service are already booked. • If different classes of travel are provided by a service, appropriate seats must be available in each class. <p>The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 156: Benefit-cost ratios for appropriate seats on booked services

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	Benefit-cost ratio
Status Quo	-	-	-	-	-
Non-regulatory	101.0	-	104.7	104.7 ⁱ	0.96
Regulatory	317.0	-	144.8	144.8	2.19

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations:

Non-regulatory option:

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. The compliance rate is assumption-based and has been estimated by the Department through insights gained from the Consultation RIS rather than observed behaviour or direct consultation responses. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option:

The benefits and costs for this reform were estimated from publicly available data (including the number of public transport operators) and a small number of data points from the survey. This implies the benefits and costs may not be fully reflective of differences by state and jurisdiction and rates of current and future compliance.

This reform improves safety, amenity and accessibility outcomes for public transport users with disability and users with restricted mobility resulting in benefits for the broader community.

Interdependencies:

The accessibility benefits associated with this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as installation of appropriate restraints, timely provision of information, boarding points on infrastructure and others.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 157: Qualitative benefits for appropriate seats on booked services

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	-
Regulatory	Yes	Yes	-	Yes	Yes	-

Analysis of submissions

Status quo

Under the status quo, accessible seats will continue to be kept for passengers with disabilities and operators will only be able to allocate unbooked accessible seats to other passengers after all other standard seats are filled. During consultation, individuals, people with disability and disability organisations identified that these requirements do not align with best practice and should be replaced with more inclusive booking options. For example, one submission noted the individualised identification of appropriate seating to meet people’s needs could reduce potential health and safety issues during service use.

Our preference reflects our view that the regulatory option is the most effective way of achieving consistency and certainty by acknowledging that for many people who are blind or have low vision it can be more useful for them to be allocated a seat, for example, that is closer to bathroom or dining facilities than a seat that meets the definition of an accessible seat.

Vision Australia

One submission from industry supported the status quo option. This stakeholder preferred the status quo as unique characteristics in the relevant industry make this option the most feasible and appropriate solution, without compromising on safety issues.

Maintaining the status quo has no-ongoing costs for public transport operators and providers. There may be a lost opportunity to ensure people with disability can book seating more appropriate to their needs.

Non-regulatory

Two submissions from industry and one submission from government supported the non-regulatory option. Those who supported the non-regulatory option noted guidance material would support operators and providers to ensure their practices follow best practice, and benefit

passengers when there is operational and passenger alignment. Similarly, two submissions stated the regulatory option may not be feasible to implement, given the variability of passenger's needs and the operational constraints of coaches.

The BIC does not support the regulatory option as it would be impossible to apply to passengers in all circumstances of travelling needs across all coach types.

For example: all booked passengers have their position on the coach conveyance pre-allocated. If a roadside pickup were to occur, the passenger would be booked and allocated a seat (if one is available), before the passenger boards the coach. This cannot happen for roadside bookings, for example, where the passenger uses a mobility aid, as the removal of fixed seats to gain access is a 2-man lift / job and cannot be completed roadside.

Bus Industry Confederation

To the extent that guidance is adopted, people with disability may benefit from increased amenity through the provision of seating most appropriate to their needs. However, the discretionary nature of the option does not provide certainty that operators and providers will adopt guidance.

Regulatory

The majority of submissions from government, two submissions from industry and all individuals, people with disability and disability organisations supported the regulatory option.

Stakeholders from the disability sector indicated that identifying appropriate seating during the booking process can reduce safety issues while a service is underway. Individual respondents highlighted that the regulatory option would be an effective way of providing consistency of service to people with disability. Additionally, it was mentioned that this option would allow individuals to have a greater sense of confidence and independence when travelling.

Regulation in the Transport Standards gives choice and control back to the consumer and people with disability when using booked service, promoting the use of these services with the understanding for passengers that their needs will be met equitably and not at the expense of their time and dignity.

Physical Disability Council of NSW

The majority of submissions from government supported the regulatory option in principle, but suggested amendments to clarify the scope of the proposed requirements. One submission sought clarity regarding the definition of 'booked seats' and 'booked services' to mitigate the risk of misinterpretation which may result in services that do not have reserved seating being subject to compliance obligations. Additionally, one submission suggested amendments to clarify an appropriate location must be provided, rather than a specific seat.

Industry provided mixed support for the regulatory option. Both submissions which supported the regulatory option highlighted the accessibility benefits that may result from this reform. However, one submission noted that while they support regulatory amendments in principle, further clarity is required regarding the definition of accessible seating and guidance on how operators and providers should appropriately accommodate passengers based on their preferences. This submission suggested further consultation with operators and providers and the disability sector to ensure the proposal is fit-for-purpose.

Submission from both industry and government noted any legislative amendments may result in technical and cost impacts, depending on the manner in which new requirements are implemented.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **regulatory option with additional guidance**.

Industry provided mixed support for the status quo, non-regulatory and regulatory options, while the majority of submissions from government and the disability sector supported the regulatory option. The regulatory option will provide a greater standard of accessibility to passengers when booking seating, and increase consistency of service across public transport networks. Operational issues, such as managing seating allocation and bookings would continue to be the responsibility of the public transport operators and providers. To support people with disability, transport operators and providers, guidance will be developed. Guidance material would focus on addressing stakeholder concerns about defining 'booked' and 'unbooked' service and the scope of the new requirements.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements retrospectively with a compliance schedule timing of 5 years.

56. Conveyance dwell times at stops

Issue

The Transport Standards do not provide any requirements for dwell (waiting) times at stops to enable people with disability to be safely seated, securely located in allocated spaces or have safely alighted before the conveyance moves. In some conveyances such as buses and coaches it is possible for drivers to observe if people with disability are safely seated or securely positioned in an allocated space prior to departing a stop, but it is difficult or not possible in other conveyances. Addressing conveyance dwell times in either the Transport Standards or guidance can provide a nationally consistent approach and may increase safety for people with disability.

Collective government action would ensure people with disability are able to safely board conveyances and would address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 158: Reform options for conveyance dwell times at stops

Option	Description
Status Quo	<p>The Transport Standards does not include provision of conveyance dwell time at stops.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-regulatory	<p>Guidance would be updated to include advice that conveyances should not depart from stops until passengers including those with disabilities are safely seated, securely located or securely positioned in allocated spaces or have safely alighted.</p>
Regulatory	<p>The Transport Standards would be amended to include new requirements for conveyance dwell time at stops. Dwell times at stops must permit passengers, including those with disabilities, to safely alight and to board and be safely seated, be securely located, or be securely positioned in allocated spaces before the conveyance resumes movement.</p> <p>These requirements would apply to all conveyances where the driver or master has a clear view of the priority seats and allocates spaces.</p> <p>The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect new requirements.</p>

Cost benefit analysis

Quantitative assessment

Submissions from public transport operators and providers and state and territory governments indicated internal operational standards, processes and procedures are currently in place to manage safety risks associated with conveyance movement. As a result, there would be no additional costs or benefits associated with the reform.

More information is provided below in the analysis of submissions.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 159: Qualitative benefits for conveyance dwell times at stops

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	Yes
Regulatory	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

Under the status quo there would continue to be no requirements regarding conveyance dwell times at stops to enable passengers to be seated or alight safely, or to securely located in allocated spaces.

Feedback provided by individuals, people with disability and disability organisations indicates the lack of consistency in conveyance dwell times can cause considerable anxiety for passengers, and may make them more reluctant to use public transport. Similarly, stakeholders highlighted the additional safety and accessibility impacts risked posed to passengers with disability when appropriate dwell times are not provided.

Often it has been the experience of our members that there is little assurance that transport services will not leave without them, or they are unable to get off at their desired stop because there is simply not enough time allowed for them to enter and exit.

Physical Disability Council of NSW

Of the 19 stakeholders who indicated a preference for this reform, two submissions from industry and one submission from government supported the status quo option. These submissions shared

concerns regarding the feasibility of the non-regulatory and regulatory option on timetabled services, given operational challenges associated with ensuring timely service delivery during peak periods. Likewise, one submission sought clarity regarding how the proposed requirements could be implemented on conveyances where a driver's view may be obstructed and CCTV visibility cannot be relied upon. Two submissions from government noted it is already standard practice for drivers to wait until passengers are seated before moving. In recognition of this, one submission from government suggested the intended outcome of this reform area could be achieved through staff training, making additional regulation redundant.

Maintaining the status quo will continue to inhibit the safety of people with disability if there is not sufficient time to be safely seated, securely located in allocated spaces or have safely alighted before the conveyances resumes movement. The status quo does not enhance or increase equality and independence, or reduce discrimination for people with disability in relation to public transport. It has no ongoing costs for public transports operators and providers; however, negative impacts on community accessibility and safety remain.

Non-regulatory

The majority of submissions from industry and government stakeholders supported the non-regulatory option. All of these submissions shared examples of internal operational standards, processes and procedures currently in place to manage safety risks associated with conveyance movement.

Although largely supportive of providing best practice guidance to provide greater clarity to operators and providers, multiple submissions raised concerns regarding the feasibility of complying with the regulatory proposal on certain conveyance types. Stakeholders broadly agreed that on buses and coaches, the proposed requirements are feasible. However, on modes where there is no direct line of sight between passenger and driver – for example, heavy rail and ferries – this cannot be achieved, and therefore flexibility is required. Likewise, in conveyances that contain both seated and standing passengers, two submissions noted the potential inability for a driver to view all passengers. These submissions did not support the regulatory option, suggesting it would not provide regulatory certainty to operators and providers, and does not sufficiently consider people with hidden and invisible disabilities.

Three submissions from industry and government discussed the potentially detrimental outcomes of the regulatory option on the overall operation of a public transport network, including the impacts of additional dwell times on timetabling, service frequency and service crowding.

It would be almost impossible to have services running on time if a mandatory dwell time is inserted, as per the regulatory option.

Queensland Government Department of Transport and Main Roads

One submission questioned how the regulatory proposal would be applied to autonomous and driverless vehicles.

Due to the discretionary nature of this option, it does not provide certainty that public transport services across all jurisdictions will provide consistent dwell times to support the safe boarding of a conveyance. To the extent that guidance is followed, costs may be incurred by operators and providers relating to staff training and broader operational impacts.

Regulatory

The regulatory option was supported by all individuals, people with disability and disability organisations who expressed a preference for this reform area (nine stakeholders). Submissions from these stakeholders highlighted the certainty provided through the regulatory reform and the potential benefits to passenger safety, which are not guaranteed through the non-regulatory option.

Knowing in advance what the dwell times will be would provide passengers with a greater capacity to plan their transport usage having regard to their safety and individual circumstances.
Vision Australia

Two submissions from disability organisations also stated the benefits to accessibility should be considered more significant than the resulting operational costs that may be incurred through the regulatory option.

The regulatory option is supported. The health and safety of passengers should take precedence over the running schedule of vehicles. Drivers need training that reinforces behaviour to monitor and assess passengers during stop/start of vehicles.

Queenslanders with Disability Network

No government or industry stakeholders supported the regulatory option.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is the **non-regulatory option**.

There was a very clear split amongst stakeholders with the regulatory option being supported by all individuals, people with disability and disability organisations stakeholders (nine in total) and the non-regulatory and status quo options being supported by all industry and government stakeholders (ten in total).

The non-regulatory option will provide best practice guidance to operators and providers to implement appropriate dwell times where feasible, while recognising the operational constraints of some conveyance modes and existing internal practices which achieve the intended outcome of this reform. Additional guidance material will be provided to supplement this option, noting the importance of driver training to ensure the safety of passengers.

The effectiveness of the non-regulatory option in enabling passengers to be seated or alight safely before conveyances resume movement will be evaluated in a future statutory review of the Transport Standards.

The preferred option will be implemented through inclusion in a revised Whole Journey Guide.

57. Stairs on trains

Issue

The Transport Standards requirements reference dated Australian Standards for stairs and are not specific to each type of public transport conveyance. As a result, the requirements are not fit-for-purpose for trains as the provision of internal stairs in rail cars is not always achievable due to space constraints in rail cars. This poses a safety risk to people with disability as they may not be able to traverse stairs safely.

Collective government action would ensure requirements for stairs are appropriate to be used on trains and are accessible to people with disability. This would address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 160: Reform options for stairs on trains

Option	Description
Status Quo	<p>The Transport Standards requires stairs on conveyance to comply with relevant Australian Standards. These requirements are not specific for stairs to each type of conveyance.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-regulatory	<p>Guidance would be updated to include advice on internal stairs on board trains, including accessibility features and handrail geometry, and refer operators and providers to AS1428.1 (2009).</p>
Regulatory	<p>The Transport Standards would be amended to include requirements for stairs on trains, trams and light rail to include the following:</p> <ul style="list-style-type: none"> • Where internal stairs and steps are provided, they must have opaque risers and comply with AS1428.1 (2009). • Stair and step geometry must comply with one of two sub-options. • The minimum access path width on stairs and steps must be 850 millimetres. Stairs and steps must not intrude into access paths. • The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect new requirements. • The Transport Standards would be updated to amend requirements for handrails for all conveyances (except dedicated school buses and small aircraft.), to include the following: <ul style="list-style-type: none"> • A handrail on stairs or steps need not extend beyond the top or bottom of the steps and stairs. • Handrails must have at least 30 per cent luminance contrast with any background wall or surface adjacent to the handrail. • Handrails must comply with AS1428.1 (2009) Clause 12 Handrails.

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 161: Benefit-cost ratios for stairs on trains

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	Benefit-cost ratio
Status Quo	-	-	-	-	-
Non-regulatory	-	-	-	-	-
Regulatory	8.9	-	7.4	7.4	1.21

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

Considerations to note in interpreting analysis

Limitations:

Non-regulatory option:

There are no costs and benefits associated with this non-regulatory reform with the Department indicating that there would be no take-up based on the provision of guidelines only.

Regulatory option:

The costs and benefits for this reform were estimated from a small number of data points provided by survey responses to proxy the compliance of stairs on trains at a national level. This implies the benefits and costs may not be fully reflective of differences by state and jurisdiction.

Interdependencies:

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as nominated assistance boarding points, bus, tram and light rail boarding points and signals and process for requesting boarding devices.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 162: Qualitative benefits for stairs on trains

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	Yes
Regulatory	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

The Transport Standards requirements for stairs are not specific to each type of public transport conveyance. The space constraints of rail cars make compliance with the existing stair requirements in the Transport Standards unachievable.

The current requirements continue to inhibit the safety of people with disability when traversing stairs on trains as they are unable to be implemented. The status quo does not enhance or increase equality and independence, or reduce discrimination for people with disability in relation to public transport.

While the status quo has no ongoing costs for public transport operators and providers, negative impacts on community amenity, accessibility, and safety will remain as space constraints in rail cars make the current requirements unattainable for operators and providers.

No submissions received during public consultation expressed support for the status quo option.

Non-regulatory

The non-regulatory option would provide updated guidance with advice on accessibility features for internal stairs on board trains including stair design, appropriate luminance contrasting and handrail requirements including handrail location in relation to access paths. TGSIs would not be required at train, tram and light rail stairs and steps.

No submissions received during public consultation indicated support for the non-regulatory option. It was noted that a regulatory option is likely to provide the greatest level of consistency and certainty, and ensure people who can transit between decks can do so safely.

To the extent that guidance is followed, costs would be incurred to install compliant stairs and accessibility features. Retrofitting stairs in existing conveyances would be expensive or unfeasible. Due to the discretionary nature of this option, it does not provide certainty that operators and providers will adopt requirements, however the non-regulatory option allows operators and providers to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation.

Given this option is discretionary, it does not provide certainty that guidance will be implemented which may reduce confidence of passengers to travel if they are unable to safely traverse stairs when travelling by train. To the extent that guidance is followed, people travelling by train will benefit from safer stairs, specific to the conveyance type, delivering improved accessibility for people with disability. Operators and providers will also benefit from greater design certainty and clarity to the extent that guidance is implemented.

Regulatory

The regulatory options would amend the Transport Standards to include modal specific requirements for stairs on trains, trams and lift rail including updated Australian Standard references and handrail requirements. TGSIs would not be required at train, tram and light rail stairs and steps. Handrail requirements would be amended to include location and luminance contrast requirements and requirements for warning indicators where a handrail is interrupted or terminates abruptly at the top or bottom step. The amended Transport Standards would also include the requirements for internal stairs, including minimum access path width requirements.

Two regulatory sub-options for stair and step geometry were also proposed for consideration as part of the regulatory option. Sub-option 1 would require compliance with riser and going specifications in the NCC, Table D2.131. Sub-option 2 provides a performance-based approach, requiring riser and going dimensions that are 'safe and fit for purpose'.

All submissions received during public consultation favoured a regulatory approach in relation to stairs on trains, with sub-option 2 being preferred amongst those who expressed a preference relating to stair and step geometry. Submissions in support of sub-option 2 noted it best reflected a performance based and modal-specific approach which put passenger safety as primary concern, rather than adherence to specifications in the NCC that may not be optimised for public transport conveyances such as trains.

Concern was raised in a number of submissions that a 30 per cent luminance contrast for handrails is considered insufficient for people who are blind or vision impaired. This is a recurring concern where luminance contrast is an element of a reform area. Submissions also expressed some divergent views on the exclusion of TGSIs from the regulatory option. In light of the fact that TGSIs would not be required under the proposed regulatory option, one submission from an organisation representing the blind and vision impaired recommended that the area in front of the stairs be indicated by a textured, non-slip surface with the ability for clear detection visually with appropriate luminance contrast, and through obvious textural change for a white cane being run over the surface.

One submission from a government stakeholder outlined stairs on trains is a critical area for reform. The submission outlined that the existing requirements relate to buildings and are not achievable on conveyances as they fail to consider the operational environment, and space and design limitations in trains. This submission made suggestions to remove width requirements and references to Australian Standards for stair height and width. Recommendations were made to replace these requirements with a performance-based approach of making stairs safe and fit for purpose, in line with the proposed sub-option 2 for stair geometry.

Costs would be incurred to install compliant stairs and accessibility features. Due to space constraints, modifying existing stair geometry is not be feasible. A regulatory approach was supported by all stakeholder who expressed a preference during the consultation period. A regulatory approach would provide certainty for people with disability, ensuring that operators and

providers would adopt requirements. People with disability, as well as the general public, will be able to traverse stairs more safely once requirements are implemented. Operators and providers will also benefit from greater design certainty and clarity.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is the **regulatory option with revisions**, with **sub-option 2** in relation to stair and step geometry and proposed amendments.

Following feedback through the Consultation RIS, the features for this option have been refined to remove specific references relating to width, and Australian Standards references for stair heights and depths. These changes address concerns outlined in submissions regarding conveyance space and design constraints making implementation of width and stair height and depth requirements difficult to achieve or unfeasible in trains. Stairs should instead be safe and fit for purpose.

Submissions in support of sub-option 2 highlighted that a performance-based solution, which would replace the existing Australian Standards references for stair height and width, would allow flexibility to adopt a 'fit for purpose' solution. Submissions outlined this would not necessarily be achieved through reliance on specifications outlined in the National Construction Code (sub-option 1) which is not optimised for public transport conveyances.

Concerns were raised from organisations representing the blind community and those with low vision regarding the proposed luminance contrasting requirements of the regulatory option. These luminance contrast requirements have been developed by a Standards Australia technical committee to ensure products, services, and systems are safe, consistent, and reliable. The objective of the referenced Australian Standards is to provide design requirements to enable access for people with disabilities. The Australian Standards note that the design requirements should be regarded as a minimum. The regulatory approach reiterates that this requirement should be regarded as a minimum and this will be further emphasised in updating the Transport Standards Guidelines and /or The Whole Journey Guide to reflect the new requirements.

This option provides a balance of certainty, improved accessibility and safety for people with disability with greater certainty for industry, who will benefit through and feasible and practical requirements that are fit-for-purpose.

The new Transport Standards requirements would apply prospectively. Consultation findings indicate that it is difficult or not feasible to retrofit stairs due to conveyance space and design constraints.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism.

58. Stairs on ferries

Issue

The Transport Standards requirements reference dated Australian Standards for stairs and are not specific to each type of public transport conveyance. As a result, the requirements are not fit-for-purpose for ferries as vessel interiors are space constrained and the geometry required of stairs is not always feasibly achieved in a ferry. The Transport Standards requirements are also inadequate for handrails along ferry stairs. This poses a safety risk to people with disability as they may not be able to traverse stairs safely.

Collective government action would ensure requirements for stairs are appropriate to be used on ferries and are accessible to people with disability. This would address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 163: Reform options for stairs on ferries

Option	Description
Status Quo	<p>The Transport Standards requires stairs on conveyance to comply with relevant Australian Standards. These requirements are not specific for stairs to each type of conveyance.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-regulatory	<p>Guidance would be updated to include advice for stairs and handrails on ferries including advice for:</p> <p>Stair design, including risers, nosings and luminance contrast, Handrail design, Operators and providers can choose to adopt AS1428.1 (2009)</p> <p>Operators can refer to NSCV, Part C Design and construction Section 1 Arrangement, accommodation and personal safety (2018) Section 5.13.3.4.</p>
Regulatory	<p>The Transport Standards would be amended to include new requirements for ferry stairs and handrails along ferry stairs, including:</p> <ul style="list-style-type: none"> • Where stairs and steps are provided, they must have opaque risers and comply with AS1428.1 (2009). Stair and steps risers and goings dimensions must comply with one of three sub-options. • The minimum access path width on stairs and steps in the conveyance must be 900 millimetres as per NSCV, Part C Design and construction. Stairs and steps must not intrude into access paths. • The Transport Standards would include the following new requirements for handrails on ferries: • Handrails must comply with the NSCV Part C Design and construction. A handrail on steps and stairs need not extend beyond the top or bottom of the stairs or steps. If the handrail is interrupted or abruptly terminated, a domed warning indicator must be provided. Handrails must have at least 30

	<p>per cent luminance contrast with any background wall or surface adjacent to the handrail. Handrail profile must be as per AS1428.1 (2009).</p> <p>The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect new requirements.</p>
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Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 164: Benefit-cost ratios for stairs on ferries

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	Benefit-cost ratio
Status Quo	-	-	-	-	-
Non-regulatory	-	-	-	-	-
Regulatory	12.0	-	0.7	0.7	15.95

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

⁽ⁱⁱ⁾The benefits and costs presented in the table above are rounded to two decimal places and calculated to four decimal places in the CBA workbook, which may result in zero values in the table.

Considerations to note in interpreting analysis

Limitations:

Non-regulatory option:

There are no costs and benefits associated with this non-regulatory reform with the Department indicating that future infrastructure would be compliant under the National Standard for Commercial Vessels.

Regulatory option:

The costs and benefits for this reform were estimated from a small number of data points provided by survey responses to proxy the compliance of stairs on ferries at a national level. This implies the benefits and costs may not be fully reflective of differences by state and jurisdiction.

The survey indicated that a low number of ferries would require upgrades, resulting in a relatively lower overall cost, in comparison with a potentially large group of beneficiaries.

Stairs on ferries

Interdependencies:

The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as removable gangway design and pontoon boarding points on infrastructure.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 165: Qualitative benefits for stairs on ferries

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	-	-	-	-	-	-
Regulatory	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

The Transport Standards requirements for stairs are not specific to each type of public transport conveyance. The space constraints and the geometry required of stairs makes compliance with the existing stair requirements in the Transport Standards unachievable in many cases.

The current requirements continue to inhibit the safety of people with disability when traversing stairs on ferries as they are unable to be implemented. The status quo does not enhance or increase equality and independence, or reduce discrimination for people with disability in relation to public transport.

While the status quo has no ongoing costs for public transport operators and providers, negative impacts on community amenity, accessibility, and safety will remain as space constraints in ferries and stair geometry requirements make the Transport Standards unattainable for operators and providers.

No submissions received during public consultation expressed support for the status quo option.

Non-regulatory

The non-regulatory option would provide updated guidance to include advice for stairs and handrails on ferries, including stair design, appropriate luminance contrasting and handrail requirements, providing flexibility to operators and providers.

No submissions received during public consultation indicated support for the non-regulatory option. It was noted that the current requirements are not fit-for-purpose, do not account for space limitations in ferries and that an achievable, modal specific approach was required.

To the extent that guidance is followed, costs would be incurred to install compliant stairs and accessibility features. Due to space constraints, modifying existing stair geometry may not be feasible. Due to the discretionary nature of this option, it does not provide certainty that operators and providers will adopt requirements; however, the non-regulatory option should allow operators and providers to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation.

Given this option is discretionary, it does not provide certainty that guidance will be implemented which may reduce confidence of passengers to travel if they are unable to safely traverse stairs when travelling by ferry. To the extent that guidance is followed, people travelling by ferry will benefit from safer stairs, specific to the conveyance type, delivering improved accessibility for people with disability. Operators and providers will also benefit from greater design certainty and clarity to the extent that guidance is implemented.

Regulatory

The regulatory options would amend the Transport Standards to include new requirements for ferry stairs and handrails, including updating Australian Standard references. TGSIs would not be required at ferry stairs and steps. Handrail requirements would be amended to include location and luminance contrast requirements, minimum access path widths, and requirements for warning indicators where a handrail is interrupted or terminates abruptly at the top or bottom step.

In relation to stair and step riser and going dimensions, three regulatory sub-options were presented for consideration. Sub-option 1 would require riser and going dimensions to comply with relevant parts of the NSCV. Sub-option 2 would require compliance with relevant parts of the NCC. Sub-option 3 would require riser and going dimensions that are safe and fit for purpose.

All submissions received during public consultation favoured a regulatory approach, noting this would best achieve consistency and certainty in relation to stairs on ferries. Concern was raised in a number of submissions that a 30 per cent luminance contrast for handrails is considered insufficient for people who are blind or vision impaired. This is a recurring concern where luminance contrast is an element of a reform area.

There was no clear preference for any one of the sub-options across submissions received during the consultation period. Some considered sub-options 1 and 2 as more appropriate for transiting safely between decks, with more support for sub-option 1 noting it would include modal specific requirements and align with the NSCV. Others noted that sub-option 2 provided more generous dimensions for risers and goings than sub-option 1. Others expressed support for sub-option 3 as it best reflected a performance based and modal-specific approach which put passenger safety as primary concern, rather than adherence to specifications in the NCC that may not be optimised for public transport conveyances such as ferries.

Some concerns were expressed that the regulatory options did not adequately account for space constraints in ferries. One submission suggested reference to width and Australian Standards requirements for stair heights be removed from the broader reform proposal, instead adopting a 'fit-for-purpose' approach similar to sub-option 3, with other elements to be moved to guidance. It was noted that compliance with the NSCV (option 1) is already an industry requirement and this

shouldn't be mandated in the Transport Standards as it would increase regulatory burden without commensurate value add.

Costs would be incurred to install compliant stairs and accessibility features. Due to space constraints, modifying existing stair geometry may not be feasible. A regulatory approach was supported by all stakeholder who expressed a preference during the consultation period. A regulatory approach would provide certainty for people with disability, ensuring that operators and providers would adopt requirements. People with disability, as well as the general public, will be able to traverse stairs more safely once requirements are implemented. Operators and providers will also benefit from greater design certainty and clarity.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is the **regulatory option with revisions**, no preferred sub-option.

The NSCV already regulates the design specifications for vessel stair and step riser and going dimensions. Adopting a preferred sub-option in relation to stair and step riser and going dimensions, and imposing further regulation through the Transport Standards, is considered duplicative, unnecessary and may lead to uncertainty and inconsistencies if the National Standards or Transport Standards are amended in the future.

The proposed amendments refine the preferred option to also remove references relating to width and Australian Standards references for stair heights and depths. These changes address concerns outlined in submissions regarding conveyance space and design constraints making implementation of stair width, height and depth requirements difficult to achieve or unfeasible in ferries. Stairs should instead be safe and fit for purpose.

While acknowledging concerns from organisations representing the blind community and those with low vision regarding the proposed luminance contrasting requirements of handrails, these requirements have been developed by a Standards Australia technical committee to ensure products, services, and systems are safe, consistent, and reliable. The objective of the referenced Australian Standards is to provide design requirements to enable access for people with disabilities. The Australian Standards note that the design requirements should be regarded as a minimum. The regulatory approach reiterates that this requirement should be regarded as a minimum and this will be further emphasised in updating the Transport Standards Guidelines and /or The Whole Journey Guide to reflect the new requirements.

The new Transport Standards requirements would apply prospectively. Consultation findings indicate that it is difficult or not feasible to retrofit stairs due to conveyance space and design constraints.

This option provides a balance of improved accessibility and safety for people with disability with improved requirements for tread nosing and handrail contrast and ensuring that trip hazards are not introduced into ferries. The ferry industry will benefit through greater certainty and feasible and practical requirements that are consistent with existing industry standards.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism.

59. Stairs on buses

Issue

The Transport Standards requirements reference dated Australian Standards for stairs and are not specific to each type of public transport conveyance. As a result, the requirements are not fit-for-purpose for buses and coaches, as they contradict industry standards and interior spaces are constrained meaning the geometry required of stairs is not always feasibly achieved. The existing requirements are also lacking accessibility features for people with disability to be able to use stairs on buses and coaches safely.

Collective government action would ensure requirements for stairs are appropriate to be used on buses and are accessible to people with disability. This would address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 166: Reform options for stairs on buses

Option	Description
Status Quo	<p>The Transport Standards requires stairs on conveyance to comply with relevant Australian Standards. These requirements are not specific for stairs to each type of conveyance.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-regulatory	<p>Guidance would be updated to include advice on the accessibility of stairs on buses, including:</p> <ul style="list-style-type: none"> • Step and stair design, specifically location, risers, nosings and luminance contrast and handrail location and design. • Operators and providers can refer to AS1428.1 (2009).
Regulatory	<p>Transport Standards would be amended to include updated requirements for stairs on buses, including:</p> <ul style="list-style-type: none"> • Steps and stairs must comply with ADR 58. • Step edges and stair tread nosings must comply with AS1428.1 (2009). • Passenger doors must be fitted with handrails accessible when the doors are open and the minimum distance between the handrails of the door that provides the access path must be a minimum of 850 millimetres. For outward opening doors, handrails must be permanently fixed to the body. • Steps and stairs must not intrude into access paths. <p>The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 167: Benefit-cost ratios for stairs on buses

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	Benefit-cost ratio
Status Quo	-	-	-	-	-
Non-regulatory	-	-	-	-	-
Regulatory	1.0	-	0.4	0.4	2.46

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

Considerations to note in interpreting analysis

Limitations:

Non-regulatory option:

There are no costs and benefits associated with this non-regulatory reform with the Department indicating that all future infrastructure would be compliant with current industry standards.

Regulatory option:

The costs and benefits for this reform were estimated from a small number of data points provided by survey responses to proxy the compliance of stairs on buses at a national level. This implies the benefits and costs may not be fully reflective of differences by state and jurisdiction.

The majority of existing assets comply with current industry standards implying minimal costs and benefits associated with this reform.

Interdependencies:

This reform provides safety for passengers in conveyance, improving overall accessibility. The accessibility benefits of this reform will only be realised if there was equitable access across the whole public transport journey, with benefits reliant on implementation of other reforms such as bus, tram and light rail boarding points and identification of lead stops.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 168: Qualitative benefits for stairs on buses

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	-	-	-	-	-	-
Regulatory	Yes	Yes	-	Yes	Yes	Yes

Analysis of submissions

Status quo

The Transport Standards requirements for stairs are not specific to each type of public transport conveyance. The requirements reference dated Australian Standards that are not adequate for people with disability to access stairs on buses and coaches, as they contradict industry standards. In addition, the space constraints and the geometry required of stairs is not always feasibly achieved on a bus or coach making compliance with the existing Transport Standards requirements unachievable in many cases.

One submission expressed support for the status quo option noting regulated requirements are not always feasibly achieved in a bus or coach due to internal conveyance design limitations and that the current requirements provide the flexibility required to meet the needs of people with disability.

The current requirements continue to inhibit the safety of people with disability when traversing stairs on buses and coaches as they are unable to be implemented in many cases. The status quo does not enhance or increase equality and independence, or reduce discrimination for people with disability in relation to public transport.

The status quo would also fail to achieve the clarity and consistency that would be achieved through modal specific and fit-for-purpose requirements. While the status quo has no ongoing costs for public transport operators and providers, negative impacts on community amenity, accessibility, and safety are high and will remain as space constraints in buses and coaches and stair geometry requirements make the Transport Standards unattainable for operators and providers. Bus stairs and handrails would continue to not be aligned with industry standards and people with disability would continue to face accessibility and safety issues. Stair nosings, edge tread, and contrasting strips would also fail to meet contemporary accessibility standards.

Non-regulatory

The non-regulatory option would provide updated guidance on the accessibility of stairs on buses, including stair design, location and appropriate luminance contrasting and handrail requirements. Flexibility would be provided to operators and providers in the choice of application of Australian Standards.

One submission received from a government stakeholder expressed support for the non-regulatory option noting there is already compliance with the proposed regulatory changes and additional guidance would be welcome.

To the extent that guidance is followed, costs would be incurred to make changes to contrasting strips on tread nosings and ensuring that steps do not obstruct access paths. A non-regulatory option should allow operators and providers to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation.

Given this option is discretionary, it does not provide certainty that guidance will be implemented which may reduce confidence of passengers to travel if they are unable to safely traverse stairs when travelling by bus. To the extent that guidance is followed, people travelling by bus will benefit from safer stairs, specific to the conveyance type, delivering improved accessibility for people with disability. Operators and providers will also benefit from greater design certainty and clarity to the extent that guidance is implemented.

Regulatory

The regulatory option would amend the Transport Standards to include updated requirements for stairs on buses, except dedicated school buses. The regulatory option was the preferred option for government as well as individuals, people with disability and disability organisations.

Most feedback from individuals, people with disability and disability organisations highlighted that the regulatory option was most likely to achieve consistency and certainty, with measurable outcomes which will enhance stair safety and accessibility. Disability organisations representing the blind and vision impaired recommended some amendments to the regulatory option. It was recommended that TGSIs be included in the area in front of the stairs that would be appropriate for cane users, and with appropriate luminance contrast. Concern was again raised that a 30 per cent luminance contrast for handrails against contrasting backgrounds is considered insufficient for people who are blind or vision impaired and recommendations were made to make this higher. This is a recurring concern where luminance contrast is an element of a proposed reform area.

Feedback from governments and public transport operators indicated support for the regulatory option as it would bring the requirements in line with best practice accessibility standards. One submission noted space and design constraints for double deck fleets which may mean requirements are not achievable. This submission made suggestions to remove width requirements and references to Australian Standards for stair height and width, instead referring to ADR Rule 58, with other elements of the regulatory option being provided as guidance only. It was also suggested that clarification be provided that handrails on a single step are not necessary and should be provided as guidance only. Another suggestion was made to remove clauses 11.1(d) of AS1428.1(2009), submitting that buses cannot meet this requirement as it would present a trip hazard.

Costs would be incurred in meeting the requirements. Some submissions note that as the regulatory option brings requirements in line with contemporary accessibility standards, impacts

would be minimal. It was noted that retrofitting may not be feasible due to structural design limitations. Many noted that the regulatory option would provide clarification and certainty to the bus industry and achieve equitable outcomes for people with disability.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is the **regulatory option with revisions**.

Following feedback through the Consultation RIS, the features for this option have been refined to remove references relating to width and Australian Standards references for stair heights and depths. These changes address concerns outlined in submissions regarding conveyance space and design constraints making implementation of stair width, height and depth requirements difficult to achieve or unfeasible in buses. Stairs should instead be safe and fit for purpose. The updated requirements would also be clarified to specify that handrails would not be not mandated for a single step, but the updated Transport Standards Guidelines and /or The Whole Journey Guide Guidance would advise that handrails should still be considered in these circumstances.

While acknowledging concerns from organisations representing the blind community and those with low vision regarding the proposed luminance contrasting requirements of handrails, these requirements have been developed by a Standards Australia technical committee to ensure products, services, and systems are safe, consistent, and reliable. The objective of the referenced Australian Standards is to provide design requirements to enable access for people with disabilities. The Australian Standards note that the design requirements should be regarded as a minimum. The regulatory approach reiterates that this requirement should be regarded as a minimum and this will be further emphasised in updating the Transport Standards Guidelines and /or The Whole Journey Guide to reflect the new requirements. Organisations representing the blind community and those with low vision also raised concerns regarding the exclusion of requirements for TGSIs. The suitability of requiring TGSIs on stairs on buses should be addressed in a future statutory review of the Transport Standards to ensure suitable options are developed and considered by all stakeholders.

Since the primacy of ADR Rule 58 is maintained with the preferred option, the geometry of bus stairs is unlikely to change. Costs will be incurred by operators and providers in meeting contrast requirements for handrails.

This option provides a balance of improved accessibility and safety for people with disability with improved requirements for tread nosing and handrail contrast and ensuring that trip hazards are not introduced into buses. The bus industry will benefit through greater certainty and feasible and practical requirements that are fit-for-purpose for buses and coaches.

The new Transport Standards requirements would apply to new conveyances and would not be retrospective. Consultation findings indicate that it is difficult or not feasible to retrofit stairs due to conveyance space and design constraints. This would address the primary concerns of stakeholders.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism.

60. Doorway contrast and height

Issue

The Transport Standards requirements for doorways reference dated Australian Standards that are not commensurate with the Premises Standards. These requirements do not include the minimum safe height and luminance contrast of doorways on conveyances. This poses a safety risk for head strikes and people mistaking gaps or glass doors for open doors.

Collective government action would ensure doors do not pose a safety risk to people with disability and address key stakeholder issues raised through the Transport Standards review process.

Reform options

Following is a summary of the proposed options for this reform. Full details of each reform option is provided at Appendix A.

Table 169: Reform options for Doorway contrast and height

Option	Description
Status Quo	<p>The Transport Standards require that doorways must comply with the relevant Australian Standards. These requirements do not include luminance contrast for solid and glazed doors and no minimum height for doors on conveyance.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Non-regulatory	<p>The Whole Journey Guide would be updated to include advice for good practice for luminance contrast and height clearance of conveyance doors, including:</p> <ul style="list-style-type: none"> • Door dimension requirements specific to location, such as on an access path or a bus and luminance contrast on and around access path doors • Operators and providers can choose to comply with AS1428.2 (1992).
Regulatory	<p>Transport Standards would be amended to include updated requirements for luminance contrast and height clearance of conveyance doors for conveyances including:</p> <ul style="list-style-type: none"> • Doors located on an access path other than in buses and coaches must be at least 850 millimetres width from the floor or deck to a height of at least 1980 millimetres. Door vertical clearance in buses and coaches must comply with ADR 58. • Doors and gates on an accessway must luminance contrast with their surroundings as per AS1428.1 (2009). Fully glazed doors must have a luminance contrasting strip as per AS1428.1 (2009). <p>The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect new requirements.</p>

Cost benefit analysis

Quantitative assessment

The following categories of quantitative costs and benefits were identified in the CBA as pertaining to the reform options.

Table 170: Benefit-cost ratios for doorway contrast and height

Reform Option	Monetised benefits*	Monetised compliance costs (administrative)*	Monetised compliance costs (substantive)*	Monetised total compliance costs*	Benefit-cost ratio
Status Quo	-	-	-	-	-
Non-regulatory	0.0	-	0.9	0.9 ⁱ	0.00
Regulatory	0.1	-	3.9	3.9	0.03

*\$M, 2022/23, real, discounted at 7% over a 15-year appraisal period after implementation of all reforms, assessed incrementally

⁽ⁱ⁾Non-regulatory compliance rates are calculated using assumptions about retrospective and prospective take-up rates, and are not a percentage of the regulatory costs.

Considerations to note in interpreting analysis

Limitations:

Non-regulatory option:

The costs and benefits associated with the non-regulatory reform are lower than its regulatory counterpart reflecting an assumed lower rate of compliance with the reform. An estimated rate of uptake of 75 per cent for new assets was applied to the non-regulatory option based on the low cost and complexity to implement the requirements for doors on new conveyances. It was not expected the guidance would be implemented on existing assets. This implies that the benefits and costs quantified for this non-regulatory reform may not reflect future take-up of the reform.

Regulatory option:

The benefits and costs for this reform were estimated based on publicly available data and survey responses, proxied to estimate compliance at a national level. This implies the benefits and costs may not be fully reflective of existing compliance rates.

With only luminance contrast changes required, this reform would result in safety benefits to a relatively small group of beneficiaries such as people with vision impairments with upgrades required across a number of conveyances.

Qualitative assessment

The following categories of qualitative benefits were identified in the CBA as pertaining to the reform options.

Table 171: Qualitative benefits for doorway contrast and height

Reform Option	Increased optionality	Enhanced independence and inclusion	Improved health outcomes	Improved access to services	Greater sense of connection to community and place	Increased opportunities for employment
Status Quo	-	-	-	-	-	-
Non-regulatory	Yes	Yes	-	Yes	Yes	-
Regulatory	Yes	Yes	-	Yes	Yes	-

Analysis of submissions

Status quo

The Transport Standards have no requirement for luminance contrast for solid and glazed doors and have no minimum height for conveyance doors, creating a risk of a passengers striking the door or door frame. Current requirements for doorways reference dated Australian Standards that are not commensurate with the Premises Standards. Transport Standards section 12.4 Clear opening of doorways, references AS1428.2 (1992) Design for access and mobility, Clause 11.5.1, covers clear opening of conveyance doors. While Clause 11.5.1 recommends that doors have a contrasting frame or trim, this reference is dated and has the potential to be updated to a more contemporary reference.

One submission expressed support for the status quo option, noting doorway size is adjusted to take maximum advantage of conveyance design. This submission from a government stakeholder noted that being too prescriptive may lead to requirements being unachievable.

Submissions from individuals, people with disability and disability organisations outlined concerns posed by the current lack of requirements and maintaining the status quo. Submissions highlighted concerns regarding the lack of luminance contrast requirements for glazed doors and the safety risk this poses, particularly for people with low vision.

The status quo continues to inhibit accessibility and safety of people with disability on public transport services. The status quo does not enhance or increase equality and independence, or reduce discrimination for people with disability in relation to public transport. The status quo has no ongoing costs for public transport operators and providers; however, negative impacts on community amenity, accessibility, and safety will remain. The opportunity for more contemporary Australian Standards that are commensurate and harmonised with the Premises Standards would also be missed by maintaining the status quo. This would result in continuing uncertainty for operators and providers on their obligations under the DDA.

Non-regulatory

The non-regulatory option would update the Whole Journey Guide and / or the Transport Standards Guidelines to include advice for luminance contrast and height clearance of conveyance doors. Specific guidance would pertain to buses (except dedicated school buses), coaches, ferries, trains, trams and light rail.

The non-regulatory option was the preferred option for governments and public transport operators, in large part due to concerns regarding the height requirements outlined in the regulatory option. It was noted that retrofitting door height on existing conveyances is not achievable due to design complexity and structural impacts on the vehicle and may result in entire fleets being non-compliant with the proposed regulatory option.

Many viewed the proposed height as inappropriate, noting there would be significant operational impacts, it would only support a small number of people, and the cost associated with implementing the reform would not be commensurate with the benefit it would achieve. Some suggested they would support the regulatory option if these requirements were removed and replaced with the industry standard for specific conveyances or as conveyance specific guidance. It was also noted by some that luminance contrast requirements in the regulatory option were too prescriptive due to different finishes presented around a door, and that these requirements would also be better as guidance.

To the extent that guidance is followed, costs would be incurred to ensure conveyance doors met luminance contrast and minimum height requirements. Submissions indicate that retrofitting doors in existing conveyances is likely to impose an onerous financial cost, and possibly unfeasible due to the complexity of the design, structural impacts on conveyances and significant operational impacts. Due to the discretionary nature of this option, it does not provide certainty that operators and providers will adopt requirements, however the non-regulatory option allows operators and providers to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation.

Given this option is discretionary, it does not provide certainty that guidance will be implemented which may reduce confidence of passengers to travel. To the extent that guidance is followed, the incidents of passengers striking or mistaking doorways is likely to be reduced and wayfinding for people with vision impairments is likely to improve.

Regulatory

The regulatory option would amend the Transport Standards to include updated requirements for luminance contrast and height clearance of conveyance doors. These requirements would pertain to buses (except dedicated school buses), coaches, ferries, trains, trams and light rail.

The regulatory option was the preferred option for individuals, people with disability and disability organisations as it would achieve consistency and certainty, with measurable outcomes to address non-compliance. Many noted that being able to recognise a door is both a safety and accessibility issue. It was noted that incidents where people with vision impairment have stepped between train carriages, mistaking the gap for an open door, have been reported. Markings on glass doors and contrasting features were particularly important to respondents.

In the case of passenger opened doors it is imperative to boarding and alighting that the door be recognisable. Glass doors without markings are easily mistaken for an open door to people with low vision.

Queenslanders with Disability Network

However, disability organisations representing the blind and vision impaired again recommended significantly higher luminance contrast, noting that a 30 per cent luminance contrast is considered insufficient for people who are blind or vision impaired. This is a recurring concern where luminance contrast is an element of a reform area.

One submission from an industry stakeholder noted that luminance contrast reforms should not be applied to coaches which are typically only fitted with front doors and do not experience high and regular passenger movement around doorways. The submission contended that the luminance requirement does not provide the same passenger benefit. Safety risks for coaches were also noted in that they operate frequently on high-speed roads and highways, use additional headlighting and experience reflection from other road vehicles. It was noted that additional luminance doorway contrasts would create a vision distraction for the driver. The concerns regarding coaches did not apply to city buses; however, the stakeholder noted the inclusion of luminance contrast requirements would be of a benefit given the high number of passenger movements in and around city buses. It was noted that these buses also have multiple passenger doors, where locations down the length of the bus varies depending on bus design and layout.

As noted above, concerns were raised by governments and public transport operators regarding the inappropriateness, cost and complexity of implementing door height requirements. One submission stated that there was no evidence from customer complaints that door heights in conveyances is an issue. Some suggested they would support the regulatory option if these requirements were removed and included as conveyance specific guidance.

Consistency in the luminance contrast and heights of doorways would allow a level of predictability across transport modes and instill a greater level of confidence using multi modal transport for people with disability. One submission noted that consistency in transport systems is a common issue for people with disability, as accessibility often differs when changing transport conveyances. It was noted that regulated consistency in accessibility requirements for door height and contrast would assist with addressing this issue. The regulatory option would improve wayfinding for people with vision impairment and minimum door height clearance would improve safety for passengers. Harmonisation with the Premises Standards and referencing contemporary Australian Standards would also provide clarity for operators and providers on their obligations under the DDA to assist in their compliance.

One submission from government outlined that the costs associated with this reform area are not commensurate with the benefit it would achieve. Many submissions noted there would be significant costs associated with retrofitting conveyance doors for height, or replacing conveyances with door heights that would be compliant. The mandating of contrast of doors will also impose a cost on operators and providers. This will apply to operators and providers who have not followed existing advice to contrast doors with their surroundings.

Preferred option

Informed by the outcomes of consultation, stakeholder impacts, cost and outcomes analysis, the preferred option is the **regulatory option with revisions**.

Following strong feedback from government and industry that the proposed minimum height requirements for conveyance doors were not feasible or appropriate due to structural impacts and design complexity and constraints, this option has been refined to remove requirements relating to minimum door height clearance. In addition, in response to safety concerns raised during consultation, the luminance contrasting requirements will not apply to coaches. The Transport Standards Guidelines and / or The Whole Journey Guide will be updated to include advice that doorway height should be adjusted to take maximum advantage of conveyance design. Guidance will also be provided regarding good practice for luminance contrast of coach doorways where safe and appropriate. Noting AS1428.1 (2009) has now been superseded by AS1428.1 (2021), reference to AS1428.1 (2009) clauses 13.1 and 13.2 will be updated with the equivalent clause reference in AS1428.1 (2021). There is no material change to the content of these updated Australian Standards clauses. However, reference to AS1428.1 (2009) 6.6 will be retained as the equivalent references in AS1428.1 (2021) contains technical additions that are not equivalent to the AS1428.1 (2009) reference.

While requirements regarding minimum door heights would reduce the risk of head strike, the requirement for luminance contrasted door elements will also reduce this risk. For people who have vision impairments, the requirement for luminance contrasted door elements will also be beneficial for wayfinding. Operators and providers will also have greater confidence if provided with a more contemporary reference for contrast requirements.

While acknowledging concerns from organisations representing the blind community and those with low vision regarding the proposed luminance contrasting requirements, these requirements have been developed by a Standards Australia technical committee to ensure products, services, and systems are safe, consistent, and reliable. The objective of the referenced Australian Standards is to provide design requirements to enable access for people with disabilities. The Australian Standards note that the design requirements should be regarded as a minimum. The regulatory option reiterates that this requirement should be regarded as a minimum and this will be further emphasised in updating the Transport Standards Guidelines and /or The Whole Journey Guide to reflect the new requirements.

Luminance contrast of doorways have been advised in the Transport Standards but the regulatory option would see this advice being mandated. Costs will be incurred by operators and providers who have not followed the advice to contrast doors with their surroundings, however submissions indicate costs are anticipated to be low and the requirements will be easy to implement.

This option provides a balance of improved accessibility and safety for people with disability, while providing a feasible and practical solution for public transport operators and providers to implement.

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements retrospectively within 5 years of commencement. The compliance schedule proposed would allow time to audit existing assets and implement upgrades, where required. This would address the primary concerns of stakeholders.

61. Stage 1 reform areas and preferred options

The reform process is being undertaken in two stages. Stage 1 covered 16 areas of reform and a group of amendments to Australian Standards referenced in the Transport Standards. On 12 February 2021, the Department released a Consultation RIS for Stage 1 of the reform process outlining the proposed reform options. The Consultation RIS was open for public feedback until 23 April 2021. The Consultation RIS sought public feedback on whether the proposed reform options will improve public transport accessibility for people with disability and support operators and providers to remove discrimination from their services.

Following consultation, the Department developed a Decision RIS that outlined findings from public consultations, the illustrative costs and benefits for each reform option and presented a preferred option for consideration by Ministers. Reform options for Stage 1 were confirmed by Transport Ministers at the Infrastructure and Transport Ministers Meeting on 11 February 2022. The Stage 1 Decision Regulation Impact Statement did not address how agreed Stage 1 reform options would be implemented. As such, the Stage 2 Decision RIS also presents recommended implementation approaches for Stage 1 reform areas.

Further information about Stage 1 of the reform process can be viewed at infrastructure.gov.au/infrastructure-transport-vehicles/transport-accessibility/reform-transport-standards/stage-1-reforms.

This chapter provides an overview of all Stage 1 reform areas, outlining the issue, agreed reform option, proposed implementation approach and any interactions with Stage 2 reform areas.

1. Staff Training and Communication

There are no regulatory requirements for staff training in the Transport Standards. The interactions between staff and customers with disability can affect the extent to which people with disability access public transport.

Preferred option

The following option was agreed by transport ministers in the Stage 1 Decision Regulation Impact Statement.

Table 172: Preferred option for Staff Training and Communication

Option	Description
Regulatory	<p>A new section will be inserted into the Transport Standards which specifies performance requirements for the provision, development and implementation of staff training. The new section will specify that public transport operators and providers must:</p> <ul style="list-style-type: none"> Conduct tailored training to meet the specific roles and responsibilities of staff.

	<ul style="list-style-type: none"> • Conduct refresher training. • Consult with people with disability, or groups representing people with disability, when developing and reviewing training materials to ensure appropriate content is included. • Ensure training is delivered by a qualified trainer.
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Interactions with Stage 2 Decision Regulation Impact Statement

There are no interactions between this reform area and Stage 2 of the reform process.

Implementation approach

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements retrospectively with a compliance schedule timing of 5 years.

2. Mobility aid safety

Submissions to reviews of the Transport Standards identified a need for further clarity and guidance for both operators and customers on the safety measures for customers travelling in mobility aids whilst in transit. This issue is particularly relevant for buses, trams and light rail as passengers in these conveyances are sometimes subject to significant displacement forces during starts, stops and turns, which are a product of the dynamics of the street road environment. At times, mobility aids will unexpectedly slide or tip out of allocated spaces and into the aisle when these forces are suddenly experienced.

Preferred option

The following option was agreed by transport ministers in the Stage 1 Decision Regulation Impact Statement.

Table 173: Preferred option for Mobility aid safety

Option	Description
Non-regulatory	Guidance will be included in The Whole Journey Guide concerning mobility aids on conveyances. This guidance will outline considerations for designers with regard to improving the safety of mobility aid users travelling on a conveyance, in particular, on buses, trams and light rail where they are subject to greater forward and lateral movements.

Interactions with Stage 2 Decision Regulation Impact Statement

There is no duplication or contradiction between *Chapter 5: Mobility aid safety* of Stage 1 and Reform Proposal 53. *Mobility aid movement in allocated spaces: Passive restraints*. Rather, Stage 1 informs how Reform 53 of Stage 2 might be implemented. There is no duplication or contradiction between *Chapter 5: Mobility aid safety* of Stage 1 and Reform Proposal 54. *Mobility aid movement in allocated spaces: Active restraints* of Stage 2.

Implementation approach

The preferred option will be implemented through inclusion in a revised Whole Journey Guide.

3. Priority seating

Section 31.1 of the Transport Standards requires public transport operators and providers to provide at least two priority seats on conveyances for 'passengers with disabilities and other groups in need of special assistance'. The size of the cohort in need of priority assistance is substantial and is increasing as the population ages. To accommodate the increasing number of people requiring priority seating, members of the public transport industry and the disability community have raised that the current requirement for a minimum of two priority seats is inadequate to support access to public transport.

Preferred option

The following option was agreed by transport ministers in the Stage 1 Decision Regulation Impact Statement.

Table 174: Preferred option for Priority seating

Option	Description
Regulatory	<p>The regulatory option specifies a balance of prescriptive and performance-based requirements for priority seats in conveyances, including:</p> <ul style="list-style-type: none">• Number of priority seats per conveyance• Location of priority seats in a conveyance• Identification of priority seats <p>The Transport Standards Guidelines will be updated to reflect the new requirements.</p>

Interactions with Stage 2 Decision Regulation Impact Statement

There are no interactions between this reform area and stage 2 of the reform process.

Implementation approach

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements retrospectively with a compliance schedule timing of 5 years.

4. Allocated spaces in Transit

Transport Standards Part 9, *Allocated Spaces*, includes provisions for the design and use of allocated spaces. Passengers who use mobility aids are dependent on the availability and accessibility of allocated spaces in public transport conveyances to undertake their journeys. Allocated spaces are provided on the understanding that people with mobility aids have priority access to them. To ensure maximum access to mobility aid users, access paths, manoeuvring areas and allocated spaces are required to be as clear and functional as practicable. Further clarity is also

needed to ensure that customers are informed that allocated spaces are priority for people using mobility aids.

Preferred option

The following option was agreed by transport ministers in the Stage 1 Decision Regulation Impact Statement.

Table 175: Preferred option for Allocated spaces

Option	Description
<p>Regulatory, sub-option 3</p>	<p>The Transport Standards will be amended to provide a balance of mandatory prescriptive and performance requirements for access paths, manoeuvring areas and allocated spaces in conveyances, including:</p> <ul style="list-style-type: none"> • Vertical dimensions of access paths, manoeuvring areas and allocated spaces • Access path ‘swept path’ dimensions • Objects permitted to intrude into the vertical space • Use of allocated space for other purposes • Co-location of access paths, manoeuvring areas and allocated spaces • Informing other passengers of allocated space priority <p>The Transport Standards Guidelines would be updated to reflect the Transport Standards amendments.</p>

Interactions with Stage 2 Decision Regulation Impact Statement

There is potential overlap but no contradiction between Stage 1 *Chapter 4 Allocated spaces in transit* and Stage 2 *Chapter 52 Grabrails in allocated spaces*. Grabrails could be used as Stage 2 passive restraints on the aisle side of an allocated space if they conform to the Stage 1 proposal for conformance AS/NZS ISO 10865.1-2015. If used in this way grabrails would constitute lateral excursion barriers as per requirements of AS/NZS ISO 10865.1-2015 and would not therefore be required to conform to AS1428.1.

Implementation approach

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism.

5. Digital information screens

Section 27.1 of the Transport Standards currently provides that ‘general information about transport services must be accessible to all passengers’. The Transport Standards do not include specific requirements for digital displays. Operators and providers are increasingly utilising digital information channels to provide static and dynamic information to customers. As digital display technology has been widely adopted since the introduction of the Transport Standards, there is often uncertainty around what is required to be delivered to meet the needs of people with disability or to comply with the Transport Standards. Other requirements are clear, but are considered to be inappropriate or technically unfeasible when applied to digital displays.

Preferred option

The following option was agreed by transport ministers in the Stage 1 Decision Regulation Impact Statement.

Table 176: Preferred option for Digital information screens

Option	Description
Regulatory	<p>The regulatory option proposes where display screens are used on transport infrastructure, premises and conveyances, they must meet prescribed requirements for:</p> <ul style="list-style-type: none"> • Luminance • Polarisation • Location • Font and typeface • Display requirements • Location • Display requirements • Glare <p>The Transport Standards Guidelines and Whole Journey Guide would be updated to reflect the Transport Standards amendments.</p>

Interactions with Stage 2 Decision Regulation Impact Statement

There is potential overlap but no contradiction between Stage 1 *Chapter 5 Digital Information Screens* and Stage 2 *Chapter 22 Mobile web systems*. Stage 2 *Chapter 22* covers how information is to be displayed on the screens of mobile devices such as smartphones and tablets. It is not relevant to digital signs or screens on conveyances, premises or infrastructure.

Implementation approach

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism.

6. Lifts

The Transport Standards require lifts to comply with Australian Standard AS1735.12 (1999) which is an outdated standard and is not aligned with requirements under other standards for lifts, such as those under the Premises Standards and the NCC. This misalignment limits of types of lifts that can be used at public transport premises and infrastructure, inhibits the installation of enhanced audible and visual accessibility features, and prevents harmonisation with the Premises Standards and the NCC.

Preferred option

The following option was agreed by transport ministers in the Stage 1 Decision Regulation Impact Statement.

Table 177: Preferred option for Lifts

Option	Description
Regulatory	<p>The regulatory option requires:</p> <ul style="list-style-type: none"> • Maintain Australian Standard AS1735.12 (1999) as the key standard except for the following accessibility enhancements: • Lift floor dimensions of not less than 1600 millimetres wide by a clear depth of 2000 millimetres to accommodate a stretcher. • Automatic audible information within a lift to identify the level (or platform) each time the car stops as per AS1735.12 (1999). • Audible and visual indication at each lift landing to indicate the arrival of a lift car. • Audible information and audible indication are provided in a range between 20 dB(A) and 80 dB(A) at a maximum frequency of 1,500 Hz. • Allow the use of inclined lifts and small sized, low speed automatic lifts in limited applications in alignment with the NCC and the Premises Standards.

Interactions with Stage 2 Decision Regulation Impact Statement

There are conflicts between Stage 1, *Chapter 6 Lifts* and Stage 2, *34. Lift specifications and enhancements*. The former retains AS1735.12 (1999) *Lifts, escalators and moving walks* as its primary reference while the latter proposes AS1735.12 (2020) as primary reference. There is a conflict between Stage 1 *Chapter 9: Lifts* and Stage 2, *18. Lifts: Audible wayfinding*. The former would require audio announcements when lifts stopped at more than two landings while the latter proposes audible wayfinding announcements at all landings. Further detail on how these conflicts are managed is outlined in the respective chapters.

Implementation approach

Stage 1, *Chapter 6 Lifts* is superseded by Stage 2, *Chapters 34 and 18*. Consequently, there is no implementation approach required for Stage 1 *Chapter 6*.

7. Website accessibility

Transport operators and providers are increasingly using websites and other online systems to communicate service information to customers. The current Transport Standards do not reflect industry standards concerning minimum requirements for website accessibility.

Preferred option

The following option was agreed by transport ministers in the Stage 1 Decision Regulation Impact Statement.

Table 178: Preferred option for Website accessibility

Option	Description
Regulatory, Sub-option 3	The Transport Standards would specify that websites that provide information on public transport services must comply with WCAG Level 2.1 AA.

Interactions with Stage 2 Decision Regulation Impact Statement

There is some overlap but no contradiction between Stage 1, *Chapter 10: Website accessibility* and Stage 2, 5. *Better communication of accessibility features*. Stage 1 proposes a choice between WCAG 2.0 and WCAG 2.1 as the standard for web accessibility. Stage 2, 5. *Better communication of accessibility features* is purely definitional and not affected by any conflict with Stage 1.

There is some overlap but no contradiction between Stage 1, *Chapter 10: Website accessibility* and Stage 2, 22. *Mobile web systems*. Stage 1 proposes a choice between WCAG 2.0 and WCAG 2.1 as the standard for web accessibility. Stage 2, 22. *Mobile web systems* only proposes WCAG 2.1, but this is purely for mobile technology on which WCAG 2.0 is silent. Mobile technology apps would be captured by Stage 2 without compromising the options proposed for websites in Stage 1.

Implementation approach

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism.

8. Communication during service disruption

Currently, the Transport Standards provide guidance on access to ‘general information’, but lack specific guidance on communication with passengers with disability during service disruptions. A lack of coordination of systems across jurisdictions often results in disparate communication systems at the operator level. The availability of information at unstaffed locations also creates challenges, especially when passengers are required to take alternative routes or transport modes. The traditional forms of communication, such as customer service announcements, are not always available.

Preferred option

The following option was agreed by transport ministers in the Stage 1 Decision Regulation Impact Statement.

Table 179: Preferred option for Communication during service disruption

Option	Description
Regulatory	<p>Definitions for ‘planned’ and ‘unplanned’ disruptions would be incorporated into the Transport Standards.</p> <p>During planned disruptions, operators and providers must continue to provide information in a variety of formats that specifically communicate details of the disruption and alternate travel options. Information must not be provided solely through online platforms or channels. Where information cannot be provided in an accessible format or in a timely manner, information may be provided through direct assistance. These requirements do not apply in scenarios where control is transferred to emergency services or another third party, for example a fire evacuation, when communication and operational decisions are not within the control of transport operators and providers.</p>

Interactions with Stage 2 Decision Regulation Impact Statement

There some overlap but no duplication or contradiction between Stage 1, *Chapter 11: Communication during service disruption* and Stage 2, 6. *Timely provision of information*. Chapter 11 proposes performance-based outcomes of which one is direct assistance. Stage 2, chapter 6 compliments Chapter 11 and permits direct assistance as per Chapter 11.

Implementation approach

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements retrospectively with a compliance schedule timing of 5 years.

9. Gangways

Gangways are ramps that connect to ferry pontoons which have unique design constraints imposed by the tidal environment. The Transport Standards do not adequately define or identify gangways. The Transport Standards define gangways as static ramps and walkways, referring to them in Part 6.5 as 'ramps connected to pontoon wharves'. The Transport Standards currently require that gangways have a gradient of at least 1:14 – that is, they may rise no more than 1cm for every 14cm of run. As a result, the Transport Standards do not recognise the cyclical alteration of gangway and treadplate slope, which makes full compliance with the cited standard impossible and creates several issues.

Preferred option

The following option was agreed by transport ministers in the Stage 1 Decision Regulation Impact Statement.

Table 180: Preferred option for Gangways

Option	Description
Regulatory with revisions	<p>The regulatory option includes the following elements:</p> <ol style="list-style-type: none"> 1. Gangways to be defined as access paths 2. Gangway definition to be incorporated into the Transport Standards 3. Gangway maximum gradients 4. Nationally consistent chart datum and tide tables

Interactions with Stage 2 Decision Regulation Impact Statement

There is no duplication between Stage 1, *Chapter 12: Gangways* and Stage 2, 42. *Removable gangway design—ferries* as Stage 1 is specific to fixed pontoon gangways while Stage 2 is specific to removable boarding gangways.

Implementation approach

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements prospectively with a trigger mechanism.

10. Assistance animal toileting facilities

The DDA acknowledges that assistance animals can be used by people to alleviate the effects of their disability. Whilst the use of assistance animals can remove some barriers for people with disability, the lack of appropriate and conveniently located sites for these animals to be toileted poses a barrier that can deter or prevent travel on public transport. Also, the individuals utilising assistance animals will often need to venture away from their intended path of travel to locate an appropriate toileting area for their animal.

Preferred option

The following option was agreed by transport ministers in the Stage 1 Decision Regulation Impact Statement.

Table 181: Preferred option for Assistance animal toileting facilities

Option	Description
Non-regulatory	The non-regulatory option would include a dedicated Section on assistance animal toileting areas in The Whole Journey Guide. This would expand on the 'beyond compliance' case study concerning Brisbane Airport in the current version of the guide. The guidance would include information about the location of safe and appropriate assistance animal toileting areas, design considerations and information provision.

Interactions with Stage 2 Decision Regulation Impact Statement

There is no duplication between Stage 1, *Chapter 13: Assistance animal toileting facilities* and Stage 2, 5. *Better communication of accessibility features* as Stage 2 does not specify technical material, it only details how the facilities may be described and promoted.

Implementation approach

The preferred option will be implemented through inclusion in a revised Whole Journey Guide.

11. Emergency egress

Emergency egress requirements for building premises are covered under the Premises Standards. However, the Premises Standards do not make provision for associated safety and technical issues relating to public transport infrastructure. The Transport Standards make no provisions for emergency egress from public transport infrastructure, premises or conveyances, and therefore, the provision of safe emergency egress is not well understood by all operators, designers and people with disability.

Preferred option

The following option was agreed by transport ministers in the Stage 1 Decision Regulation Impact Statement.

Table 182: Preferred option for Emergency egress

Stage 1 reform areas and preferred options

Option	Description
Non-regulatory	<p>The non-regulatory option will include guidance on emergency egress related to public transport infrastructure in The Whole Journey Guide, including:</p> <ul style="list-style-type: none">• Passengers should have at least two accessible egress routes that lead away public transport facilities located within a road reserve.• Consultation with local councils should be conducted, particularly where public transport infrastructure interfaces with council land.• Co-design processes should be conducted to ensure that the needs of people with disability who may experience emergency situations have been considered.• Emergency services such as fire and police should have management procedures in place to address emergency egress at transport sites.

Interactions with Stage 2 Decision Regulation Impact Statement

There are no interactions between this reform area and Stage 2 of the reform process.

Implementation approach

The preferred option will be implemented through inclusion in a revised Whole Journey Guide.

12. Fit for purpose accessways

The Transport Standards do not specify requirements for fit-for-purpose accessways. A fit-for-purpose accessway must have the capacity to allow for safe, timely egress of passengers from infrastructure or premises. People with mobility impairments have raised that when ramps or walkways are co located with stairs, they sometimes provide a path of travel inferior to the stairs that are designed to be the 'main pedestrian traffic route/branch'.

Preferred option

The following option was agreed by transport ministers in the Stage 1 Decision Regulation Impact Statement.

Table 183: Preferred option for Fit for purpose accessways

Option	Description
Non-regulatory	<p>Information to be included in The Whole Journey Guide will comprise the following:</p> <ol style="list-style-type: none">1. Universal design principles2. Access paths to have appropriate dimensions3. Priority of access paths4. Prevention of misuse of access paths5. Continuous accessible journey6. Anticipating future demand

Interactions with Stage 2 Decision Regulation Impact Statement

There is no duplication or contradiction between Stage 1, *Chapter 15: Fit for purpose accessways* and Stage 2, *25. Continuous accessibility on access paths*. Stage 1 seeks priority for access paths over other pedestrian paths of travel while Stage 2 specifies where access paths are required.

Implementation approach

The preferred option will be implemented through inclusion in a revised Whole Journey Guide.

13. Wayfinding

People with disability have indicated the current Transport Standards do not provide adequate wayfinding requirements to assist people with a range of disabilities to independently and effectively navigate their way through transport related infrastructure and premises.

Currently there is no single standard or guideline that offers a consistent, integrated approach to providing information for people with disability concerning wayfinding. Inconsistencies between the Transport Standards, the general provisions and Part H2 of the Premises Standards result in a lack of regulatory clarity.

Preferred option

The following option was agreed by transport ministers in the Stage 1 Decision Regulation Impact Statement.

Table 184: Preferred option for Wayfinding

Option	Description
Regulatory	<p>This option would make regulatory changes to the Transport Standards to address inconsistencies between the Transport Standards, the NCC and the Premises Standards in relation to a range of matters concerning wayfinding, including:</p> <ul style="list-style-type: none">• Replication of the current NCC clause D3.6 (signage), specification D3.6 (braille and tactile signs) and clause D3.8 (tactile indicators).• Reference to Australian Standard AS1428.1 (2009) and AS/NZS1428.4.1 (2009) as the appropriate technical specification references for TGSIs to meet Transport Standards obligations.• Luminance contrast for internal and external settings.• Location of TGSi placement at stairs.

Noting AS1428.1 (2009) has now been superseded by AS1428.1 (2021), reference to AS1428.1 (2009) clauses 8.1, 8.2 and 9 will be updated with the equivalent clause reference in AS1428.1 (2021). There is no material change to the content of these updated Australian Standards clauses.

Interactions with Stage 2 Decision Regulation Impact Statement

There is some overlap but no contradiction between Stage 1, *Chapter 16: Wayfinding* and Stage 2, *16. Braille and tactile lettering for signage*. The Stage 2 proposal builds on Stage 1 rather than introducing any contradictions. There is some overlap but no contradiction between Stage 1, *Chapter 16: Wayfinding* and Stage 2, *36. Poles, objects and luminance contrast*. The Stage 2 proposal builds on Stage 1 rather than introducing any contradictions.

Implementation approach

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements retrospectively with a compliance schedule timing of 10 years.

14. Tactile ground surface indicators (TGSIs)

The current Transport Standards do not include adequate requirements for directional tactile ground surface indicators (TGSIs) to assist people who are blind or have vision impairment to navigate through public transport precincts. This often leads to a poor understanding of what is required resulting in an inconsistent application or, in some instances, the absence of directional cues.

Preferred option

The following option was agreed by transport ministers in the Stage 1 Decision Regulation Impact Statement.

Table 185: Preferred option for Tactile ground surface indicators (TGSIs)

Option	Description
Regulatory	<p>This option would see content added to the Transport Standards to define the requirement for the use of directional TGSIs, adopting the requirements of AS1428.4.1:2009.</p> <p>Changes will include design requirements and additional guidance on where it is expected that directional TGSIs may be used to assist vision impaired customers to navigate transport facilities in the absence of other wayfinding cues. These requirements would also establish where directional TGSIs are not required due to the potential to interfere with mobility aids or create confusion for people with vision impairment.</p>

Interactions with Stage 2 Decision Regulation Impact Statement

There is no duplication or contradiction between Stage 1, *Chapter 17: Tactile ground surface indicators* and Stage 2, *48. Accessible taxi ranks*. All refer to relevant clauses of AS1428.4.1-2009. There is no duplication or contradiction between Stage 1, *Chapter 17: Tactile ground surface indicators* and Stage 2, *49. Accessible passenger loading zones on-street*. All refer to relevant clauses of AS1428.4.1-2009.

Implementation approach

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements retrospectively with a compliance schedule timing of 10 years.

15. Passenger loading areas

The Transport Standards facilitate the delivery of accessible facilities and infrastructure. However, the provisions do not extend to enabling passengers to safely arrive, depart, unload, load and move throughout the public transport precincts via passenger loading areas. Environments with insufficient amenity for passengers to feel safe can limit their participation in the community.

Preferred option

The following option was agreed by transport ministers in the Stage 1 Decision Regulation Impact Statement.

Table 186: Preferred option for Passenger loading areas

Option	Description
Regulatory, sub-option 1	<p>The regulatory option will provide more specific detail on accessible passenger loading areas, including:</p> <ul style="list-style-type: none">• Defining passenger loading areas• Specific access provisions• Design• The number of taxi rank spaces which must be accessible (the first and last taxi rank space must be accessible)

Please note the Stage 1 Decision RIS included an editorial error in section 5.15.4 regarding the preferred sub-option for the number of taxi rank spaces which must be accessible. Sub-option 1 is the preferred sub-option for this reform area (the correct preferred option is included in the summary table and the regulatory option analysis).

Interactions with Stage 2 Decision Regulation Impact Statement

There is no duplication or contradiction between Stage 1, Chapter 15: Passenger loading areas and Stage 2, 49. Accessible passenger loading zones on-street.

The two proposals refer to loading zones in two discrete and different locations. Stage 1 refers to loading zones in the vicinity of transport nodes, such as train station or airport car parking while Stage 2 refers to loading zones on public streets.

The design requirements for the number of accessible spaces recommended in Stage 1, Chapter 15 and Stage 2, Chapters 48 and 49 align.

Implementation approach

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards

requirements retrospectively with a compliance schedule timing of 10 years.

16. Provision of information in multiple formats

Public transport operators and providers are increasingly using websites, smartphone applications (apps) and online systems to communicate either static or dynamic service information to customers. The Transport Standards do not provide clarity for operators and providers about what their obligations are in relation to providing information about transport services, nor do they provide certainty for people with disability that information will be available in multiple formats other than online systems and apps.

Preferred option

The following option was agreed by transport ministers in the Stage 1 Decision Regulation Impact Statement.

Table 187: Preferred option for Provision of information in multiple formats

Option	Description
Regulatory with revisions	<p>Mandatory performance elements would be included in the Transport Standards which includes requirements for the provision of information in multiple formats and the types of transport information this would be applicable to as a minimum. These include:</p> <ul style="list-style-type: none"> • General information for transport services cannot solely be provided in an online format such as a website. • General information includes but is not limited to timetables, routes, fare, payment methods, next stop information, next service information. • The Transport Standards Guidelines would be amended to reflect and provide further advice on the new requirements

Interactions with Stage 2 Decision Regulation Impact Statement

There is no contradiction between Stage 1, *Chapter 19: Provision of information in multiple formats* and Stage 2, 5. *Better communication of accessibility features*, 6. *Timely provision of information*, 7. *Real time communication* and 9. *Hearing augmentation on conveyances*. Stage 1 further establishes a general right to information that already exists in DSAPT. Stage 2 expands on Stage 1 by proposing uniform terminology, timely provision, real time communication and audio alternatives.

Implementation approach

The preferred option will be implemented through amendments to the Transport Standards and Guidelines. Operators and providers will be required to meet the new Transport Standards requirements retrospectively with a compliance schedule timing of 5 years. This provides operators and providers with 5 years to ensure processes meet these requirements.

17. Australian Standards and definitional amendments

A number of references to Australian Standards in the Transport Standards have been superseded by the release of new and updated Australian Standards. The aim of this reform is to update the Transport Standards to:

- Reference more current Australian Standards in a manner that imparts either no change in material outcome or only minor material changes.
- Align the Transport Standards with the Premises Standards where this gives favourable outcomes and achieves consistency.
- Harmonise language with the DDA.

Preferred option

The following option was agreed by transport ministers in the Stage 1 Decision Regulation Impact Statement.

Table 188: Preferred option for Australian Standards and definitional amendments

Option	Description
Support all 32 regulatory amendments	The Transport Standards will be updated to reference all 32 relevant Australian Standards Submissions supported consolidating Section 21.2 and Section 21.3 to improve clarity.

Interactions with Stage 2 Decision Regulation Impact Statement

There are no interactions between this reform area and stage 2 of the reform process.

Implementation approach

The preferred options will be implemented through amendments to the Transport Standards. Table 176 in the Implementation chapter details the implementation arrangements for all 32 relevant Australian Standards.

62. Implementation approach

Issue

This chapter considers the implementation arrangements for the package of reforms to the Transport Standards (stages 1 and 2). Implementation arrangements are required for both non-regulatory and regulatory preferred options.

If Transport Ministers decide to implement new regulatory requirements in the Transport Standards, public transport operators and providers must comply with them. Amendments to the Transport Standards will set out what requirements will apply, and how and when they will apply.

Transport Ministers may also agree to a range of non-regulatory options. The non-regulatory options propose the provision of guidance, or improvements to existing guidance, to encourage greater accessibility. This guidance may be provided through the Disability Standards for Accessible Public Transport Guidelines 2004 (No. 3) and/or The Whole Journey Guide: A guide for thinking beyond compliance to create accessible public transport journeys (Whole Journey Guide). These supporting documents assist operators and providers with planning, designing, implementing and delivering public transport services to provide accessible and non-discriminatory public transport services.

It is not the intention to amend, remove or alter the existing requirements for compliance in Schedule 1 of the Transport Standards. These options will not provide existing assets with any additional time to comply with the current requirements of the Transport Standards.

Implementation of preferred regulatory options

Chapter 62 of the Consultation RIS outlined proposed options for implementation of preferred regulatory options. The following is a summary of these options. Full details are provided at Attachment A.

Table 189: Reform options for implementation

Option	Description
Status Quo	<p>The Transport Standards would continue to determine compliance requirements of assets using the following three factors:</p> <ul style="list-style-type: none"> • Attachment A – Whether an asset is ‘new’ • Attachment B – Whether an asset is ‘existing’ and the provisions at Transport Standards, section 32.1 Effect and application of these Standards are not met. • Attachment C – Whether an asset is ‘existing’ and one or more of the provisions set out in Transport Standards, section 32.1 are met. <p>The definition of new and existing assets is benchmarked to the date at which the current version of the Transport Standards came into effect. That is, whether an asset is in service before or after 2002.</p> <p>The Transport Standards would remain unchanged and no new or updated guidance would be issued.</p>
Regulatory	<p>There are 3 regulatory options proposed:</p> <p>Option 1</p>

	<p>Existing assets would need to comply with new regulatory requirements based on a new compliance schedule. Compliance target dates for individual sections of the Transport Standards would be developed with stakeholders.</p> <p>Option 2</p> <p>Existing assets would need to comply with new regulatory requirements based on a new compliance schedule. Compliance target dates for transport assets (e.g. trams, bus stops, taxi ranks, websites and digital information etc.) be developed with stakeholders.</p> <p>Option 3</p> <p>Existing assets would only need to comply with new regulatory requirements when certain circumstances are met, triggering compliance obligations with the new requirements.</p>
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Analysis of submissions

Status quo

Schedule 1 of the Transport Standards sets percentage compliance targets and dates for different categories of requirements. In the compliance schedule, most public transport assets are required to be fully compliant with current requirements by 2022¹⁵ – before any new regulatory requirements will come into effect.

The current compliance schedule does not allow for implementation or compliance of any new regulatory requirements following the cessation of the current schedule dates. Therefore, using the current compliance schedule for implementing the reforms is not feasible.

Where any new regulatory amendments are made to the Transport Standards, a new implementation approach must be embedded into the Transport Standards to enable the application of those new regulatory requirements.

Non-regulatory

The Consultation RIS did not seek feedback on how operators and providers would be encouraged through guidance. The Consultation RIS proposes using the Transport Standards Guidelines and the Whole Journey Guide to provide guidance and encourage operators and providers to take up the guidance. The Department sought feedback on how stakeholders have interacted with the whole journey guide and how it can be improved. This feedback will be used to inform how guidance is provided through an updated Whole Journey Guide.

Where the guidance relates to requirements in the Transport Standards, it will be included in the Transport Standards Guidelines. Where guidance does not relate to requirements in the Transport Standards, it will be included in an amended Whole Journey Guide.

¹⁵ The existing compliance target dates, contained in Schedule 1 of the Transport Standards, will not be affected by the reform process. The current compliance target dates for all existing requirements of the Transport Standards, will continue to apply.

Regulatory option 1

Option 1 was the most widely supported option for individuals, people with disability and disability organisations who expressed a preference for one of the options presented. One-third of submissions from this stakeholder group expressed support for option 1. Of these submissions, half noted that the requirements should be applied retrospectively to ensure public transport operators and providers are obliged to implement the requirements, rather than waiting on complaints from public transport users or a major refurbishment of relevant transport assets to trigger compliance.

Over half of the submissions from individuals, people with disability and disability organisations raised disappointment and frustration with the lack of progress towards implementing the existing requirements in the Transport Standards. Submissions noted that any amendments to the Transport Standards, including target dates for compliance with any new requirements, risked further delays in upgrading assets to comply with existing requirements.

No industry stakeholders expressed support for option 1. One government stakeholder expressed support for option 1, noting that a compliance mechanism would allow for the highest level of compliance achievable if 100% compliance cannot be practically achieved (e.g. due to topographical constraints). Although expressing support for option 3, another government submission noted the benefits of a compliance schedule (i.e. option 1 or 2) are that the approach provides greater certainty for people with disability, and operators and providers, as it prescribes what requirements need to be implemented and the applicable compliance dates.

However, over 40 per cent of industry stakeholders, and over 15 per cent of government stakeholders indicated compliance targets have promoted a piecemeal and fragmented approach to compliance, and created uncertainty for operators and providers, as well as public transport users. One submission outlined that uncertainty stemmed from a lack of clarity regarding how compliance targets are calculated. One industry submission outlined that both option 1 and 2 do not consider prioritisation models developed by operators and providers. Another industry submission similarly noted that the current milestone approach outlined in the Transport Standards schedule fails to recognise the funding required over the twenty-year schedule timeline and that option 1 would promote a similar approach that thinned resources and would lead to inconsistent outcomes with no overall improvement to accessibility.

Regulatory option 2

One quarter of submissions from individuals, people with disability and disability organisations expressed support for option 2. One of these submissions noted that option 2 would ensure all elements of a public transport asset are compatible, while avoiding delays to some elements being caused by complexities in adjacent areas. This submission noted that retaining the current final compliance date of 2032 would be desirable and enforcement mechanisms should also be built into the Transport Standards to encourage compliance with target dates.

As with option 1, some submissions raised concerns this option may lead to further delays to assets upgrades that do not reflect existing requirements in the Transport Standards (assets include conveyances (for example trains and buses), premises and infrastructure (for example train stations and bus stops), fixtures and fittings (for example signs and seating) and information). It was noted that 'difficult' assets that have not been upgraded would re-enter a large pool of assets requiring upgrades and would continue to be untouched until the easier work is complete.

Implementation approach

One submission from a government stakeholder expressed support for option 2, noting it provided clear target dates and allows for entire vehicles to be upgraded at once, rather than a piecemeal replacement of parts occasioned through the proposed implementation approach outlined in option 1. This submission considered option 1 as a costlier approach for providers to implement. However, in line with some submissions received from individuals, people with disability and disability organisations, the submission noted that without enforcement of target dates, it is unlikely that there will be a consistent adoption of the Transport Standards across providers. It was noted that option 2 could result in outcomes not being achieved and existing barriers for accessing public transport continuing. Although expressing support for option 3, another government submission noted the benefits of a compliance schedule (i.e. option 1 or 2) are that it provides greater certainty for people with disability, operators and providers, as it prescribes what requirements need to be implemented and the applicable compliance dates.

Regulatory option 3

No submissions from individuals, people with disability and disability organisations expressed support for option 3. Two submissions from individuals, people with disability and disability organisations expressed strong opposition to this option and viewed it as an incentive to not upgrade assets, effectively rendering the Transport Standards as opt-in and resulting in insufficient progress on legacy infrastructure and conveyances. One government submission expressed similar concern, that without target dates the pace of upgrades to existing assets may be reduced.

All submissions from industry stakeholders supported option 3. These submissions noted that option 3 would allow for prioritising and funding of upgrades to be coordinated with other works (e.g. road corridor upgrades, development), ensure accessibility upgrades are high impact and more considered, and avoiding the complexity and costs associated with regulating existing assets. It was noted, however, that triggers must be clearly articulated and transitional rules should apply where construction or significant upgrades have commenced.

Funding was raised as a concern by industry and the reason for the slow rate of improved accessibility of public transport. One submission noted that adopting a schedule approach similar to the Transport Standards, where timeframes and percentages are stipulated, may not be the most beneficial for all stakeholders. One submission noted that option 1 is reasonable to propose and may result in greater improvements to accessibility in a shorter timeframe, if appropriate funding is provided to operators. However, if there is no intention to provide operators and providers with additional funding, option 3 was preferred.

There were divergent views across government and industry about whether compliance should be implemented on an end-of-life basis or allow for retrospective application or retrofitting where an asset undergoes refurbishment or upgrade. One-third of submissions from industry and government noted that progressive compliance as new assets are purchased or built was more aligned with other sectors, such as the building industry, as reflected in the NCC and the Premises Standards. While some acknowledged the positive social and customer outcomes in retrospective application, it was complex, costly and resource intensive. It was noted that implementation on an end-of-life basis, in line with option 3, would ensure that all assets are captured, and that appropriate funding can be planned to rectify all deficiencies, rather than achieving easy wins and postponing needed improvements. Some noted that the cost of including the new requirements into a new build is considerably lower than upgrading existing facilities and if retrospective application is considered, additional funding should be provided.

Others recommended requirements also apply to existing assets and that requiring assets to be compliant when they undergo substantial refurbishment or alteration is clear, easy to understand and provides surety and confidence to people with disability, operators, and providers. It was also noted that if there was also a final date for compliance for all assets, there would be an incentive to work on existing assets, removing the risk that existing assets would not be upgraded or refurbished.

Preferred option

Informed by the outcomes of consultation, impacts, cost and outcomes analysis above, the preferred option is a **fit-for-purpose hybrid approach** to implementation of the preferred regulatory options.

Consultation highlighted a hybrid approach to implementation is likely to better meet the objectives of the reform, while being cognisant of implementation barriers and difficulties faced by providers and operators. Across stakeholder groups, many submissions noted concerns about the effectiveness of the current implementation approach in the Transport Standards and that a blanket approach to implementation of any new requirements may constrain the provision of several reform areas.

Two submissions from disability stakeholders expressly indicated support for a hybrid approach, recognising this would allow consideration of each reform area against the principle that people with a disability must benefit from reforms as soon as possible. These submissions noted there are benefits of a 'trigger' approach to the implementation of some reform areas as this approach would be less likely to lead to protracted consultations about timeframes and more likely to produce tangible and timely change. Likewise, submissions noted there were no convincing reasons why some other reform areas could not be implemented almost immediately.

Industry and government submissions similarly indicated that a blanket approach for all reform areas may not be appropriate. One submission from industry highlighted while some reform areas may need to be implemented over a longer period, other reform areas could deliver important outcomes for people with disability within a relatively short timeframe.

Submissions across stakeholder groups indicated that flexibility is required in implementation of the reform areas. The results of consultation indicate a range of factors influence the preferred implementation approach relevant for a reform area. This includes the transport mode, age of assets, status of compliance, value of works, proportion of assets being upgraded, the benefits of upgrading a portion of an asset, and identifying priority areas for implementation based on their significance in producing improved customer outcomes.

Proposed hybrid implementation approach

Three options for each individual reform area are presented in the proposed hybrid implementation approach:

- **On commencement** - Where a preferred regulatory option is being applied on commencement this means it applies from the date the amendments to the Transport Standards come into force.
- **Retrospectively with a compliance schedule** - Where a preferred regulatory option is applied retrospectively with a compliance schedule this means it applies to all new public transport assets and all public transport assets that are currently in service in accordance with the dates in the compliance schedule.

Implementation approach

- **Prospectively with a trigger mechanism** - Where a preferred regulatory option is being applied prospectively with a trigger mechanism this means it applies to all new public transport assets and will only apply to public transport assets that are currently in service if the asset is substantially upgraded.

In addition, there are three 'regulatory in-principle' preferred options proposed in the Decision RIS: 15. Braille embossed printed specifications, 16. Braille and tactile lettering for signage. and 42. Removeable gangway design – ferries. Detailed implementation arrangements for these reform areas are set out in their respective chapters.

Where a preferred regulatory option relates to definitional changes or clarifies existing requirements and would not introduce new requirements or result in material change to the intent of the Transport Standards, the changes to the Transport Standards would apply on commencement.

The other preferred regulatory options were individually assessed, considering a body of evidence from consultation findings, the CBA developed by PwC and findings from previous reviews of the Transport Standards to determine whether prospective implementation of the reform area, or retrospective implementation of the reform area was preferred.

This assessment entailed a principles-based consideration of each preferred option, considering:

- the significance of improved customer outcomes.
- the difficulty or challenges associated with implementation of a new requirement for existing assets, including consideration of:
 - whether the new requirements related to structural elements of a transport asset (for example stairs, toilets, doors, access paths), standalone fixtures or fittings, or minor modifications to existing assets.
 - whether design or space constraints make retrofitting existing assets to meet the requirements unfeasible.
 - whether the significance or scale of upgrades, or the complexity of changes required to retrofit existing assets make implementing the requirements costly or unfeasible.
 - the degree to which a new requirement is already being implemented by industry.

Based on this assessment the Department has identified a preferred implementation approach for each of the preferred regulatory options in the Decision RIS. The incorporation of the implementation arrangements into the Transport Standards will be settled in the drafting process and it may be different to the structure of the existing Schedule 1.

Implementation arrangements

The implementation arrangements for the preferred regulatory options are outlined below. Stage 1 reforms are indicated with (S1) and stage 2 are indicated with (S2).

Regulatory - on commencement

25. Continuous accessibility on access paths (S2)

37. Lighting (S2)

41. Boarding ramp and removeable gangway definitions (S2)

Implementation approach

47. Hail-and-ride boarding points on infrastructure (S2)

Regulatory - retrospective with a five-year implementation schedule

1. Staff training and communication (S1)
3. Priority Seating (S1)
8. Communication during service disruption (S1)
16. Provision of information in multiple formats (S1)
3. Rideshare (S2) – raised registration number and response times
5. Better communications of accessibility features (S2)
6. Timely provision of information (S2)
17. Lifts: Braille and tactile information at lift landings (S2)
27. Resting points (S2)
30. Allocated spaces and priority seating in waiting areas (S2)
44. Mobility boarding points – identification of lead stops (S2)
55. Appropriate seats on booked services (S2)
60. Doorway contrast (S2)

Regulatory - retrospective with a ten-year implementation schedule

13. Wayfinding (S1)
14. Tactile ground surface indicators (S1)
15. Passenger loading zones (S1)
48. Accessible taxi ranks (S2)
49. Accessible passenger loading zones on street (S2)
50. Accessible parking spaces in infrastructure off-street carparks (S2)

Regulatory - prospective with a trigger mechanism

4. Allocated spaces (S1)
5. Digital information screens (S1)
7. Website accessibility (S1)
9. Gangways (S1)
3. Rideshare (S2) – requirements that apply to accessible taxis
8. Passenger location during journey (S2)
11. Print size and format (S2)

Implementation approach

- 12. International symbol for access and deafness (S2)
- 13. Letter heights and luminance contrast of signs (S2)
- 14. Location of signs (S2)
- 18. Lifts: Audible wayfinding (S2)
- 19. Lifts: Emergency communication systems in lift cars (S2)
- 21. Information and communication technologies (ICT) procurement (S2)
- 22. Mobile web systems (S2)
- 23. Accessible fare system elements (S2)
- 24. Doors on access paths (S2)
- 28. Requirements for handrails in over-bridges and subways (S2)
- 29. Location of fare system elements (S2)
- 31. Accessible toilets with equal proportion of left- and right-hand configurations (S2)
- 34. Lift specifications and enhancements (S2)
- 35. Specifications for escalators and inclined travelators (S2)
- 36. Poles, objects and luminance contrast (S2)
- 38. Signals and process for requesting boarding devices (S2)
- 40. Portable boarding ramp edge barriers (S2)
- 43. Nominated assistance boarding points (S2)
- 46. Bus, tram and light rail boarding points on infrastructure (S2)
- 51. Grab-rails on access paths (S2)
- 52. Grab-rails in allocated spaces (S2)
- 57. Stairs on trains (S2)
- 58. Stairs on ferries (S2)
- 59. Stairs on buses (S2)

Regulatory – other implementation arrangements

- 17. Australian Standards and definitional amendments (S1)
- 15. Braille embossed printed specifications (S2)
- 16. Braille and tactile lettering for signage (S2)
- 42. Removeable gangway design – ferries (S2)

Projects under construction and in planning at the commencement of the amendments

At the commencement of the amendments to the Transport Standards there will be new public transport infrastructure, premises or conveyances under construction and existing public transport infrastructure, premises or conveyances undergoing substantial refurbishment. There will also be projects for new public transport infrastructure, premises and conveyance projects, or projects to substantially upgrade existing infrastructure, premises and conveyances, in the planning process. The implementation arrangements for these projects needs to be specially considered to ensure that they are not delayed, or the cost increased, by the new requirements, whilst ensuring that the new requirements are implemented where possible so that the benefits to people with disability can be realised.

Projects under construction

For projects under construction, transport operators or providers would not be required to implement the new prospective requirements and could proceed with implementing the existing requirements of the Transport Standards. In these situations, operators and providers would be encouraged to consider if any new prospective requirements could be adopted to deliver benefits to people with disability earlier.

Infrastructure, premises and conveyances would still be required to meet any new requirements that are being implemented retrospectively in accordance with the new compliance schedule. Consideration could be given to implementing new retrospective requirements for projects under construction at the commencement of the new requirements to ensure required timeframes are met and to deliver benefits to people with disability earlier.

Projects in planning

For projects in the planning process, transport operators and providers would only be required to implement the new prospective requirements in the Transport Standards if the project has not reached the approval prior to issuing a tender stage (the exact timing and process for this is dependent on the procurement processes for each operator and provider). If the project was past this phase of the planning process (for example the approval to issue the tender had been granted), then operators and providers could proceed with implementing the existing requirements of the Transport Standards. Operators and providers would be encouraged to choose to implement the new prospective requirements if the project is past this phase where feasible to do so. If a project has not reached the approval prior to issuing a tender stage, the project would need to meet all the new prospective requirements of the Transport Standards.

Infrastructure, premises and conveyances would still be required to meet any new requirements that are being implemented retrospectively in accordance with the new compliance schedule. Consideration could be given to implementing new retrospective requirements for projects in the planning phase at the commencement of the new requirements to ensure required timeframes are met and to deliver benefits to people with disability earlier.

Stage 1 updated Australian Standards and other references

The Stage 1 Decision RIS identified the need to update referenced Australian Standards in the Transport Standards, align requirements with intersecting legislation, such as the Premises Standards and the National construction Code, and harmonise language in the Transport Standard with the DDA.

Implementation approach

The Stage 1 Decision RIS concluded before Standards Australia published an update to the most frequently referenced Australian Standard in the Transport Standards - Design for access and mobility AS 1428.1 (2021). The updated standard consists of minor and clarifying amendments to the 2009 version of the standard and a new layout. Therefore, the department proposed updating the Australian Standards reference to the 2021 version where there is no change.

Stage 1 Implementation of Australian Standards and other references

The table below details the updated Stage 1 proposed amendments to referenced Australian Standards in the Transport Standards and their implementation status. Where a change between the existing Australian Standards reference and the new reference exists, prospective implementation has been chosen. Where there is no substantive change, on commencement implementation has been chosen.

Table 176: Updated Stage 1 Decision RIS Australian Standards and other references

Proposed Stage 1 Decision RIS Australian Standards and other references	Implementation approach
Minimum unobstructed width Replace reference to AS1428.2 (1992) with text specifying dimensions.	On commencement
Circulation space for wheelchairs to turn in AS1428.1 (2021) Clause 3.5	On commencement
Minimum width AS1428.1 (2021) Clause 3.4	On commencement
Slope of external boarding ramps Remove references to AS/NZS3856.1 (1998), AS1428.2 (1992) and AS1428.1 (2001). Retain requirements in text.	On commencement
International symbol of accessibility to be displayed 1428.1 (2021). Refer to Clause 5.2.1(c).	On commencement
Abutment of surfaces AS1428.1 (2021) Refer Clauses 4 and 4.2	On commencement
Slip resistance – premises and infrastructure AS1428.1 (2021) Clause 4.1 Note reference to SA HB 198 (2014) Table 3a and 3b.	Prospective
Slip resistance – conveyances Australian Design Rule 58 – Conveyances (slip and skid resistant surface requirements in conveyances)	On commencement
Luminance contrast AS1428.1 (2021) Clause 9 and Appendix B. Retain stage 1 provision of additional text regarding luminance contrast and domed warning indicators.	Prospective
Handrails on steps AS1428.1 (2021) Section 9	On commencement

Implementation approach

Proposed Stage 1 Decision RIS Australian Standards and other references	Implementation approach
Handrails above access paths AS1428.1 (2021) Clause 9(d) and Figure 29	On commencement
Grabrails AS1428.1 (2021) Clause 14	On commencement
Doorways and Doors AS1428.1 (2009) Clause 13	Prospective
Weight activated doors and sensors DSAPT reference to service animal to <i>assistance animal</i> to align with the DDA.	On commencement
Clear opening of doorways AS1428.1 (2009) Clause 13.2	On commencement
Stairways AS1428.1 (2021) Clauses 8.1 and 8.2	Prospective
Accessible unisex toilet AS1428.1 (2009) Clause 15	Prospective
Requirements for accessible toilets AS1428.1 (2009) Clause 15.2.10 and Figure 38.	Prospective
International symbols ISO 7001 (2007)	On commencement
Location tactile ground surface indicators ASNZ1428.4.1 (2009) Clause 2.3.3, 2.4, 2.5 and 2.6	Prospective
Tactile ground surface indicators ASNZ1428.1 (2009) Clause 2.2, 2.3.1, 2.3.2, and 3.2.1	On commencement
Instalment at accessible bus boarding point AS1428.1 (2021) Clause 15.2	On commencement
Instalment at rail stations ASNZ1428.4.1 (2009) Clause 3.4	On commencement
Instalment tactile ground surface indicators at wharves ASNZ1428.4.1 (2009) Clause 3.5	On commencement
Controls AS1428.1 (2021) Clause 10.4	On commencement
Passenger-operated devices for opening and closing doors AS1428.1 (2021) Clause 10.4 and 11. Retain stage 1 reference to add luminance contrast requirements, to better define controls for power	On commencement

Implementation approach

Proposed Stage 1 Decision RIS Australian Standards and other references	Implementation approach
operated doors and manual door opening forces, and to align with the Premises Standards	
Location of passenger-operated controls for opening and locking doors AS1428.1 (2021) Clause 10.4.3	Prospective
Signal devices for conveyances that stop on request AS1428.1 (2021) Clauses 10.4 and 11	On commencement
Circulation space in front of vending machines AS1428.1 (2021) Clause 3.5	On commencement
Location of carers, assistants and service animals DSAPT reference to service animal changed to assistance animal to align with the DDA	On commencement
Information to be provided about vacating priority seating Amend heading to include allocated spaces to better clarify the intent of the text in the DDA	On commencement

63. Evaluation

The preferred options will be evaluated following implementation to test their effectiveness, efficiency, and ongoing relevance. The five-yearly statutory review will be the mechanism used for the evaluation. Section 34 of the Transport Standards requires the Minister administering the *National Land Transport Act 2014*, in consultation with the Attorney-General, to review the efficiency and effectiveness of the Transport Standards every five years. Reviews must include:

- whether discrimination has been removed as far as possible, according to the requirements for compliance set out in Schedule 1 (Target dates for compliance)
- any necessary amendments to the Transport Standards.

Utilising an existing mechanism for the evaluation of the preferred options will reduce the consultation burden on people with disability and operators and providers. Even though the statutory review requirement is focused on the regulatory requirements of the Transport Standards, review of The Whole Journey Guide will be incorporated into the review process to capture evaluation of non-regulatory preferred options.

The first statutory review that will occur after the preferred options are implemented is scheduled to commence in late 2027. This will allow people with disability and operators and providers to have a few years of experience with those preferred options that have been implemented at that time post implementation. The regular 5-yearly review cycle will allow other reforms to be progressively evaluated as they are implemented

Appendix A—Detailed reform options

The reform options listed in this appendix are as seen in the Stage 2 Consultation RIS. In some cases, the options have been refined in this Decision Regulation Impact Statement following feedback received in consultation.

1. Reporting

Status quo

No changes would be made. There would continue to be no provisions or guidance for reporting compliance with the Transport Standards.

Non-regulatory: Self-reporting against compliance plans

The Australian Government would, through guidance, encourage operators and providers to:

- publish plans on compliance with the Transport Standards and
- publish progress reports based on their compliance against these plans.

Compliance plans would outline compliance data for new or upgraded assets, set out target dates for when existing non-compliant assets will reach compliance and provide strategies for how operators and providers will achieve this. Compliance plans should also establish feedback processes and reports to enable the public to provide input on the compliance plans.

Progress reports should be published at regular intervals between the publication of compliance plans, to update the public on how operators and providers have progressed towards meeting the compliance plan targets.

To do this, the Australian Government would develop guidance for what data and information should be included in the compliance plans and progress reports, and what format compliance plans and progress reports should be published in. Guidance would be developed in consultation with state and territory governments, operators and providers and the disability community.

Components of this guidance may include:

- consistent definition of terms
- frequency of renewing compliance plans and providing compliance reports
- templates to support national consistency in reporting
- guidance on how compliance plans and reporting could be published, ensuring they meet accessibility requirements
- how data will be used.

The guidance would allow for scalability, recognising that public transport operators and providers have different capacity to develop and implement compliance plans and progress reports.

The Australian Government may provide a central repository of published compliance plans and progress reports.

Regulatory: mandatory reporting on assets

The Australian Government would work with state and territory governments, operators and providers and the disability community to:

- develop a national compliance reporting framework (the framework) and

- establish a database to receive and store compliance data for all public transport assets.

The framework could include information on, but not be limited to:

- the purpose and methodology of data collection
- responsibilities for data collection and collation, incorporating scalability considerations of responsible reporting entities
- responsibilities for data storage and dissemination (if required)
- how data will be stored and used, including the potential publication of data
- the scope of aspects / elements of the Transport Standards to be measured
- consistent definitions of terms
- frequency of reporting
- guidance on how to achieve consistent and / or comparable data
- guidance on how to use the framework.

The framework would require operators and providers to:

- report identification information for an asset and whether it is compliant with the prescriptive standards or not
- report any cases where the assets do not meet the select prescriptive standards in the Transport Standards, and how the asset meets the requirements of the Transport Standards through unjustifiable hardship, direct assistance or equivalent access.

The Australian Government would work with state and territory governments and operators and providers to incrementally expand the scope of the reporting regulations, with the aim to eventually cover all standards and to improve the quality of data being reported.

To assist with the development of the framework there are three proposed regulatory approaches for determining the scope of which assets would be reported on under the framework.

Option 1 Report compliance on new or substantially refurbished or upgraded assets only

Report data **for all new or substantially refurbished / upgraded conveyances, infrastructure and premises** (except premises to which the Premises Standards apply) that are brought into use for public transport service in line with Transport Standards section 32.1 Effect and application of these Standards.

Operators and providers would only need to report on assets that meet the circumstances set out in Transport Standards section 32.1 Effect and application of these Standards. That is, where an asset meets one of the conditions in section 32.1, operators and providers will be required to report compliance of the asset against the Transport Standards.

32.1 Effect and application of these Standards

These Standards apply, on and from the date they come into effect under section 31 of the *Disability Discrimination Act 1992*, to:

- (a) public transport services provided with:
 - (i) newly constructed premises or infrastructure; or
 - (ii) conveyances entering service after these Standards come into effect; or
 - (iii) premises, infrastructure or conveyances that have undergone substantial refurbishment or alteration; or
 - (iv) additional or replacement equipment in premises and infrastructure or on conveyances; and

- (b) new or revised ancillary services that are provided as an adjunct to the public transport operation; and
- (c) new or updated information provided to the public.

This section pertains to conveyance, premises and infrastructure.

Reporting requirements in the Transport Standards only apply to assets regulated by the Transport Standards.

For example:

- Where a train platform is substantially upgraded, this would trigger compliance reporting. An operator or provider would need to identify the elements of the Transport Standards that cover the train platform and provide data on the level of compliance with the prescriptive standards of these elements in the Transport Standards.
- An operator or provider would not need to provide data on the level of compliance with the Transport Standards where assets are not covered by the Transport Standards, such as a toilet on a train platform. Toilets on train platforms are required to comply with the Premises Standards rather than the Transport Standards. As such, an operator and provider would not need to report on how the toilet meets compliance requirements under the Transport Standards.

Option 2 Report compliance data on new or substantially refurbished and upgraded assets AND all assets for select sections of the Transport Standards only

Report data for:

- All new or substantially refurbished / upgraded conveyances, infrastructure and premises (except premises to which the Premises Standards apply) that are brought into use for public transport service in line with section 32.1.
- Specific parts or sections in the Transport Standards (for example Parts 8, 11, 17 and sections 9.1 and 16.1 etc.).

Transport operators and providers would be required to report the level of compliance of their assets against certain parts or sections of the Transport Standards (not the entire Transport Standards). Applicable sections or parts of the Transport Standards would be identified through consultation with stakeholders during development of the compliance reporting framework.

Option 3 Report compliance data on new or substantially refurbished and upgraded assets AND for specific assets only

Report data for:

- All new or substantially refurbished / upgraded conveyances, infrastructure and premises (except premises to which the Premises Standards apply) that are brought into use for public transport service in line with section 32.1.
- Specific transport assets covered under the Transport Standards (for example trams, bus stops, taxi ranks, websites and digital information etc.).

Transport operators and providers would be required to report the level of compliance of each transport asset by reporting the extent that each asset meets the relevant prescriptive requirements of the Transport Standards. This may not include all transport assets or cover all sections of the Transport Standards. Applicable assets would be identified through consultation with stakeholders during development of the compliance reporting framework.

For example, an operator or provider may need to report the extent that their buses comply with the prescriptive requirements that relate to buses in the Transport Standards rather than reporting individual compliance on handrails, allocated spaces or manoeuvring areas that are components of a bus.

2. Equivalent access

Status quo

Transport Standards sections 1.16 and 33.3 Equivalent access, would remain unchanged and no guidance would be issued.

The definition for equivalent access is provided at Division 1.2 Meaning of important terms, section 1.16:

1.16 Equivalent access

- (1) Equivalent access is a process, often involving the provision of direct assistance, under which an operator or provider is permitted to vary the equipment or facilities that give access to a public transport service, so long as an equivalent standard of amenity, availability, comfort, convenience, dignity, price and safety is maintained.
- (2) Equivalent access does not include a segregated or parallel service.

Compliance with the Transport Standards may be achieved through equivalent access, as per section 33.3 Equivalent access:

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.

Non-regulatory option

The Australian Government would develop web-based repository of equivalent access successfully applied by operators and providers.

The repository would provide a central collection point for examples of the application of equivalent access to inform stakeholders (i.e. other operators and providers) of possible applications in their own settings. The repository would also inform the disability community of where and how equivalent access is applied.

The onus for providing examples would rest with operators and providers. Examples may include (but are not limited):

- The cohorts / groups that were involved in the process.
- Details surrounding processes where stakeholders reached agreement on the meanings of the equivalent access terms.
- The steps and tools used throughout the process to reach the agreed solution.

- Any other relevant documentation which would provide the community the confidence that the agreed outcomes were the result of a robust equivalent access process.

The scalability of examples provided would depend on the size and complexity of the process involved. Documentation surrounding larger processes, involving substantial cost would be expected to be more extensive and detailed than documentation surrounding smaller processes.

The website would contain a disclaimer advising that the examples provided had not been legally tested and were not endorsed by governments.

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide to assist operators and providers in using and navigating the repository.

Regulatory option

The Transport Standards would be amended to include a new alternative approach for equivalent access, such as a performance solution process. If an alternative approach is agreed by Transport Ministers, an appropriate peer review, certification mechanism and certification body would need to be developed. This would be developed in consultation with the disability community, state and territory governments and the transport industry.

This alternative process would include co-design and consultation with the disability community and set out certification methods to provide operators and providers with legal certainty and assurance that an alternative solution is fit for purpose and not discriminatory.

The proposed process could be similar to the performance solution process utilised under the National Construction Code (NCC). A performance solution provides a tailored solution to meet the intended objective of performance requirements, must comply with these requirements and be verified by an assessment method.¹⁶

Many of the NCC performance requirements that relate to accessibility could be modified to align with the Transport Standards, as well as developing new additional, more specific, performance requirements to address Transport Standards requirements not covered in the NCC (e.g. infrastructure, conveyances, connections between transport nodes, rest points, boarding areas, lighting, fixtures and fittings, fare gates, ticketing, information, etc.).

A process suitable for the development of performance solutions under the Transport Standards could include the following:

- Prepare a performance-based design brief (a document developed in collaboration with key stakeholders) that will be used as the platform upon which the proposed design is constructed.
- Carry out analysis and co-design that includes consultation with relevant stakeholders, including the disability community.
- Evaluate results.
- Prepare draft report.
- Peer review draft report.
- Prepare final report.
- Certify the process.

¹⁶ The National Construction Code, Part A2 Compliance with the NCC, 21 January 2022, <https://ncc.abcb.gov.au/editions/2019-a1/ncc-2019-volume-three-amendment-1/section-governing-requirements/part-a2>

This process builds on the NCC performances requirements and is suitable for developing simple and complex performance solutions. This is achieved by requiring stakeholders to collaborate and develop an agreed pathway for the design process to follow in order to produce an acceptable outcome.

The detail and depth of analysis to support a performance solution should reflect the complexity and impact of the solution. Larger performance solution projects would require more comprehensive consultation and co-design to that of smaller performance solution projects.

Performance solution reports should be prepared by access professionals with appropriate expertise and qualifications in accessibility, building compliance and public transport to ensure appropriate accessibility outcomes are achieved. In conjunction with public transport operators and providers and members of the disability community, the access professionals would be required to:

- document the performance requirement to be achieved
- document the performance solution process undertaken to achieve the requirement
- demonstrate how co-design and consultation with the disability community was incorporated into the process steps.

An appropriate peer review, certification mechanism and certification body would be required to validate the performance solution process. This is to ensure the integrity of the process and appropriate accessibility outcomes are achieved with consistent decision making.

Under a proposed new process, operators and providers could utilise their own accessibility experts to peer review the performance solution reports or seek an independent expert to undertake the peer review process on their behalf.

Additionally, a process for final certification would need to be developed. This may be achieved through establishing new certification bodies (such as a national body to oversee certification processes), utilising existing bodies (such as accessibility reference groups or technical committees) or through a process based on state and territory governments nominating an appropriate existing jurisdictional body to certify performance solutions.

Certification bodies would need to have flexibility in their terms of reference and governance processes to allow for scalability of performance solutions.

3. Rideshare

Status quo

Transport Standards Division 1.2, Meaning of important terms, would remain unchanged and no Guidance would be issued.

1.12 Conveyance

- (1) A conveyance includes any of the following, to the extent that they are used to provide a public transport service:
 - (a) aircraft;
 - (b) buses or coaches;
 - (c) ferries;
 - (d) taxis;
 - (e) trains, trams, light rail, monorails, rack railways;

- (f) any other rolling stock, vehicle or vessel classified as public transport within its jurisdiction by regulation or administrative action of any Government in Australia.
- (2) A conveyance does not include the following:
 - (a) charter boats (including water taxis);
 - (b) limousines (including chauffeured hire cars);
 - (c) self-drive rental cars.

1.23 Public Transport Service

- (1) A Public transport service is an enterprise that conveys members of the public by land, water or air.
- (2) A public transport service includes:
 - (a) community transport conveyances that are funded or subsidised by charity or public money and that offers services to the public and;
 - (b) foreign aircraft and vessels that carry passengers to, from, or in Australia and that offer services to the public
- (3) A public transport service does not include a service that provides adventure travel, except to the extent that the service operates to move the public from one location to another distant location.

Non-regulatory option

Through guidance and an education campaign this option will provide advice on requirements of transport services to ensure conveyances are compliant with the Transport Standards. This guidance would encourage future transport modes to consider accessibility requirements during the design of their services to ensure these services are Transport Standards compliant when entering the Australian market.

Given the similarities between the services provided by taxis and rideshare, guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide to include requirements for services that provide taxi travel (such as rideshare) under the Transport Standards. Advice would also raise awareness of areas where operators and providers can improve the accessibility of their services.

Specific guidance may include the following:

- Rideshare conveyances without a taxi registration number may potentially comply with Transport Standards section 17.7, Taxi registration numbers, by instead providing the vehicle's registration number in raised lettering.
- Booking platforms for taxi travel services should ensure response times for accessible vehicles are the same as for other conveyances providing taxi travel.
- Accessible rideshare conveyances may comply with the requirements for accessible taxis.
- Rideshare conveyances may comply with all other requirements for conveyances in the Transport Standards and rideshare operators should comply with any other requirements related to the provision of public transport.
- Booking and payment platforms must be accessible.
- Including wheelchair accessible vehicles in the rideshare fleet will help to ensure their service is accessible to all passengers.

An education campaign would be developed targeted at the rideshare sector, providing advice on their responsibilities under the DDA to eliminate discrimination as far as possible, and provide

clarity and certainty on their responsibilities to ensure compliance as a public transport operator and provider under the Transport Standards. The aim of the campaign will be to encourage rideshare operators to eliminate discrimination against people with disability and provide more accessible services.

Regulatory option

The Transport Standards would be amended to ensure rideshare services are explicitly identified and ensure the current requirements for taxis are fit for purpose to apply to other services providing taxi travel.

Transport Standards Division 1.2, Meaning of important terms, would be amended to ensure rideshare is explicitly covered by the Transport Standards, including:

- list of conveyance at section 1.12, Conveyance
- definition of public transport at section 1.23, Public transport service.

Amendments to the definitions of conveyance and / or public transport service would be drafted to ensure rideshare is explicitly covered by the Transport Standards. Any amended definitions would not be overly prescriptive, to ensure any operator or provider of public transport entering the Australian market understands the requirements it must comply with.

Amendments to the applicability of sections of the Transport Standards for conveyances would also be updated to reflect these new definitions.

Transport Standards requirements that currently apply to 'taxis' would also be amended to ensure they are fit for purpose in application to rideshare conveyances, including:

- Schedule 1, Target dates for compliance, Part 1, Target date—31 December 2007, section 1.3 Responsibility, that provides response times for accessible vehicles.
- Section 17.7, Taxi registration numbers, that provides for the placement of taxi registration numbers and would be broadened to require vehicle registration numbers for rideshare vehicles.

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide to include advice ensure rideshare services are explicitly identified and the applicable requirements for taxi-travel are fit for purpose.

4. Dedicated school buses

Status quo

The Transport Standards would remain unchanged and no Guidance would be issued. Dedicated school buses would continue to be exempt from the following sections:

- Section 1.13, Dedicated school bus and dedicated school bus service
- Section 3.2, Access for passengers in wheelchairs, etc
- Section 6.2, Boarding ramps
- Section 6.3, Minimum allowable width
- Section 6.4, Slope of external boarding ramps
- Section 8.2, When boarding devices must be provided
- Section 8.3, Use of boarding devices
- Section 8.4, Hail-and-ride services
- Section 8.5, Width and surface of boarding devices
- Section 8.6, Maximum load to be supported by boarding device

- Section 8.7, Signals requesting use of boarding device
- Section 8.8, Notification by passenger of need for boarding device
- Section 9.1, Minimum size for allocated space
- Section 9.4, Number of allocated spaces to be provided—buses
- Section 9.7, Consolidation of allocated spaces
- Section 9.9, Use of allocated spaces for other purposes
- Section 9.11, Movement of mobility aid in allocated space
- Section 10.1, Compliance with Australian Standard
- Section 11.3, Handrails on steps
- Section 11.4, Handrails above access paths
- Section 11.5, Compliance with Australian Standard
- Section 11.6, Grabrails to be provided where fares are to be paid
- Section 11.7, Grabrails to be provided in allocated spaces
- Section 12.1, Doors on access paths
- Section 12.4, Clear opening of doorways
- Section 12.6, Automatic or power-assisted doors
- Section 14.1, Stairs not to be sole means of access
- Section 14.4, Compliance with Australian Design Rule 58—conveyances.

Non-Regulatory option

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide for school bus operators and providers.

Specific guidance may include the following:

- Emphasise that wherever possible, school bus services should be run using conveyances that are compliant with the Transport Standards.
- Provide advice that vehicles procured for school bus services should not be used to offer other public transport services unless they are compliant with the Transport Standards.
- Provide information and examples on potential equivalent access solutions to assist operators and the disability community to reach equivalent access solutions that meet the needs of all parties, without constituting a parallel service.
- Educate operators and providers on the exemption from the Transport Standards, noting which requirements a school bus must comply with.

Regulatory option

The Transport Standards would be amended to provide better accessibility for students with disability on dedicated school buses. There are two regulatory options which propose to either remove some or all of the current dedicated school bus exemptions.

The outcome of this reform area will determine how any new regulatory requirements agreed throughout this reform process will apply to dedicated school buses.

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide to reflect new requirements and provide advice on the new regulatory requirements.

Option 1 Remove dedicated school bus exemptions

The Transport Standards would be amended to remove exemptions for dedicated school buses.

Transport Standards section 1.13, Dedicated school bus and dedicated school bus service, would be removed. This means there would be no distinction between dedicated school buses and other buses.

The following sections would be amended to remove the dedicated school buses exemption:

- Section 3.2, Access for passengers in wheelchairs, etc
- Section 6.2, Boarding ramps
- Section 6.3, Minimum allowable width
- Section 6.4, Slope of external boarding ramps
- Section 8.2, When boarding devices must be provided
- Section 8.3, Use of boarding devices
- Section 8.4, Hail-and-ride services
- Section 8.5, Width and surface of boarding devices
- Section 8.6, Maximum load to be supported by boarding device
- Section 8.7, Signals requesting use of boarding device
- Section 8.8, Notification by passenger of need for boarding device
- Section 9.1, Minimum size for allocated space
- Section 9.4, Number of allocated spaces to be provided—buses
- Section 9.7, Consolidation of allocated spaces
- Section 9.9, Use of allocated spaces for other purposes
- Section 9.11, Movement of mobility aid in allocated space
- Section 10.1, Compliance with Australian Standard
- Section 11.3, Handrails on steps
- Section 11.4, Handrails above access paths
- Section 11.5, Compliance with Australian Standard
- Section 11.6, Grabrail to be provided where fares are to be paid
- Section 11.7, Grabrails to be provided in allocated spaces
- Section 12.1, Doors on access paths
- Section 12.4, Clear opening of doorways
- Section 12.6, Automatic or power-assisted doors
- Section 14.1, Stairs not to be sole means of access
- Section 14.4, Compliance with Australian Design Rule 58—conveyances.

Any new regulatory requirements agreed through this process would not exempt dedicated school buses.

Option 2 Principles for dedicated school bus services

The Transport Standards would be amended to include principles for dedicated school bus services.

The following principles for dedicated school bus services would be adopted:

- Dedicated school bus services must not discriminate and be such that accessible transport services are provided as required and where practical to do so.
- Fully accessible (low floor buses) are to be used for school services where appropriate, practical and available.
- Where a low floor bus is used, it must be fully compliant with the Transport Standards.
- In areas where operational issues such as route accessibility, road terrain, or the need for added safety features such as seatbelts or rollover compliance dictate, then high floor buses can be used.
- In such areas where the need for access to on-board accessible features by passengers using mobility aids is determined, then an accessible high floor bus can be employed.

- Accessible high floor buses (such as high floor buses fitted with a hoist) meet the sections of the Transport Standards covering access to on-board accessible features by passengers using mobility aids.
- To support this process, the following would apply:
 - New high-floor, dedicated school buses must comply with all sections of the Transport Standards except those sections covering access to on-board accessible features by passengers using mobility aids.
 - New high floor dedicated school buses must also be so configured that they are able to be retrofitted with a hoist and be able to provide access to on-board accessible features by passengers using mobility aids.

High-floor, dedicated school buses (such as those fitted with a hoist) would continue to be exempt from the following sections of the Transport Standards:

- Section 3.2, Access for passengers in wheelchairs, etc.
- Section 8.2, When boarding devices must be provided
- Section 8.3, Use of boarding devices
- Section 8.4, Hail-and-ride services
- Section 8.5, Width and surface of boarding devices
- Section 8.6, Maximum load to be supported by boarding device
- Section 8.7, Signals requesting use of boarding device
- Section 8.8, Notification by passenger of need for boarding device
- Section 9.1, Minimum size for allocated space
- Section 9.4, Number of allocated spaces to be provided—buses
- Section 9.11, Movement of mobility aid in allocated space
- Section 11.7, Grabrails to be provided in allocated spaces
- Section 14.1, Stairs not to be the sole means of access

Any regulatory requirements relating to these sections that are agreed through this reform process would continue to exempt dedicated school buses.

A high floor is defined as per Vehicle Standard (Australian Design Rule 59/00—Standards for Omnibus Rollover Strength) 2007¹⁷, and is based on floor height and area.

An accessible high floor dedicated school bus (such as those fitted with a hoist) must then meet the following additional requirements:

- Section 6.2, Boarding ramps
- Section 6.3, Minimum allowable width
- Section 6.4, Slope of external boarding ramps
- Section 9.7, Consolidation of allocated spaces
- Section 9.9, Use of allocated space for other purposes
- Section 10.1, Compliance with Australian Standard
- Section 11.3, Handrails on steps
- Section 11.4, Handrails above access paths
- Section 11.5, Compliance with Australian Standard
- Section 11.6, Grabrails to be provided where fares are to be paid
- Section 12.1, Doors on access paths

¹⁷ Australian Government Federal Register of Legislation, *Vehicle Standard (Australian Design Rule 59/00—Standards For Omnibus Rollover Strength) 2007*, (4 November 2021), <https://www.legislation.gov.au/Details/F2012C00535>

- Section 12.4, Clear opening of doorways
- Section 12.6, Automatic or power-assisted doors
- Section 14.4, Compliance with Australian Design Rule 58—conveyances.

Any new regulatory requirements or requirements relating to these sections that are agreed through this reform process would not exempt dedicated school buses.

The Whole Journey Guide and / or the Transport Standards Guidelines would include guidance on the navigating these principles and providing accessible school bus services.

Specific guidance may include the following:

States and territories may have varying requirements of their own when receiving requests by applicants to access dedicated school bus services. Circumstances are likely to be unique for each applicant and may require coordinated review by the principals (for example the applicant, educational institution, and jurisdiction). In reaching a negotiated solution, the principals may consider variables such as personal aids and the capability of related infrastructure (such as residence, school, and public utilities).

Risk assessments should be undertaken for rural locations where a passenger using a mobility aid requires access. Following are risk considerations for dedicated school bus fitted with a hoist. Where an accessible dedicated school bus cannot be deployed, then alternative arrangements must be made.

- Is the site suitable to deploy a hoist (e.g. site clear area, slope, adjoining road profile)?
- Can the bus access the site such that the hoist can be correctly positioned relative to the site?
- Is the road location suitable for the bus driver to leave the driving position, considering the following?
- Can the bus be parked off the main thoroughfare?
- Is there a sufficient field of view such that other road passengers can see the parked bus?
- Is the road gradient such that the bus can be properly secured to avoid potential bus rollaway?

5. Better communication of accessibility features

Status quo

The Transport Standards would remain unchanged and no Guidance would be issued.

Non-regulatory option

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide on the communication of accessibility terminology and features by operators and providers.

Specific guidance may include the following:

- Nationally consistent accessibility terminology that can be applied across all modes of public transport and be easily comprehended by people with disability according to their personal requirements.
- A baseline list of accessible features provided by operators and providers that should be available and communicated to customers.

Nationally consistent accessibility terminology would be developed through a consultation process with state and territory governments, operators and providers, and the disability community.

Accessibility terminology relating to factors other than mobility access should be considered, noting this is currently being explored by several operators and providers.

Guidance material may include a list of features that operators and providers could include when communicating accessibility of infrastructure, premises, and conveyances to the public through websites, communication materials, and on-site, including:

- Accessible car parking
- Assistance Animal Toileting Facilities
- Closed circuit television (CCTV)
- Colour contrast / illuminated strips for stairs
- Emergency Help Point
- Escalator
- Hearing augmentation system (type and coverage)
- Information Help Point
- Lift
- Low tide wharf access
- Public Announcement (PA) system for passenger information
- Raised platform / stop
- Staffed or unstaffed station
- Stairs
- Tactile ground surface indicators
- Tide dependent gangway and ramp gradients
- Wayfinding
- Wheelchair accessible bus
- Wheelchair accessible car parking space
- Wheelchair accessible payphone
- Wheelchair accessible toilet (including Left- or Right-hand access)
- Wheelchair ramp boarding assistance.

Regulatory option

The Transport Standards would be amended to include new requirements for defining accessibility terminology and communication of accessibility features.

Accessibility Terminology

A new performance-based requirement for defining accessibility terminology would require public transport operators to:

- identify access barriers within the transport network and communication solutions operators could offer.
- provide clear definitions of any access terminology it uses in its communication channels to customers. Clear definitions would be required to include the level/degree of access available at infrastructure, premises, and conveyance.
- publish what accessible features are available at infrastructure, premises, and conveyance, considering criteria including, but not limited to, mobility, functionality, information, safety and wayfinding.

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide on accessibility terminology.

Final details of the national consistent terminology for accessibility must be developed through a consultation process with state and territory governments, operators and providers, and the disability community.

Communication of Accessibility Features

A baseline / minimum list of accessible features provided by operators and providers that must be communicated to the public should be developed through a consultation process with state and territory governments, operators and providers, and the disability community.

In determining what accessible features are communicated to the public, the following should be considered:

- Accessible car parking
- Assistance Animal Toileting Facilities
- CCTV
- Colour contrast / illuminated strips for stairs
- Emergency Help Point
- Escalator
- Hearing augmentation system (type and coverage)
- Information Help Point
- Lift
- Low tide wharf access
- Public Announcement system for passenger information
- Raised platform / stop
- Staffed or unstaffed station
- Stairs
- Tactile ground surface indicators
- Tide dependent gangway and ramp gradients
- Wayfinding
- Wheelchair accessible bus
- Wheelchair accessible parking space
- Wheelchair accessible payphone
- Wheelchair accessible toilet (including Left- or Right-hand access)
- Wheelchair ramp boarding assistance.

6. Timely provision of information

Status quo

Transport Standards section 27.2 Direct assistance, would remain unchanged and no Guidance would be issued.

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.

Note, see sections 33.3 to 33.6 in relation to equivalent access and direct assistance.

This section pertains to conveyances, premises and infrastructure.

Non-regulatory option

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide on good practice for timely provision of information in requested formats.

Specific guidance may include the following:

- Service-related information in infrequently requested but preferred formats should be provided in a timely manner if not immediately available. This is best achieved by having master copies of the less commonly requested formats available that can be quickly reproduced and supplied to passengers.
- If information cannot be immediately supplied in a passenger's preferred format, equivalent access should be given by direct assistance until the request is fulfilled.
- Providing requested information that is not immediately available in a 'timely' manner means that an operator or provider would supply the information in the shortest practicable timeframe. Timeframes will vary based on the medium of the information and the capacity of the operator or provider.

Regulatory option

Transport Standards section 27.2 would be amended to include the following (including any requirements retained or amended from the status quo):

- Infrequently requested formats must be provided in a timely manner if not immediately available.
- If information cannot be immediately supplied in a passenger's preferred format, equivalent access must be given by direct assistance until the request is fulfilled.

These amendments would pertain to conveyances, premises and infrastructure.

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide to reflect new requirements.

Specific guidance may include:

- Operators and providers should expect requests for information in formats such as standard or large print, Braille, audio, touch-tone telephone, teletypewriter (TTY), digital files of various formats, SMS / Text, email, Auslan, audio-visual material, and on-line.
- Information formats that are less frequently requested should be supplied in a timely manner following the request. This is best achieved by having master copies available of the less commonly requested formats that can be quickly reproduced and supplied to passengers. Some formats or mediums may take longer to produce than others.
- Providing requested information that was not immediately available in a 'timely' manner means that an operator or provider would supply the information in the shortest practicable timeframe. Timeframes will vary based on the medium of the information and the capacity of the operator or provider.

7. Real time communication

Status quo

Transport Standards Part 27 Information, would remain unchanged and no new or additional guidance would be provided.

Part 27 Information

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.

Note, See sections 33.3 to 33.6 in relation to equivalent access and direct assistance.

27.3 Size and format of printing

- (1) Large print format type size must be at least 18-point sans serif characters.
- (2) Copy must be black on a light background.

27.4 Access to information about location

All passengers must be given the same level of access to information on their whereabouts during a public transport journey.

This Part pertains to all conveyances, premises and infrastructure.

Non-regulatory option

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide on real-time communication.

Specific guidance may include the following:

- Guidance on how to improve the lines of communication between operators, providers and passengers in real time
- Examples of real time communication
- Recommend for disability awareness training for operators and providers.

Regulatory option

Transport Standards Part 27 would be amended to include the following (including any requirements retained or amended from the status quo):

- Passengers who require service-related information, who wish to communicate service related information, or who need assistance or help on service-related matters must be able engage in real time communication with the transport operator or provider before boarding, while the conveyance is in transit and after alighting. This real-time communication may involve direct assistance.

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide on real-time communication.

Specific guidance may include:

- Guidance on how to improve the lines of communication between operators, providers and passengers in real time
- Examples of real time communication
- Recommend for disability awareness training for operators and providers.

8. Passenger location during journey

Status quo

Transport Standards section 27.4 Access to information about location, would remain unchanged and no Guidance would be issued.

27.4 Access to information about location

All passengers must be given the same level of access to information on their whereabouts during a public transport journey.

Non-regulatory option

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide on provision of location information during a transport journey.

Specific guidance may include the following:

- Information should be provided in multiple formats, including via direct assistance, in a timely manner allowing time for a person to respond and successfully alight.

Regulatory option

Transport Standards section 27.4 would be amended to include the following (including any requirements retained or amended from the status quo). There are two sub-options consideration regarding the visibility of visual information displays:

- Visual information display of next stop must be visible.

Sub-option 1

Visual information display of next stop must be visible from all priority seats and allocated spaces.

Sub-option 2

Visual information display of next stop must be visible from all seats and allocated spaces.

- Audio announcements of next stop broadcast over an onboard public address system must also be provided via a hearing augmentation system complying with AS1428.5 *Design for access and mobility, Part 5: Communication for people who are deaf or hearing impaired, section 3.2.*
- Announcement of the side or door / gate through which a passenger must alight, must be made where side or door / gate for alighting can vary.

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide to reflect new requirements.

Specific guidance may include that useful information should be provided in a timely manner allowing sufficient time for a person to respond and successfully alight public transport.

9. Hearing augmentation on conveyances

Status quo

Transport Standards section 26.2 Public address systems—conveyances, would remain unchanged and no additional guidance would be issued.

26.2 Public address systems—conveyances

If a public address system is installed:

- (a) people who are deaf or have a hearing impairment must be able to receive a message equivalent to the message received by people without a hearing impairment; and
- (b) it must comply with AS1428.2 (1992) *Clause 21.1, Hearing augmentation*.

This section pertains to conveyances, including buses, coaches, ferries, trains, trams and light rail.

Non-regulatory option

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide for hearing augmentation systems in conveyances to encourage the installation of hearing augmentation systems in conveyances that have service related PA announcements.

Specific guidance may include the following:

- People with disability should be able to receive service-related information being broadcast on a conveyance PA system in real time. This can be achieved by having the PA announcement broadcast via a magnetic induction system or another technological system for hearing aid passengers.
- While the system may be technology agnostic, it must be available to all passengers who rely on hearing augmentation systems to receive PA announcements.
- If a public address system is installed:
 - any magnetic induction system should comply with AS1428.5 (2021) Design for access and mobility, Part 5: Communication for people who are deaf or hearing impaired section 3.2.
 - conveyances that have hearing augmentation systems should identify this with the international symbol for deafness
 - the message broadcast in accessible format should be received in 100 per cent of the area covered by the public address system.
- If a conveyance has 100 per cent coverage by a hearing augmentation system, the international symbol should be displayed on the entrance doors. If coverage is incomplete the area covered must be clearly identified by symbols and diagrams.
- Magnetic induction fields are susceptible to interference from other strong electrical fields such as those emanating from overhead wires. While some conveyances entering service since 2002 may be sufficiently insulated from opposing fields, pre-2002 conveyances may not be. For conveyances that experience interference from external electrical fields which compromises the delivery of information, an equivalent means of conveying service-related PA announcements to people who are hearing impaired should be developed.

Regulatory option

Transport Standards section 26.2 Public address systems—conveyances, would be amended to include the following (including any requirements retained or amended from the status quo):

There are two regulatory options presented for consideration. The first option stipulates that requirements are applicable whenever a public address system is installed. The second option stipulates that requirements are only applicable when a public address system is in operation. For both options, a sub-option is presented for consideration regarding the minimum coverage requirements of hearing augmentation systems.

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect new requirements and include specific guidance for buses, coaches, ferries, trains, trams and light rail.

Specific guidance may include the following:

- People with disability should be able to receive service-related information being broadcast on a conveyance PA system in real time. This can be achieved by having the PA announcement broadcast via a magnetic induction system or other technological system for hearing aid passengers.
- While the system may be technology agnostic, it must be available to all passengers who rely on hearing augmentation systems to receive PA announcements.
- Magnetic induction fields are susceptible to interference from other strong electrical fields such as those emanating from overhead wires. While some conveyances entering service since 2002 may be sufficiently insulated from opposing fields, pre-2002 conveyances may not be. For conveyances that experience interference from external electrical fields which compromises the delivery of information, an equivalent means of conveying service-related PA announcements to people who are hearing impaired should be developed.
- If a conveyance has 100 per cent coverage by a hearing augmentation system, the international symbol should be displayed on the entrance doors. If coverage is incomplete the area covered must be clearly identified by symbols and diagrams.

Option 1

Requirements of the Transport Standards would be amended to include **if a public address system is installed**:

The following requirements would apply:

- People who are hearing impaired or have a hearing impairment must be able to receive a message equivalent to the message received by people without a hearing impairment.
- Conveyances that have hearing augmentation systems must identify this with the international symbol for deafness.
- If a public address system is installed and satisfies Transport Standards section 26.2 (a) Public address systems—conveyances, a magnetic induction system must comply with AS1428.5 (2021) *Design for access and mobility, Part 5: Communication for people who are deaf or hearing impaired*, section 3.2.
- The message broadcast in via the hearing augmentation system must be received in:

Sub-option 1

100 per cent of the area covered by the public address system.

Sub-option 2

80 per cent of the area covered by the public address system.

These requirements would apply to conveyances, including buses, coaches, ferries, trains, trams and light rail.

Option 2

Requirements of the Transport Standards would be amended to include **if a public address system is in operation**:

The following requirements would apply:

- People who are hearing impaired or have a hearing impairment must be able to receive a message equivalent to the message received by people without a hearing impairment.
- Conveyances that have hearing augmentation systems must identify this with the international Symbol for Deafness.
- If a public address system is installed and satisfies Transport Standards section 26.2 (a) Public address systems—conveyances, a magnetic induction system must comply with AS1428.5 (2021) *Design for access and mobility, Part 5: Communication for people who are deaf or hearing impaired, section 3.2*
- The message broadcast in via the hearing augmentation system must be received in:

Sub-option 1

100 per cent of the area covered by the public address system.

Sub-option 2

80 per cent of the area covered by the public address system.

These requirements would apply to conveyances, including buses, coaches, ferries, trains, trams and light rail.

10. Hearing augmentation: infrastructure and premises

Status quo

Transport Standards section 26.1 Public address systems—premises and infrastructure, would remain unchanged and no additional guidance would be issued.

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.

This section pertains to premises, except premises to which the Premises Standards apply and infrastructure.

Non-regulatory option

The Transport Standards Guidelines would be updated to include advice on hearing augmentation in infrastructure and premises to encourage use of an updated Australian Standard and harmonise with the Premises Standards.

Specific guidance for premises and infrastructure may include the following:

- If a public address system is installed, a hearing augmentation system complying with AS1428.5 (2010) *Design for access and mobility, section 4 Requirements for assistive listening systems*, should be provided.
- Any hearing augmentation system should cover the maximum area practicable, and at least cover those areas in which boarding assistance and customer service are available.
- The area covered by the hearing augmentation system should be designated by the international access symbol for deafness.
- Signs displaying the international symbol for deafness should indicate the presence and type of a hearing augmentation system.
- Overhead power lines and other infrastructure that generate strong electrical fields, such as signals, can adversely impact on magnetic induction loop systems. Rail and light rail stations

and tram stops that have platforms exposed to overhead wires or other electrical field generators should therefore take a platform-by-platform approach on coverage rather than attempting to cover an entire station or stop with a single loop.

- Where the entire area of the public transport infrastructure served by an amplified system that communicates public information cannot be fully covered by hearing augmentation, the area that can be covered should be negotiated and determined through a solution developed in a consultation and co-design process with local passengers.
- Where a hearing augmentation system cannot cover the full area covered by the amplified system that communicates public information a means of indicating the extent of the hearing augmentation zone should be provided. Solutions might include associating maps / floor plans showing the extent of the field with the international symbol for deafness sign, embedded platform markers, braille and tactile signs incorporating the symbol for deafness at either end of the area covered by the hearing augmentation system, and any similar signage solutions that would be functional at the site.
- The International Symbol for Deafness should be accompanied by directional arrows and an indication of the distance to the boundary of the area covered by the hearing augmentation system.

Regulatory option

Transport Standards section 26.1 would be amended to include the following (including any requirements retained or amended from the status quo):

There are two regulatory options proposed for this reform area. For both options, the Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect new requirements, and include specific guidance for buses, trams and light rail and ferries.

Option 1

The Transport Standards would be amended to include:

- If an amplified system conveying public transport information is installed a hearing augmentation system complying with AS1428.5 (2010) *Design for access and mobility, section 4 Requirements for assistive listening systems*, must be provided:
- if installed, a magnetic induction system must cover at least 80 per cent of the area served by the public address system.
- at any ticket office, teller's booth, reception area or the like, where the public is screened from the service provider.
- Where the hearing augmentation system does not cover the total area of the area served by the public address system, the boundaries of the area served by the hearing augmentation system must be designated by the international access symbol for deafness.
- Signs displaying the international symbol for deafness must indicate the presence and type of a hearing augmentation.

These requirements would apply to infrastructure and premises (except premises to which the premises standards apply).

Option 2

The Transport Standards would be amended to include:

- If a public address system is installed, a hearing augmentation system complying with AS1428.5 (2010) *Design for access and mobility, section 4 Requirements for assistive listening systems*, must be provided.

- Any hearing augmentation system must cover the maximum area practicable and at least those areas in which staff assistance is available.
- The area covered by the hearing augmentation system and must be designated by the international symbol for deafness.
- Signs displaying the international symbol for deafness must indicate the presence of a hearing augmentation system also indicate the type of hearing augmentation system.

These requirements would apply to infrastructure and premises (except premises to which the Premises Standards apply).

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated for both options to include advice for hearing augmentation in premises and infrastructure.

Specific guidance for both options may include:

- It will be assumed that passengers have ensured that their hearing aids are compatible with standard hearing augmentation systems likely to be encountered in the public transport environment, such as magnetic induction loops.
- It will also be assumed that hearing aid passengers are competent to activate the telecoil (T switch) in the hearing aid when necessary.
- Overhead power lines and other infrastructure that generate strong electrical fields, such as signals, can adversely impact on magnetic induction loop systems. Rail and light rail stations and tram stops that have platforms exposed to overhead wires or other electrical field generators should therefore take a platform-by-platform approach on coverage rather than attempting to cover an entire station or stop with a single loop.
- Where the entire area of the public transport infrastructure served by an amplified system that communicates public information cannot be fully covered by hearing augmentation, the area that can be covered should be negotiated and determined through an equivalent access solution developed in a consultation and co-design process with local passengers.
- Where a hearing augmentation system cannot cover the full area covered by the amplified system a means of indicating the extent of the hearing augmentation zone should be provided. Solutions might include associating maps / floor plans showing the extent of the field with the international symbol for deafness sign, embedded platform markers, braille and tactile signs incorporating the international symbol for deafness at either end of the area covered by the hearing augmentation system, and any similar signage solutions that would be functional at the site.
- The international symbol for deafness should be accompanied by directional arrows and an indication of the distance to the boundary of the area covered by the hearing augmentation system.

11. Print size and format

Status quo

Transport Standards section 27.3 Size and format of printing would remain unchanged and no additional guidance issued.

Section 27.3 Size and format of printing

- (1) Large print format type size must be at least 18-point sans serif characters.
- (2) Copy must be black on a light background.

This section pertains to conveyances, premises and infrastructure.

Non-regulatory option

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide to include advice on best practice for print size and format.

Specific guidance may include:

- Large print format type size should be at least 18-point Sans Serif characters. For people with certain print disabilities particular accessible fonts may be requested. These fonts include Dyslexie, OpenDyslexic and Fs Me.
- Copy should be black on a light background. However, whilst the majority of people requesting large print documents will prefer black text on a light background, some individuals may request light text on a dark background. Whichever colours are used, at least 75 per cent luminance contrast between text and background should be achieved.
- Large format text should be semi-bold or bold font weight and should be left justified with a ragged right margin.
- Text should be in sentence case, in which the first letter of the initial word of the sentence is capitalised, as well as the first letter of proper nouns and other words as required.

Regulatory option

Transport Standards section 27.3 would be amended to include the following (including any requirements retained or amended from the status quo):

- Copy must be black on a light background or achieve a 75 per cent luminance contrast between text and background.
- Font weight must be semi-bold or bold.
- Text must be left justified with a ragged right margin.

These requirements would pertain to conveyances, premises and infrastructure.

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide to reflect and provide advice concerning the new regulatory requirements. Specific guidance may include:

- Whilst the majority of people requesting large print documents will prefer black text on a light background, some individuals may request light text on a dark background.
- For people with certain print disabilities particular accessible fonts may be requested. These fonts include Dyslexie, OpenDyslexic and Fs Me.

12. International symbol for access and deafness

Status quo

Transport Standards section 16.1 International symbols for accessibility and deafness, would remain unchanged and no new additional requirements or guidance would be issued.

16.1 International symbols for accessibility and deafness

- (1) The international symbols for accessibility and deafness (AS1428.1 (2001) Design for access and mobility, Part 1: General requirements for access—new building work, Clause 14.2, International symbol and Clause 14.3, International symbol for deafness)

must be used to identify an access path and which facilities and boarding points are accessible.

- (2) The colours prescribed in AS1428.1 (2001) *Design for access and mobility, Part 1: General requirements for access—new building work*, Clause 14.2 (c) are not mandatory.
- (3) The size of accessibility symbols must comply with AS1428.2 (1992) *Design for access and mobility, Part 2: Enhanced and additional requirements—Buildings and facilities*, Table 1.

This section pertains to conveyances, premises (except premises to which the Premises Standards apply), and infrastructure.

Non-regulatory option

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide to include best practice advice on the application of the international symbol for accessibility and deafness.

Specific advice may include:

- Need for signage to identify accessible facilities and the presence of hearing augmentation systems.
- Use of the international symbol for accessibility and deafness should be provided in accordance with the design requirements in AS1428.1 (2009) *Design for access and mobility, Part 1: General requirements for access—new building work*.
- The size of the signage and symbol elements needs to consider the viewing distances of passengers and should be designed appropriately. As a minimum the size of any international symbols on signage should be 60 millimetres by 60 millimetres. AS1428.2 (1992) *Design for access and mobility, Part 2: Enhanced and additional requirements—Buildings and facilities*, Table 1, provides additional information on viewing distances and required sizes of symbols on signage.

Regulatory option

Transport Standards section 16.1 would be amended to include the following (including any requirements retained or amended from the status quo). There are two sub-options for consideration in relation to the size of accessibility symbols:

- The international symbols for accessibility and deafness must be used to identify an access path and which facilities and boarding points are accessible (AS1428.1 (2009) *Design for access and mobility, Part 1: General requirements for access—new building work*, Clause 8.2.1, *International symbol* and Clause 8.2.2, *International symbol for deafness*).
- The colours prescribed in AS1428.1 (2009) *Design for access and mobility, Part 1: General requirements for access—new building work*, clause 8.2.1 (c) and clause 8.2.2. (c), are not mandatory.
- There are two proposals for consideration in relation to the size of accessibility symbols:

Sub-option 1

The size of accessibility symbols must comply with AS1428.2 (1992) *Design for access and mobility, Part 2: Enhanced and additional requirements—Buildings and facilities*, Table 1.

Sub-option 2

The size of accessibility symbols must be of appropriate size when considering viewing distances and provided at 60 millimetres x 60 millimetres at a minimum.

These requirements would pertain to conveyances, premises (except premises to which the Premises Standards apply), and infrastructure.

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide to clarify the viewing distance for sub-option 1.

Specific advice may include:

- For viewing distances between 7 metres and 18 metres, it is recommended that a symbol size be applied between 110 millimetres x 110 millimetres and 200 millimetres x 200 millimetres. For viewing distances greater than 18 metres, a symbol size of at least 450 millimetres x 450 millimetres should be adopted.

13. Letter heights and luminance contrast of signs

Status quo

Transport Standards section 17.1 Height and illumination, would remain unchanged and no new additional requirements or guidance would be issued.

17.1 Height and illumination

Signs must comply with AS1428.2 (1992) Clause 17.1, Signs, Clause 17.2, Height of letters in signs and Clause 17.3, Illumination of signs and Figure 30.

This section pertains to conveyances, premises, except, premises to which the Premises Standards apply, and infrastructure.

Non-regulatory option

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide to include advice related to signage.

Specific advice may include the following:

- Static signage in transport precincts take many forms. Sometimes these are overhead signs and other times they are provided at lower levels for reading from standing and seated positions. Signs can be provided in braille and tactile formats but this may not be appropriate for all signs. For ease of understanding and legibility, Sans Serif fonts or typeface such as Arial should be used.
- Where signs are not provided in tactile and braille formats, it is important that they are designed in a way to ensure elements of signs are legible.
- For signs, letter heights are relative to the distances from which signs are meant to be viewed. For example, a sign which is meant to be viewed from one to two metres will have smaller letter height requirements than a sign viewed from 20 metres.
- As a basic guide to determine an appropriate letter height the following formula may be used: 'Viewing Distance (in metres) x 3 = letter height (in millimetres)'. For example, a sign that is designed to be viewed from ten metres would require 30-millimetre letter heights at a minimum (10 metres x 3 = 30 millimetres).

- Design requirements such as luminance contrast between elements is also critical in ensuring the legibility of signs. Typically, 30 per cent luminance contrast is preferred between signage elements such as letters and symbols and the sign background. Equally 30 per cent luminance contrast is preferred between the sign and the background surface to which it is mounted on or surfaces within two metres. Lighting for signage is also an important consideration. Lighting on signs should ensure that the sign is easily visible but also does not create issues such as glare or unwanted reflections.

Regulatory option

Transport Standards section 17.1 would be amended to include the following (including any requirements retained or amended from the status quo).

There are two regulatory options that were consulted on. Option 1 prescribes compliance with an Australian Standards for letter height. Option 2 is performance based, and contains two sub-options for consideration, relating to minimum letter height requirements.

Option 1

The Transport Standards would require that static signs that are not provided in braille and tactile must be provided so they are clear and legible and must:

- use Sans Serif font
- provide characters, icons and symbols with a minimum luminance contrast of 30 per cent to the background sign surface
- comply with AS1428.2 (1992) Clause 17.2 Height of letters in signs, Table 2—Height of letters for varying viewing distances.

These requirements would apply to conveyances, premises (except premises to which the Premises Standards apply) and infrastructure.

Option 2

The Transport Standards would require that static signs that are not provided in Braille and tactile must be provided so they are clear and legible and must:

- use Sans Serif font
- provide characters, icons and symbols with a minimum luminance contrast of 30 per cent to the background sign surface
- provide a luminance contrast on a sign of no less than 30 per cent when viewed against the background or against other surfaces that are within two metres.
- provide minimum letter heights (by one of the two sub-options below):

Sub-option 1

By using the Viewing Distance formula.

Sub-option 2

In accordance with AS1428.2 (1992) *Clause 17.2 Height of letters in signs, Table 2, Height of letters for varying viewing distances.*

These requirements would apply to conveyances, premises (except premises to which the Premises Standards apply) and infrastructure.

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide to reflect the new requirements, including:

- Viewing Distance (in metres) x 3 = Letter height (in millimetres)

For example, a sign that is designed to be viewed from 10 metres would require 30-millimetre letter heights as a minimum ($10 \times 3 = 30$). Or conversely, a sign with a letter height of 30 millimetres has a maximum viewing distance of 10 metres.

14. Location of signs

Status quo

Transport Standards section 17.2 (Signs) Location—premises and infrastructure, and section 17.3 (Signs) Location—conveyances, will remain unchanged and no guidance will be implemented.

17.2 Location—premises and infrastructure

Signs must be placed according to AS1428.2 (1992) Clause 17.4, Location of signs.

This section pertains to conveyances, premises, except premises to which the Premises Standards apply, and infrastructure.

17.3 Location—conveyances

- (1) If possible, signs are to be placed in accordance with AS1428.2 (1992) AS1428.2 (1992) Design for access and mobility, Part 2: Enhanced and additional requirements—Buildings and facilities, Clause 17.4, Location of signs and Figure 30.
- (2) If the design of the conveyance prevents strict compliance, signs must be placed above the head height of passengers, whether they are sitting or standing.
- (3) If used, destination signs must be placed above the windscreen.

This section pertains to the following conveyances: buses, coaches, ferries, trains, trams and light rail.

Non-regulatory option

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide to include advice related to location of signage.

Specific advice may include the following:

- Static signage in transport precincts takes many forms including overhead signs for reading from standing positions and lower level signs for reading from seated positions.
- Signage placement needs to be considered on a case by case basis due to the variances in transport environments. Two main aspects need to be considered:
- The purpose of the sign message. For example, instructional information versus identification signs.
- The operational context which considers passenger movements in an environment. For example, a local bus stop identification sign versus an exit sign on a crowded station platform.
- Where signs are intended to be read by a single person at a time, they should be located at lower levels. Similarly, in uncrowded or transient type spaces where passengers are not waiting or congregating, it is expected that low level signs are appropriate. Viewing heights as prescribed under AS1428.2 (1992) considers a common view range for both seated and standing passengers when they are within close proximity to a sign.
- It is important that information is provided at higher levels to ensure visibility by many, such as waiting areas, standing transport areas, and directional signage to facilities or access paths.

- It may be beneficial to supplement overhead signs with lower level signs where appropriate. In conveyances or where signs are not directly above an access path, it may be appropriate to install signs at a lower height so long as visibility to the sign is still achieved.
- Signs can be provided in braille and tactile formats however this may not be appropriate for all signs.

Regulatory option

Transport Standards section 17.2 and section 17.3 would be amended to combine requirements for signage location that pertains to conveyances, premises and infrastructure in one section.

The following additional requirements would be added to the Transport Standards (including any requirements retained or amended from the status quo):

- Specific requirements for signage not provided in braille and tactile format would be included:
- Signs are required to be visible from seated and standing positions.
- If the design of the conveyance prevents strict compliance, signs must be placed above the head height of passengers, whether they are sitting or standing.
- If used on conveyances, destination signs must be placed above the windscreen.

Sub-option 1

Where possible, signs must be placed:

- Between 1000 millimetres and 1600 millimetres from the finished floor level in uncrowded areas.
- Above 2000 millimetres above the finished floor level in areas of high patronage or crowding.

Sub-option 2

Where possible, signs are to be placed in accordance with AS1428.2 (1992) Design for access and mobility, Part 2: Enhanced and additional requirements—Buildings and facilities, Clause 17.4 Location of signs (a), (b) and (c), including the notes.

These requirements will pertain to buses, coaches, ferries, trains, trams and light rail, premises (except premises to which the Premises Standards apply) and infrastructure.

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide to distinguish between the use of overhead and non-overhead signs and why it may be appropriate to provide a mix of signage options to suit different viewing heights and situations.

Specific advice may include:

- Signage locations needs to consider two main aspects:
- The purpose of the sign message. For example, instructional information versus identification signs.
- The operational context which considers passenger movements in an environment. For example, a local bus stop identification sign versus an exit sign on a crowded station platform.
- Where signs are intended to be read by a single person at a time they should be located at lower levels. Similarly, in uncrowded or transient type spaces where passengers are not waiting or congregating it is expected that low level signs are appropriate. The viewing heights of 1600 to 1000 millimetres consider a common view range for both seated and standing passengers when they are within close proximity to a sign (approximately two metres distance) which would be relevant to these situations.
- It is important that information is provided at higher levels to ensure visibility by many, such as waiting areas, standing transport areas, and directional signage to facilities or access paths.

- It may be beneficial to supplement overhead signs with lower level signs where appropriate. In conveyances or where signs are not directly above an access path, it may be appropriate to install signs at a lower height so long as visibility to the sign is still achieved.

15. Braille embossed (printed) specifications

Status quo

Transport Standards section 17.6 Raised lettering or symbols or use of braille, would remain unchanged and no new additional requirements or guidance would be issued.

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 millimetres 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.

This section pertains to conveyances, premises and infrastructure.

Non-regulatory option

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide on good practice for the provision of information in braille formats.

- Specific guidance may include:
- The standard of braille expected when information is provided in braille is in Grade 1 Braille (uncontracted) in accordance with the criteria set out in The Rules of Unified English Braille by the Australian Braille Authority. On request though, passengers should, in a timely manner, be supplied the information in their preferred braille format as per current requirements in Transport Standards section 27.1 Access to information about transport services.
- The demographics of a particular location—for example, a concentration of service providers for people with vision impairments—might guide when it is appropriate to pre-produce information in braille.
- Braille on service-related publications or pamphlets that are pre-prepared and supplied directly and randomly to passengers, should be of the easiest braille format to read. This is Grade 1 Braille (uncontracted). Grade 1 (uncontracted) Braille should be the default when materials such as pamphlets or publications are pre-prepared for the general public as it will be directly offered to readers of varying braille proficiency.
- Expert braille readers may find Grade 1 (uncontracted) Braille time consuming for longer publications, preferring the much more quickly read contracted formats. While this is understood, the legibility of pre-prepared publications and pamphlets for braille readers of only modest skills must be accommodated.
- If experienced braille readers specifically request information such as pamphlets and publications in a grade of braille other than Grade 1 (uncontracted), the information must be supplied in the requested grade in a timely manner.
- In some instances, passengers who have their own braille embosser may request electronic copy of the publication or pamphlet so that they can then emboss (print) it themselves in their preferred grade of braille. To enable this, an accessibly formatted electronic copy of the publication should be available for distribution.

Regulatory option

Transport Standards section 17.6 would be amended to include the following (including any requirements retained or amended from the status quo):

- If information is presented to passengers in braille format, the braille must be Grade 1 Braille (uncontracted), in accordance with the criteria set out in The Rules of Unified English Braille by the Australian Braille Authority.
- If material is specifically requested in a grade of braille other than Grade 1 Braille (uncontracted) it must be supplied in the passenger's preferred grade in a timely manner.

These requirements would apply to conveyances, premises and infrastructure.

The Transport Standards Guidelines and / or The Whole Journey Guide may be updated to reflect new requirements for conveyances, premises and infrastructure.

Specific guidance may include:

- Braille on service-related publications or pamphlets that are pre-prepared and supplied directly to passengers, should Grade 1 Braille (uncontracted). Expert readers may find this format time consuming for longer publications. While this is understood, the legibility of pre-prepared publications and pamphlets for braille readers of only modest skills must be accommodated.
- Grade 1 (uncontracted) Braille should therefore be the default when materials such as pamphlets or publications are pre-prepared for the general public as it will be supplied directly on request or offered to readers of varying proficiency.
- The demographics of a particular location, for example a concentration of non-government organisations and service providers for people with vision impairments, might guide when it is appropriate to pre-produce information in braille.
- If experienced braille readers specifically request information such as pamphlets and publications in a grade of braille other than Grade 1 (uncontracted) the information must be supplied in the requested grade.
- In some instances, passengers who have their own braille embosser may request electronic copy of the publication or pamphlet so that they can then emboss (print) it themselves in their preferred grade of braille. To enable this, an accessibly formatted electronic copy of the publication should be available.

16. Braille and tactile lettering for signage

Status quo

Transport Standards section 17.6 Raised lettering or symbols or use of braille, would remain unchanged and no Guidance would be issued.

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 millimetres 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.

This section pertains to conveyances, premises and infrastructure.

Non-regulatory option

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide to include best practice advice on braille and tactile signage.

Specific guidance may include the following:

- Tactile signage comprises raised text and symbols that can be useful for people who are blind or have low vision. Similarly, braille when provided on signs is a touch reading system that can convey information in a user's preferred format. It is best practice to provide both elements on signage.
- Signs should be designed and provided in a consistent way and in a location that makes them functional for the reader.
- Messaging on signs when provided in braille should consider critical information for the reader rather than a direct translation of text. This ensures information is succinct and provides the reader with clear instruction or information.
- Labels are often used with braille and tactile information. They should be located adjacent to the component or device they relate to, to provide information in the most appropriate location for the customer to read and use.
- Braille and tactile signs should closely align to the requirements of the Premises Standards. Some of the key considerations include:
- Braille and tactile components should be located between 1200 millimetres and 1600 millimetres above the ground or floor surface.
- Signs should have good luminance contrast between elements and the background surface and be located in places that are well lit.
- An equivalent message in braille should be provided to that in text or written information including pictograms on signs.
- Braille should be Grade 1 Braille (uncontracted) in accordance with the criteria set out by the Australian Braille Authority and in sentence case so it can be read by the greatest cohort of braille passengers.
- Braille should be located 8 millimetres below the bottom line of text (not including descenders) and be left justified.
- Where an arrow is used in the tactile sign, a solid arrow should be provided for braille readers.
- On signs with multiple lines of text and characters, a semicircular braille locator at the left margin should be horizontally aligned with the first line of braille text.
- Tactile characters should be raised or embossed to a height between 1 millimetre and 1.5 millimetres.
- Title case should be used with upper case tactile characters, height between 15 millimetres and 55 millimetres and lower case being half the upper character height.
- The spacing of tactile characters on signs should be 2 millimetres with words spaced 10 millimetres.
- The thickness of letter strokes should be between 2 millimetres and 7 millimetres.
- Tactile text should be Sans Serif typeface such as Arial.
- In some circumstances locations of signs may need to fall out of the zones outlined above. Similarly, design elements such as the use of uncontracted braille in some situations may not be achievable or appropriate. It is important that consultation with people with disability should be considered to identify the most appropriate placement and design solutions when there is a need to deviate from best practice.

Regulatory option

Transport Standards section 17.6 Raised lettering or symbols or use of braille, would be removed and replaced with new requirements for braille and tactile design.

New requirements in the Transport Standards would include:

Braille and tactile signs

Where a braille and tactile sign is provided that is not required under Part D3.6 of the Premises Standards or covered under another specific provision within the Transport Standards, it must comply with the following:

- Braille where provided on signs must meet the requirements for braille design requirements (listed below).
- Tactile elements where provided on signs must meet the requirements for tactile design requirements (listed below).
- The entire sign, including any frame, must have all edges rounded.
- Braille and tactile elements on signs must be located not less than 1200 millimetres and not higher than 1600 millimetres above the ground or floor surface.
- Braille messaging shall be comparable to that in text or written information including pictograms.
- The background, negative space or fill of signs must be of matte or low sheen finish.
- The characters, symbols, logos and other features on signs must be matte or low sheen finish.
- The background, negative space, and fill of a sign or border with a minimum width of 5 millimetres must have a luminance contrast with the surface on which it is mounted of not less than 30 per cent.

These requirements would apply to conveyances, infrastructure and premises (except premises to which the Premises Standards apply).

Braille design requirements

- Braille must be in accordance with the criteria set out by the Australian Braille Authority.
- Braille must be Grade 1 Braille (uncontracted).
- Braille shall be in sentence case.
- Braille must be located 8 millimetres below the bottom line of text (not including descenders).
- Braille must be left justified.
- Where an arrow is used in the tactile sign, a solid arrow must be provided for braille readers.
- On signs with multiple lines of text and characters, a semicircular braille locator at the left margin must be horizontally aligned with the first line of braille text.
- Braille shall be provided in the same orientation as visual elements of the sign.

These requirements would apply to conveyances, infrastructure and premises (except premises to which the Premises Standards apply).

Tactile design requirements

- Tactile characters must be raised or embossed to a height of not less than 1 millimetre and not more than 1.5 millimetres.
- Title case must be used for all tactile characters, as well as:
- upper case tactile characters must have a height of not less than 15 millimetres and not more than 55 millimetres
- lower case tactile characters must have a minimum height of 50 per cent of the related upper-case characters.

- Tactile characters, symbols, and the like, must have rounded edges.
- The minimum letter spacing of tactile characters on signs must be 2 millimetres.
- The minimum word spacing of tactile characters on signs must be 10 millimetres.
- The thickness of letter strokes must be not less than 2 millimetres and not more than 7 millimetres.
- Tactile text must be left justified, except that single words may be centre justified.
- Tactile text must be Sans Serif typeface.
- Tactile characters, icons and symbols must have a minimum luminance contrast of 30 per cent to the surface on which the characters are mounted.

These requirements would apply to conveyances, infrastructure and premises (except premises to which the Premises Standards apply).

Braille and tactile labels

Braille and tactile labels may be provided to assist with use of devices or components. If provided, it must comply with the following:

- Where braille and tactile elements are used to label components, the requirements above of Braille and tactile signs, Braille design requirements, and Tactile design requirements, apply with the following exclusions:
- The entire sign, including any frame, must have all edges rounded.
- Braille and tactile elements on signs must be located not less than 1200 millimetres and not higher than 1600 millimetres above the ground or floor surface.
- The background, negative space, fill of a sign or border with a minimum width of five millimetres must have a luminance contrast with the surface on which it is mounted of not less than 30 per cent.
- Where both braille and tactile elements are produced on the same label, braille character can be provided at a height maximum of one millimetre.

These requirements would apply to conveyances, infrastructure and premises (except premises to which the Premises Standards apply).

The Transport Standards Guidelines would be updated to reflect new requirements. Specific guidance may include:

- The benefits of uncontracted braille as the preference as it accommodates more passengers being the simplest form to comprehend.
- Messaging on signs when provided in braille should consider critical information for the reader rather than a direct translation of text. This ensures information is succinct and provides the reader with clear instruction or information.
- The types of signs that may be considered as appropriate to be provided in braille and tactile.
- For greater customer benefit and consistency, signs should be available in braille and tactile format where there is feature such as accessible toilets or where there is a critical facility that requires identification for example an information point.
- Additional guidance on where it may be practicable to use contracted versus uncontracted braille. Longer text for instructions may warrant the use of an equivalent access provision to provide information in a contracted braille format. This may particularly be the case if time sensitivity is critical in receiving the information, such as in emergencies, where it is necessary to read multiple lines of text. This would need to be considered as part of an equivalent access provision in consultation with end passengers.
- The placement of signs in some instances may not be able to be placed in accordance to the regulations due to constraints. Consultation and discussion with end passengers is necessary to develop a solution that retains functionality and legibility of the signage elements.

- Define the distinction between labels and signs. This is important as labels often communicate information in relation to the use of a device or component.

17. Lifts: braille and tactile information at lift landings

Status quo

Transport Standards section 13.1 Compliance with Australian Standard—premises and infrastructure, would remain the same and no new guidance would be issued.

13.1 Compliance with Australian Standard—premises and infrastructure

Lift facilities must comply with AS1735.12 (1999).

This section pertains to premises (except premises to which the Premises Standards apply), and infrastructure (except airports that do not accept regular public transport services).

Non-Regulatory option

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to include best practice guidance for braille and tactile information at lift landings.

The advice would pertain to premises, except premises to which the Premises Standards apply, and infrastructure (except airports that do not accept regular public transport services).

Specific guidance may include the following:

- Braille and tactile signs should be located on the lift landing door frames that can be reached from within the lift allow passengers not able to discern visual cues in a lift car to identify the landing at which the car has arrived.
- Lift landings on platforms should have braille and tactile signs identifying the platform landing which comply with AS1428.4.2 (2018) *Design for access and mobility, Part 4.2: Means to assist the orientation of people with vision impairment—Wayfinding signs, section 5 Tactile signs—design requirements*. AS1735.12 (2020) *Appendix ZA.5.2*, specifies where on the lift landing door frame the signs should be placed.
- Lift landings at over bridges, subways or concourses, road reserves, parking or passenger loading areas should have identifying braille and tactile signs identifying the street or facility landing which comply with AS1428.4.2 (2018) *Design for access and mobility, Part 4.2: Means to assist the orientation of people with vision impairment—Wayfinding signs, section 5 Tactile signs—design requirements*, and are located as per AS1735.12 (2020), *Appendix ZA.5.2*.
- The information on the braille and tactile sign at lift landings should be succinct to allow quick reading and confirmation of location by a passenger. For example, a sign at a landing in a road reserve might only state the name of the street. Similarly, a landing in a subway might only be signed as ‘Subway’ or a platform landing might be signed as ‘Platform’.
- If street names are long, they may be abbreviated. However, any braille signs must meet any design requirements identified in the Transport Standards.

Regulatory option

Transport Standards section 13.1 would be amended to include the following (including any requirements retained or amended from the status quo).

New requirements in the Transport Standards would require that lift landings:

- on platforms must have braille and tactile signs identifying the platform landing.

- at road reserves, parking or passenger loading areas must have identifying braille and tactile signs identifying the street or facility landing.
- at overbridges, subways or concourses must have braille and tactile signs identifying the level.

The above requirements must comply with:

- AS1428.4.2 (2018)
- be located as per AS1735.12 (2020) *Appendix ZA.5.2*.

These requirements would pertain to premises (except premises to which the Premises Standards apply), and infrastructure (except airports that do not accept regular public transport services).

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect any new requirements.

Specific guidance may include:

- Braille and tactile signs located on the lift landing door frames that can be reached from within the lift allow passengers not able to discern the audio and visual cues in a lift car to identify the landing at which the car has arrived.
- The information on the braille and tactile sign at lift landings should be succinct to allow quick reading and confirmation of location by a passenger.
- For example, a sign at a landing in a road reserve might only state the name of the street. Similarly, a landing in a subway might only be signed as 'Subway' or a platform landing might be signed as 'Platform'.
- If street names are long, they may be abbreviated but braille must be uncontracted to meet the standard required by the Transport Standards.

18. Lifts: audible wayfinding

Status quo

Transport Standards section 13.1 Compliance with Australian Standard—premises and infrastructure, would remain unchanged and no new guidance would be made.

13.1 Compliance with Australian Standard—premises and infrastructure

Lift facilities must comply with AS1735.12 (1999)

This section pertains to premises (except premises to which the Premises Standards apply) and infrastructure (except airports that do not accept regular public transport services).

Non-Regulatory option

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to include best practice guidance for audible landing location and succinct wayfinding information in lift cars.

There are two options proposed for how lifts should provide succinct audio announcements on reaching a landing.

The guidance would apply to premises (except premises to which the Premises Standards apply) and infrastructure (except airports that do not accept regular public transport services).

Option 1

Specific guidance may include that lift cars should provide the following location and wayfinding cues to assist passengers:

- On multi-platform infrastructure, lifts cars arriving at platform landings should announce the platform number or numbers.
- Lift cars arriving at landings in road reserves, parking or passenger loading areas should announce the name of the street or facility.
- Lifts arriving at overbridges, subways or concourses should also audibly confirm the place in which they had arrived.
- Informing passengers with vision or cognitive impairments if the car was a through or turnaround unit would also be of assistance.

Option 2

Specific guidance on succinct wayfinding information in lift cars may include:

- Lift cars should provide succinct audio information on arriving at landings that permits passengers to confirm where they have arrived and to make basic orientation decisions.
- If possible, basic orientation instructions should be included in the audio announcement. The verbal information is intended to be succinct rather than detailed.
- Announcements should be succinct, not more than five to ten seconds, based on the assumption that once the passenger has confirmed their location, they have enough knowledge of the location to safely continue their journey.

Example

A rail, light rail or bus station with a single island platform is located between two parallel streets.

- Its overbridge or subway has three lift and stair combinations to traverse through the station. Lift 1 is on the Smith Street entry, Lift 2 is on the Jones Street entry and Lift 3 provides access to platforms one and two.
- The following audio announcements would be beneficial for people with hearing impairment in each scenario:
 - Arriving at the overbridge in lift 3:
 - “Overbridge. Lift and stair to Smith Street to the left. Lift and stair to Jones Street to the right.”
 - Arriving at the platform in lift 3:
 - “Platform. Platform one to the right. Platform two to the left.”
 - Arriving at the overbridge in lift 1:
 - “Overbridge. Lifts and stairs to platform and then to Jones Street to the right.”
 - Arriving at Smith Street in lift 1:
 - “Smith Street. Bus stop to the left as you leave the station, passenger pickup to the right.”

Regulatory option

Transport Standards section 13.1 would be amended to include the following (including any requirements retained or amended from the status quo).

There are two regulatory options proposed. Both options would apply to premises (except premises which the Premises Standards apply) and infrastructure (except airports that do not accept regular public transport services).

Option 1

New requirements in the Transport Standards would include:

- Lift cars arriving at platform landings must announce the platform number.
- Lift cars arriving at landings in road reserves, parking or passenger loading areas must announce the name of the street or facility.
- Lift cars arriving at overbridges or concourses must announce the level and give succinct instructions directing passengers to exits and to lifts that access other platforms.

Option 2

New requirements in the Transport Standards would include:

- Lift cars must provide succinct audio information on arriving at landings that permits passengers to confirm where they have arrived and to make basic orientation decisions.

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to include the following guidance for both options:

- On multi-platform infrastructure, lift cars arriving at platform landings should announce the platform number or numbers. This is a valuable location and wayfinding cue for people who have a vision impairment. For the same reason, lift cars arriving at landings in road reserves, parking or passenger loading areas should announce the name of the street or facility.
- Lifts arriving at overbridges, subways or concourses should also audibly confirm the place in which they had arrived. Informing passengers with vision or cognitive impairments if the car was a through or turnaround unit would also be of assistance.
- If possible, basic orientation instructions should be included in the audio announcement. The verbal information is intended to be succinct rather than detailed.
- Announcements should be succinct, not more than five to ten seconds, based on the assumption that once the passenger has confirmed their location, they have enough knowledge of the location to safely continue their journey.
- An example scenario would also be included in the guidance.

19. Lifts: emergency communication in lift cars

Status quo

No changes to the Transport Standards or guidance would be made. The Transport Standards section 13.1 would remain unchanged.

13.1 Compliance with Australian Standard—premises and infrastructure

Lift facilities must comply with AS1735.12 (1999)

This section pertains to premises, except premises to which the Premises Standards apply and infrastructure, except airports that do not accept regular public transport services.

Non-Regulatory option

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to include best practice guidance for emergency communication systems in lift cars to ensure deaf, hard of hearing, speech impaired or non-verbal passengers are able to communicate with staff in an emergency and receive a message confirming their call.

The advice would pertain to premises (except premises to which the Premises Standards apply) and infrastructure (except airports that do not accept regular public transport services).

Specific guidance may include the following:

- Emergency communication systems in lift cars should comply with AS1428.5 (2010) *Clause 6.4* and AS1735.12 (2020) *Clause 5.4.2.5*. Deaf, hard of hearing, speech impaired or non-verbal passengers travelling in a lift car should be as able to communicate with staff in an emergency in an equivalent means to other passengers. If any of these passengers initiate the emergency call, they should receive a message or signal confirming their call has been received and will be acted upon.
- This confirmation should be verbal but also include a text message located adjacent to the emergency communication system. The text should state 'help coming' or similar and illuminate on the control room's receipt of the emergency call by the passenger. This is in excess of the requirements of AS1735.12 (2020) but will be of reassurance for passengers not able to verbally interact with staff over the intercom system.
- If the communication system involves an induction loop system the symbol for hearing should be located adjacent to the microphone.

Regulatory option

Transport Standards section 13.1 would be amended to include the following (including any requirements retained or amended from the status quo):

- Emergency communication systems in lift cars must comply with AS1428.5 (2021) *Clauses 2.4 and 3.2* and AS1735.12 (2020) *Clause 5.4.2.5*.

The new requirements would apply to premises (except premises to which the Premises Standards apply) and infrastructure (except airports that do not accept regular public transport services).

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect new requirements and include guidance for premises (except premises to which the Premises Standards apply) and infrastructure (except airports that do not accept regular public transport services).

Specific guidance may include the following:

- Deaf, hard of hearing, speech impaired or non-verbal passengers travelling in a lift car should be as able to communicate with staff in an emergency in an equivalent means to other passengers. If any of these passengers initiate the emergency call, they should receive a message or signal confirming their call has been received and will be acted upon.
- This confirmation should be verbal but also include a text message located adjacent to the emergency communication system. The text should state 'help coming' or similar and illuminate on the control room's receipt of the emergency call by the passenger. This is in excess of the requirements of AS1735.12 (2020) but will be of reassurance for passengers not able to verbally interact with staff over the intercom system.
- If the communication system involves an induction loop system, the symbol for hearing should be located adjacent to the microphone.

20. Lifts: reference for lift car communication and information systems

Status quo

No changes to the Transport Standards or guidance would be made. The Transport Standards section 13.1 would remain unchanged.

13.1 Compliance with Australian Standard—premises and infrastructure

Lift facilities must comply with AS1735.12 (1999)

This section pertains to premises (except premises to which the Premises Standards apply) and infrastructure (except airports that do not accept regular public Transport services).

Non-Regulatory option

The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to include best practice guidance on accessible lift car communication and information systems and advise that deaf passengers should receive the same audible information in the lift car as other passengers.

The advice would pertain to premises (except premises to which the Premises Standards apply) and infrastructure (except airports that do not accept regular public transport services).

Specific guidance may include:

- An in-car assistive listening (hearing loop) system should be installed to allow people who are hard of hearing and wearing hearing aids to receive audio messages broadcasted in the car and to communicate externally over the help phone.
- If service-related information that is being broadcast on an external public address system is simultaneously broadcasted in lift cars, the car should also relay these announcements via an induction loop system.
- The international symbol for deafness as per AS1428.1 (2009) *Design for access and mobility, Clause 8.2.2* should be displayed where a hearing loop is provided.

Regulatory option

Transport Standards section 13.1 would be amended to include the following (including any requirements retained or amended from the status quo):

- If service-related information that is being broadcast on an external public address system is simultaneously broadcasted in lift cars, the car must also relay these announcements via an induction loop system as described in AS1735.12 (2020) *Clause 5.4.2.5.4*.
- Lift car communication systems, including those that announce the level at which the car has arrived, must comply with AS1735.12 (2020) *Clause 5.4.2.5.4*.
- The international symbol for deafness as per AS1428.1 (2009) *Design for access and mobility, Clause 8.2.2*, shall be displayed where a hearing loop is provided.

This new section would apply to premises (except premises to which the Premises Standards apply) and infrastructure (except airports that do not accept regular public transport services).

The Transport Standards Guidelines and The Whole Journey Guide would also be updated to reflect the new regulatory requirements.

Specific guidance may include:

- People who are hard of hearing and who wear hearing aids benefit from an in-car induction loop system that allows them to receive audio messages broadcast in the car such as the announcement of the level at which the car has arrived. If the car has the capacity to broadcast service-related information that is also being broadcast over an external public address system, these announcements should also be captured by the assistive listening system.

21. Information and communication technologies (ICT) procurement

Status quo

The Transport Standards would remain unchanged and no new guidance would be issued.

The Transport Standards would continue to be silent on requirements for ICT hardware, services and software procurement.

Non-regulatory options

The Whole Journey Guide and the Transport Standards Guidelines would be updated to include guidance for ICT hardware, services and software procurement to provide advice that ICT product accessibility requirements should be considered at procurement and suggest technical standards to adhere to.

Three non-regulatory options are provided which are based on either performance-based requirements, or varied levels of WCAG compliance and editions of AS/EN301549. Guidance would pertain to all public transport conveyances, infrastructure and premises to which the Premises Standards do not apply.

Option 1

This option provides performance-based requirements to ensure ICT procurement is accessible and meets the needs of people with disability. The option also recommends using the requirements of AS/EN301549 (2020) as a guideline for best practice ICT procurement.

Specific guidance may include the following:

- Any ICT hardware, services or software intended for public use by a public transport operator or provider should be accessible to people with disability. Various means of achieving this might be considered including:
- Being guided by AS/EN301549 (2020) when procuring products.
- Meeting the requirements of WCAG 2.1 AA for mobile, web and non-web software and where feasible those of WCAG 2.1 AAA.
- Passengers with disabilities will benefit from the digital technologies if care is taken to ensure that products procured meet access standards from the outset. Retrofitting products that are not fully accessible post procurement is a difficult and often expensive task.
- As technology evolves rapidly, operators and providers should always consider using the latest published Australian Standards when procuring ICT products.

Option 2

This option encourages meeting compliance with AS/EN301549 (2016) and provides two sub-options in relation to the level of WCAG compliance for operators and providers to meet.

Specific guidance may include the following:

- Procurement of ICT hardware, services and software should comply with AS/EN301549 (2016).
- Specifically, for web bases and non-web software, procurement should meet one of the following WCAG 2.0 requirements:

Sub-option 1

WCAG 2.0 AA

Sub-option 2

WCAG 2.0 AAA.

- If there is any conflict with AS/EN301549 (2016) and other requirements listed in the Transport Standards, the Transport Standards take precedence.

Option 3

This option suggests meeting compliance with AS/EN301549 (2020) and provides two sub-options in relation to the level of WCAG compliance that is advisable to meet. The following specific guidance may be included:

- Procurement of ICT hardware, services and software should comply with AS/EN301549 (2020).
- Specifically, for web bases and non-web software, procurement should meet either one of the following WCAG 2.1 requirements:

Sub-option 1

WCAG 2.1 AA

Sub-option 2

WCAG 2.1 AAA

- If there is any conflict with AS/EN301549 (2020) and other requirements listed in the Transport Standards, the Transport Standards take precedence.

Regulatory options

The Transport Standards would include new requirements for ICT hardware, services and software procurement to ensure that ICT hardware, services and software procurement results in products that are suitable for people with disability.

Five regulatory options are provided which are based on either performance-based requirements, or different editions of the AS/EN301549 standard and varied WCAG requirements. The regulatory requirements would pertain to all public transport conveyances, infrastructure and premises (except to which the Premises Standards apply).

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated for all five options to include advice on ICT procurement.

Specific guidance may include:

- Any ICT hardware, services or software intended for public use by a public transport operator or provider should be accessible to people with disability, for example:
- Being guided by AS/EN301549 (2020) when procuring products.
- Meeting the requirements of WCAG 2.1 AA for mobile, web and non-web software and where feasible those of WCAG 2.1 AAA.
- As technology evolves rapidly, operators and providers should always consider using the latest published Standards when procuring ICT products.

Option 1

The Transport Standards would be amended to **set performance requirements for ICT procurement.**

The Transport Standards would include the following new requirements:

- Any ICT hardware, services or software intended for public use by a public transport operator or provider must be accessible to people with disability.

Option 2

The Transport Standards would be amended to require **compliance with AS/EN301549 (2016)**.

The Transport Standards would include the following new requirements:

- Procurement of ICT hardware, services and software must comply with AS/EN301549 (2016) *Accessibility requirements suitable for public procurement of ICT products and services*.
- If there is any conflict with AS/EN301549 (2016) and other requirements listed in the Transport Standards, the Transport Standards take precedence.

Option 3

The Transport Standards would be amended to **require compliance with AS/EN301549 (2016) and prescribe additional minimum WCAG 2.0 AAA requirements**.

The Transport Standards would include the following new requirements:

- Procurement of ICT hardware, services and software must comply with AS/EN301549 (2016) *Accessibility requirements suitable for public procurement of ICT products and services*, with the following exceptions:
- WCAG 2.0 AAA must be met.
- If there is any conflict with AS/EN301549 (2016) and other requirements listed in the Transport Standards, the Transport Standards take precedence.

Option 4

The Transport Standards would be amended to require **compliance with AS/EN301549 (2020)**.

The Transport Standards would include the following new requirements:

- Procurement of ICT hardware, services and software must comply with AS/EN301549 (2020), *Accessibility requirements suitable for public procurement of ICT products and services*.
- If there is any conflict with AS/EN301549 (2020) and other requirements listed in the Transport Standards, the Transport Standards take precedence.

Option 5

The Transport Standards would be amended to require **compliance with AS/EN301549 (2020) and prescribes additional minimum WCAG 2.1 AAA requirements**.

The Transport Standards would include the following new requirements:

- Procurement of ICT hardware, services and software must comply with AS/EN301549 (2020) *Accessibility requirements suitable for public procurement of ICT products and services*, with the following exceptions:
- WCAG 2.1 AAA must be met.
- If there is any conflict AS/EN301549 (2020) and other requirements listed in the Transport Standards, the Transport Standards take precedence.

22. Mobile web systems

Status quo

The Transport Standards would remain unchanged and no Guidance would be issued. The Transport Standards would continue to have no provisions for mobile web systems.

Non-regulatory option

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to include best practise guidance concerning WCAG requirements and the benefits of user testing when developing apps and tools.

Specific guidance may include:

- The minimum level of WCAG compliance for information provided in this format.
- As a minimum when information is provided through mobile web systems involving apps or websites it should meet the requirements of WCAG 2.1 AA.
- Information provided by external third parties as opposed to directly from transport operators and providers should also consider minimal levels of accessibility as best practice. Where practicable the most recent version of WCAG AA should be adopted.
- Whilst WCAG AAA criteria is not recommended for whole websites or systems, some elements could be adopted where practicable to maximise the accessibility of information provided in this format.
- User testing and engagement on products and tools should be undertaken to validate systems are accessible for a wide range of people with disability.

Regulatory option

There are two regulatory options proposed. The first option prescribes minimum WCAG requirements for all information provided in a mobile format, including discretionary information that some systems provide. The second option prescribes minimum WCAG requirements only for information related to transport services provided in mobile formats.

Option 1

Where information is provided by an operator or provider to passengers in a mobile web format, all information must meet WCAG 2.1 AA requirements as a minimum.

Option 2

1. Where information is provided by an operator or provider to passengers in a mobile web format, only information related to transport services must meet WCAG 2.1 AA requirements as a minimum.

The new requirements would pertain to conveyances, premises and infrastructure.

The Transport Standards Guidelines and / or the Whole Journey Guide may also be updated for both options to reflect and provide advice concerning the new regulatory requirements and may make additional commentary on the applicability of requirements when considering WCAG AA and AAA requirements.

Specific advice may include:

- Information would cover the use of online mobile web systems involving apps and websites which can be accessed via smartphones or other devices. As a minimum when information is provided through these systems it should meet the requirements of WCAG 2.1 AA.

- Where practicable the most recent version of WCAG AA should be adopted. The WCAG provides recommendation for making content more accessible to a wide range of people with disability.
- It is advised that user testing and engagement on products and tools is undertaken to validate systems are accessible for a wide range of people with disability.
- General transport information may include, but is not limited to, timetables, routes, fares, payment methods, next stop information and next service information.

23. Accessible fare system elements

Status quo

Transport Standards section 17.5 Electronic notices, section 24.1 Gateways and checkouts and Part 25 Payments and fares, will remain unchanged and no guidance will be developed.

17.5 Electronic notices

- (1) Presentations of words or numbers on electronic notices must be visible for at least 10 seconds, unless the electronic notice is for the purpose of ticket validation.
- (2) If the electronic notice is for this purpose, the words or numbers on the notice must cease to be visible before the end of 10 seconds if the ticket validation device is used by another person within that time.

This section pertains to premises and infrastructure.

24.1 Gateways and checkouts

- (1) Gateways and checkouts, such as ticket barriers, must comply with AS1428.2 (1992) Clause 28, Gateways and checkouts.
- (2) However, the width of an accessible gateway or checkout mentioned in AS1428.2 (1992) Clause 28.2 must be at least 850 millimetres.

This section pertains to premises and infrastructure, except airports that do not accept regular public transport.

Part 25 Payment of fares

25.1 Passengers to pay fares

All passengers must be prepared to pay fares.

This section pertains to conveyances, premises and infrastructure.

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.

Note, See sections 33.3 to 33.5 in relation to equivalent access.

This section pertains to conveyances, premises and infrastructure.

25.3 Vending machines

Vending machines must comply with AS1428.2 (1992) Clause 29.1, Height, Clause 29.2, Controls, and Clause 29.3, Illumination.

This section pertains to conveyances, premises and infrastructure.

25.4 Circulation space in front of vending machine

The circulation space in front of any vending machine must allow for a 180 degree turn as in AS1428.2 (1992) Clause 6.2, Circulation space for 180-degree wheelchair turn.

This section pertains to premises and infrastructure, except airports that do not accept regular public transport services.

Non-regulatory option

The intended outcome is, through guidance, to encourage the uptake of accessible fare system elements in line with best practice, to meet not only the current and future needs of people with disability but also provide clarity, certainty and flexibility to providers and operators. Guidance on best practice fare system processes would be included in The Whole Journey Guide. The Transport Standards Guidelines may also contain additional guidance material as required.

Specific guidance may include:

- To provide a non-discriminatory fare system and ensure people with disability can travel independently, accessible fare payment options must not incur more expensive prices to other fare payment options for equivalent travel. Alternative payment and validation methods should also be available without additional fees or surcharges.
- International ICT guidelines, WCAG, or similar should be considered for the consistent accessibility attributes found in other industries, including retail and banking.
- This includes referral to AS/EN301549 (2016 or 2020) Accessibility requirements suitable for public procurement for ICT products and services.
- To meet the needs of people who are blind or have low vision, fare system elements should meet the requirements of AS/EN301549 (2020) *section 5.1.3.1 Audio output of visual information, section 5.1.3.3 Auditory output correlation, and section 8.5 tactile indication of speech mode*.

Regulatory options

Three regulatory proposals are presented for consideration. Option 1 is performance based and does not require compliance with a specific standard for fare system hardware and software. Option 2 contains prescriptive requirements, and requires compliance with a version of AS/EN301549. Option 3 also contains prescriptive requirements, and includes an additional sub-option requiring compliance with a specific version of WCAG.

For all options, the following sections of the Transport Standards would be replaced:

- Section 24.1, Gateways and checkouts.
- Section 25.2, Fare payment and ticket validation systems.
- Section 25.3, Vending machines.

These sections would be replaced by new requirements added to cover reach ranges, viewing angles, electronic notices for ticket validation, width of accessible fare system gates and or barriers. These requirements would apply to all conveyances, premises and infrastructure.

Option 1

The Transport Standards would be amended to include **new requirements for fare and ticketing systems, including a performance standard for fare system hardware and software.**

Transport Standards section 17.5 Electronic Notices, would be amended to include the following:

- Presentations of words or numbers on electronic notices must be visible for at least ten seconds.

These requirements would apply to all conveyances, premises and infrastructure.

The Transport Standards would also include the following new requirements:

- Fare systems must not require actions from passengers with disabilities that exceed the requirements for other passengers.
- For passengers with disabilities who have difficulties with standard fare systems, operators and providers must offer a form of payment that meets equivalent access principles. Forms of payment offered:
- Must not incur a surcharge for a device or be charged at a higher rate than other fare payment options.
- Should facilitate independent access through fare gates.
- Access gates forming a barrier between paid and unpaid areas of a station or interchange must have a minimum width of 850 millimetres.
- The digital display of information for the purposes of ticket validation should remain visible for the average length of time required for the person to acknowledge content of the display.
- Any fare system hardware or software intended for public use by a public transport operator or provider must comply with applicable Australian Standards for disability access concerning reach range, viewing angles, controls, audible methods of communicating information for people who are blind or vision impaired, visual methods of communicating information, compatibility with assistive technology, and logical flow of the software operation.

Option 2

The Transport Standards would be amended to include **new requirements for fare and ticketing systems, including compliance with AS/EN301549 standards for fare system hardware and software**, rather than a performance standard. Two sub-options are presented for consideration regarding which version of AS/EN301549 (2016 or 2020) should be mandated.

Transport Standards section 17.5 Electronic Notices, would be amended to include the following:

- Presentations of words or numbers on electronic notices must be visible for at least ten seconds.

These requirements would apply to all conveyances, premises and infrastructure.

The Transport Standards would also include the following new requirements:

- Fare systems must not require actions from passengers with disabilities that exceed the requirements for other passengers.
- For passengers with disabilities who have difficulties with standard fare systems, operators and providers must offer a form of payment that meets equivalent access principles. Forms of payment offered:
- Must not incur a surcharge for a device or be charged at a higher rate than other fare payment options.
- Should facilitate independent access through fare gates.

- In order to ensure the needs of people with disability who are blind or vision impaired, fare system elements must meet the requirements of AS/EN301549 *section 5.1.3.1 Audio output of visual information, section 5.1.3.3 Auditory output correlation, and section 8.5 tactile indication of speech mode*.
- Where any conflict of requirements exists, the Transport Standards take precedence over ASEN301549.
- Access gates forming a barrier between paid and unpaid areas of a station or interchange must have a minimum width of 850 millimetres.
- The digital display of information for the purposes of ticket validation should remain visible for the average length of time required for the person to acknowledge content of the display.
- Any fare system hardware or software intended for public use by a public transport operator or provider must comply with AS/EN301549 *Accessibility requirements suitable for public procurement of ICT products and service*, as a minimum standard for ICT procurement.

Sub-option 1

Compliance with AS/EN301549 (2016).

Sub-option 2

Compliance with AS/EN301549 (2020).

Option 3

The Transport Standards would be amended to include **new requirements for fare and ticketing systems, including compliance with AS/EN301549 standards for fare system hardware and software, rather than a performance standard, and additionally compliance with WCAG requirements**. Two components of the regulatory option contain sub-options, relating to the version of AS/EN301549 (2016 or 2020) and version of WCAG to be mandated, respectively.

Transport Standards section 17.5 Electronic Notices, would be amended to include the following:

- Presentations of words or numbers on electronic notices must be visible for at least ten seconds.

These requirements would apply to all conveyances, premises and infrastructure.

The Transport Standards would include the following new requirements:

- Fare systems must not require actions from passengers with disabilities that exceed the requirements for other passengers.
- For passengers with disabilities who have difficulties with standard fare systems, operators and providers must offer a form of payment that meets equivalent access principles. Forms of payment offered:
 - Must not incur a surcharge for a device or be charged at a higher rate than other fare payment options.
 - Should facilitate independent access through fare gates.
- In order to ensure the needs of people with disability who are blind or vision impaired, fare system elements must meet the requirements of AS/EN301549 *section 5.1.3.1 Audio output of visual information, section 5.1.3.3 Auditory output correlation, and section 8.5 tactile indication of speech mode*.
- Where any conflict of requirements exists, the Transport Standards take precedence over ASEN301549.
 - Sub-option 1
 - Compliance with AS/EN301549 (2016).
 - Sub-option 2
 - Compliance with AS/EN301549 (2020).

- Access gates forming a barrier between paid and unpaid areas of a station or interchange must have a minimum width of 850 millimetres.
- The digital display of information for the purposes of ticket validation should remain visible for the average length of time required for the person to acknowledge content of the display.
- Any fare system hardware or software intended for public use by a public transport operator or provider must comply with ASEN301549 *Accessibility requirements suitable for public procurement of ICT products and service*, as a minimum standard for ICT procurement and one of the following sub-options:

Sub-option 1

WCAG 2.0 AA must be met. Applies only to ASEN 301 549 (2016) *Accessibility requirements suitable for public procurement of ICT products and services*. This requirement does not address mobile applications or some web pages.

Sub-option 2

WCAG 2.1 AA must be met. These requirements allow mobile device applications.

Sub-option 3

WCAG 2.1 AA+ must be met. Includes further inclusion of the following higher-level success criterion:

Success Criterion 1.2.6 Sign Language (Pre-recorded). The intent of this success criterion is to enable people who are deaf or hard of hearing and who are fluent in a sign language to understand the content of the audio track of synchronized media presentations.

Success Criterion 1.4.6 Contrast (Enhanced). The intent of this success criterion is to provide enough contrast between text and its background so that it can be read by people with moderately low vision.

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect new requirements.

24. Doors on access paths

Status quo

Transport Standards section 12.1, Doors on access paths and section 12.6, Automatic or power assisted doors, would remain unchanged and no additional guidance would be issued.

12.1 Doors on access paths

- (1) Any doors along an access path must not present a barrier to independent passenger travel.
- (2) Direct assistance may be provided through security check points.

This section pertains to conveyances (except dedicated school buses and small aircraft), premises, and infrastructure (except airports that do not accept regular public transport services).

12.6 Automatic or power assisted doors

- (1) Doors may be fully automatic.
- (2) Power assisted doors must not require passengers to grip or twist controls in order to operate opening devices.

- (3) Operators may provide equivalent access to conveyances by opening manual doors for people with disabilities.

This section pertains to conveyances (except dedicated school buses and small aircraft).

Non-regulatory option

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide to advise that all doors on access paths that are opened by passengers, and in particular accessible and ambulant toilet doors, should be automatic or power assisted, so that doors on access paths do not present a barrier to people with disability.

This guidance would pertain to conveyances (except dedicated school buses, taxis and small aircraft), premises (except premises to which the Premises Standards apply), and, infrastructure (except airports that do not accept regular public transport services).

Specific guidance may include:

- Any door along an access path should not present a barrier to independent passenger travel.
- Doors and gates on an access path should be automatic or power assisted rather than requiring passengers to push or pull the door or gate to open or close it.
- Automatic doors are preferable along an access path as they require no action from a passenger to open or close and are activated by sensors, by staff or through software programming. They would be inappropriate in some locations however. For example, toilet doors should be opened and locked by passengers or people assisting passengers.
- Power assisted doors should not require passengers to grip or twist controls or apply constant pressure in order to operate opening devices.
- If power assisted or automatic doors are installed, cavity sliding doors give the best result for accessibility and are the least likely to be damaged. Wall mounted sliding doors are also an option. Passengers often misunderstand the operation of power assisted or automatic swing doors or become impatient with them. By pushing them they will often damage the mechanism causing the door to malfunction.
- If for technical, safety or operational reasons passengers are not able to operate or open doors and gates on access paths then doors and gates should be opened by an authorised and trained staff member. For example, for safety reasons, only ferry deckhands are permitted to open the ferry boarding gates. Likewise, for operational reasons bus drivers will open the doors of their vehicles for all passengers. Drivers of wheelchair accessible taxis will open the boarding doors for passengers in wheelchairs or other mobility aids. Cabin crew on wide bodied aircraft may open accessible toilet doors. Direct assistance may be provided through security check points.
- In locations that lack electrical power it may not be practicable to have power assisted doors. Rising butt hinges or other means of allowing doors to self-close, and that have very light closing pressure, should be considered in these locations.
- The internal geometry of a legacy conveyance may prevent manual controls for power assisted doors being placed at least 500 millimetres from an internal corner. If so, the clearance to an internal corner should be maximised to the extent possible.

Regulatory options

Transport Standards section 12.1 and 12.6 would be amended to include the following (including any requirements retained or amended from the status quo).

Two regulatory options are presented for consideration. The first option stipulates requirements for all doors that are opened by passengers on access paths, while the second option stipulates requirements only for power assisted unisex accessible and ambulant toilet doors.

Option 1

The Transport Standards would be amended to include requirements that all doors that are opened by passengers must be automatic or power assisted to ensure that doors on access paths do not present a barrier to people with disability.

The Transport Standards would be amended to include the following requirements:

- Any doors along an access path must not present a barrier to independent passenger travel.
- Doors may be fully automatic, passenger or staff operated.
- Direct assistance may be provided through security check points.
- Doors and gates on an access path that are to be opened by passengers must be automatic or power assisted rather than requiring passengers to push or pull the door or gate in order to open or close it.
- Power assisted doors must not require passengers to grip or twist controls or apply constant pressure in order to operate opening devices.

These requirements would apply to conveyances (except dedicated school buses, taxis and wide bodied and small aircraft), premises (except premises to which the Premises Standards apply), and infrastructure (except airports that do not accept regular public transport services).

Option 2

The Transport Standards would be amended to include requirements for power assisted unisex accessible and ambulant toilet doors only to ensure that unisex accessible toilet and ambulant toilet doors do not present a barrier to people with disability. All other doors could be automatic, staff operated, power assisted by passengers or manual.

Transport Standards section 12.1 and 12.6 would be amended to include the following:

- Any doors along an access path must not present a barrier to independent passenger travel.
- Doors may be fully automatic, passenger or staff operated.
- Direct assistance may be provided through security check points.
- Unisex accessible toilet and ambulant toilet doors must be power assisted. Passengers or those assisting passengers must not be required to push or pull the door in order to open or close it.
- Power assisted doors must not require passengers to grip or twist controls or apply constant pressure in order to operate opening devices.

These requirements would apply to conveyances (except dedicated school buses, taxis and wide bodied and small aircraft), premises (except premises to which the Premises Standards apply), and infrastructure (except airports that do not accept regular public transport services).

The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect the new requirements.

Specific guidance for both options may include:

- If power assisted or automatic doors are installed, cavity sliding doors give the best result for accessibility and are the least likely to be damaged. Wall mounted sliding doors are also an option. Passengers often misunderstand the operation of power assisted or automatic swing doors or become impatient with them. By pushing them they will often damage the mechanism causing the door to malfunction.
- If for technical, safety or operational reasons passengers are not able to operate or open doors and gates on access paths then doors and gates should be opened by an authorised and trained staff member. For example, for safety reasons, only ferry deckhands are permitted to open the ferry boarding gates. Likewise, for operational reasons bus drivers will open the doors of their

vehicles for all passengers. Drivers of wheelchair accessible taxis will open the boarding doors for passengers in wheelchairs or other mobility aids. Cabin crew on wide bodied aircraft may open accessible toilet doors.

- In locations that lack electrical power it may not be practicable to have power assisted doors. Rising butt hinges or other means of allowing doors to self-close, and that have very light closing pressure, should be considered in these locations.
- The internal geometry of a legacy conveyance may prevent manual controls for power assisted doors being placed at least 500 millimetres from an internal corner. If so, the clearance to an internal corner should be maximised to the extent possible.

25. Continuous accessibility on access paths

Status quo

Transport Standards section 2.2 Continuous accessibility, of the Transport Standards would remain unchanged and no Guidance would be issued.

2.2 Continuous accessibility

An access path must comply with AS1428.2 (1992) Clause 7, continuous accessible path of travel.

This section pertains to premises (except premises to which the Premises Standards apply) and infrastructure (except airports that do not accept regular public transport services).

Non-regulatory option

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to include advice on continuous accessibility to encourage the maintenance of continuous accessibility to and within public transport nodes. Guidance may be based on section DP1 of the Premises Standards.

The advisory text would pertain to premises (except premises to which the Premises Standards apply), and infrastructure (except airports that do not accept regular public transport services).

Specific guidance may include:

- Access paths should be provided to enable passengers to approach the premises or infrastructure from any accessible car parking space associated with the premises or infrastructure and from passenger loading zones associated with the premises or infrastructure.
- Passengers should be able to enter the premises or infrastructure from any connected and / or associated public transport premises or infrastructure.
- Passengers should be able to enter the premises or infrastructure from adjoining public streets or walkways. Public footpaths and pedestrian crossings in road reserves are usually the responsibility of the local authority. These footpaths and pedestrian crossings are subject to the DDA and the anti-discrimination legislation of the various states and territories. Local authorities should be aware of their responsibility under the DDA to ensure the accessibility of public footpaths insofar as this does not impose an unjustifiable hardship.
- At times, these footpaths and pedestrian crossings will connect public transport nodes. For example, a bus stop may be located close to a ferry pontoon with the two assets linked by a public footpath and pedestrian crossing. To ensure an accessible whole of journey for a

passenger with disability, these footpaths and pedestrian crossings connecting transport nodes should be as accessible as possible.

- The Australian Human Rights Commission's Advisory Note on streetscape, public outdoor areas, fixtures, fittings and furniture¹⁸ provides useful guidance on accessible streetscapes for local authorities.
- Public spaces and accessible facilities within the premises or infrastructure should be accessible to all passengers. Access paths should be designed to enable minimisation of distances to be travelled to or from entry points and between accessible facilities within the premises or infrastructure. There should be easy identification of access paths at appropriate locations which are easy to find.

Regulatory option

Transport Standards section 2.2 would be amended to include the following (including any requirements retained or amended from the status quo):

- Access paths must be provided to enable passengers to:
 - Approach the premises or infrastructure from any accessible car parking spaces associated with the premises or infrastructure.
 - Enter the premises or infrastructure from adjoining public streets or walkways, and from associated public transport premises or infrastructure.
 - Enter the premises or infrastructure from any connected premises or infrastructure.
 - Access public spaces and accessible facilities within the premises or infrastructure.
- Access paths must:
 - Be designed to enable identification of access paths at appropriate locations which are easy to find.
 - Comply with AS1428.2 (1992) Clause 7(e).

These requirements would apply to premises (except premises to which the Premises Standards apply) and infrastructure (except airports that do not accept regular public transport services).

The Transport Standards Guidelines and / The Whole Journey Guide would be updated to reflect the new requirements.

Specific guidance may include the following:

- Public footpaths and pedestrian crossings in road reserves are usually the responsibility of the local authority. These footpaths and pedestrian crossings are subject to the DDA and the anti-discrimination legislation of the various states and territories. Local authorities should be aware of their responsibility under the DDA to ensure the accessibility of public footpaths insofar as this does not impose an unjustifiable hardship.
- At times these footpaths and pedestrian crossings will connect public transport nodes. For example, a bus stop may be located close to a ferry pontoon with the two assets linked by a public footpath, tram stops located mid-street must be accessed via pedestrian crossings. To ensure an accessible whole of journey for a passenger with disability these footpaths and pedestrian crossings connecting transport nodes should be as accessible as possible.
- The Australian Human Rights Commission's Advisory Note on streetscape, public outdoor areas, fixtures, fittings and furniture provides useful guidance on accessible streetscapes for local authorities.

¹⁸ Australian Human Rights Commission, *Advisory Note on streetscape, public outdoor areas, fixtures, fittings and furniture*, 9 December 2021, <https://humanrights.gov.au/our-work/disability-rights/publications/advisory-note-streetscape-public-outdoor-areas-fixtures>

26. Flange gaps within access paths

Status quo

The Transport Standards would remain unchanged and no Guidance would be issued.

Non-regulatory option

Guidance would be provided in the Transport Standards Guidelines or The Whole Journey Guide to include advice on flange gap filler products and to promote the safe traversing of level crossings for people who use mobility devices, those who have low vision or are blind or utilise a cane, cyclists, those with prams and luggage. This guidance should ensure that until a new ‘flange gap filler’ product is regulated and rolled out across the rail networks, public transport operators and providers are able to provide appropriate information and guidance to persons with mobility devices to improve their knowledge of how to safely cross access paths at level crossings that have not had a ‘flange gap filler’ product installed.

Specific guidance for operators and providers may include:

- Where possible, ensure level crossings do not form part of an access path and continue to upgrade and remove railway level crossings, which will remove the safety risk for people getting stuck in the gap while traversing a level crossing.
- Drive research and trials of new ‘flange gap filler’ products and technologies to minimise the gap and their subsequent rollout should these products prove successful and are approved by the Office of the National Rail Safety Regulator.
- Develop and release guidance material on what constitutes good design in traversing a flange gap at a level crossing.
- Work with local passengers on how to introduce a safe equivalent access option for traversing of a level crossing where it forms part of an access path without getting stuck in the gap.

Regulatory options

The Transport Standards would be amended to include new requirements that recognise flange gaps within access paths at level crossings, encourage that they only be used where necessary, and encourage flange gap filler products be used where available. Two regulatory options are proposed for consideration.

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated for both options to include advice for improving accessibility where flange gaps are located within access paths at level crossings.

Option 1

The Transport Standards would include the following new requirements:

- Where possible, level crossings must not form part of an access path, thereby removing the safety risk for people getting stuck in the flange gap while traversing a level crossing.
- Where a ‘flange gap filler’ product or technology has been approved by the Office of the National Rail Safety Regulator for each mode of transport, it must be used to eliminate, or if not feasible, reduce the gap to be no greater than 40 millimetres.

These requirements would apply to premises (except premises to which the Premises Standards apply), and infrastructure (except airports provides that do not accept regular public transport services).

Option 2

The Transport Standards may also include the following new requirement:

- Where possible, level crossings must not form part of an access path, thereby removing the safety risk for people getting stuck in the flange gap while traversing a level crossing.
- Where a 'flange gap filler' product or technology has been approved by the Office of the National Rail Safety Regulator for each mode of transport, it must be used to eliminate, or if not feasible, reduce the gap to be no greater than 40 millimetres.
- Where an access path must be provided at a level crossing, the flange gaps at the level crossing must comply with AS1742.7 *Manual of uniform of traffic control devices*, which stipulates that flange gaps must be constructed to no wider than 65 millimetres for newly constructed level crossings and maintained to a maximum width of 75 millimetres and have a maximum depth of 50 millimetres.

These requirements would apply to premises (except premises to which the Premises Standards apply) and infrastructure (except airports provides that do not accept regular public transport services).

The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect the new requirements for both options.

Specific guidance for may include:

- Information on the safe traversing of level crossings for people who use mobility devices, those who have low vision or who are blind or utilise a cane.
- Guidance that advises operators and providers to make their level crossing as safe as possible in the interim of a 'flange gap filler' product being installed.

27. Resting points

Status quo

Transport Standards Part 5 Resting points, would remain unchanged and no additional guidance would be issued.

Part 5 Resting points

5.1 When resting points must be provided

- (1) There must be resting points for passengers along an access path if the walking distance between facilities or services exceeds 60 metres (AS1428.2 (1992) Note to Clause 7, Continuous accessible path of travel).
- (2) A resting point must provide seats (AS1428.2 (1992) Clause 27.1(a), Street Furniture).

This section pertains to premises and infrastructure (except airports that do not accept regular public transport services).

Non-regulatory option

The Transport Standards Guidelines and /or The Whole Journey Guide may be updated to include guidance on the provision of allocated spaces at resting points.

Specific guidance may include:

- A 1300 by 800 millimetre flat and stable space, suitable for a resting point allocated space, should be provided besides resting point seats. The resting point should be configured so that the backrest of the resting point seat aligns with the backrest of a device positioned in the allocated space.
- The resting point allocated space must not overlap the access path.
- The intent of AS1428.2 (1992) *Design for access and mobility, Clause 27.1(a) Street Furniture*, is to ensure seat setback is sufficient so that people using the resting point seat do not in any way obstruct pedestrian traffic on the access path. Similarly, resting point allocated spaces should allow the mobility aid to be clear of the access path.
- Where more than one resting point is provided along an access path, resting points should be placed alternately on either side of the access path in equal or near equal proportions.
- Access paths may be located on local council footpaths where these footpaths connect transport nodes such as bus and tram stops. Resting points with seating and resting points at allocated spaces may therefore be located on council footpaths.

Regulatory option

Transport Standards Part 5 Resting points, would be amended to include the following (including any requirements retained or amended from the status quo).

The Transport Standards would be amended to include the following requirements:

- There must be resting points for passengers along an access path if the walking distance between facilities or services exceeds 60 metres.
- A resting point must provide a seat or seats placed as per AS1428.2 (1992) *Clause 27.1(a), Street Furniture*.
- A 1300 by 800 millimetre flat and stable space must be provided beside the seats suitable for a wheelchair or mobility aid. The mobility aid space must not overlap the access path.
- Allocated spaces at resting points do not require signage or ground marking.

These requirements would apply to public transport premises and infrastructure (except airports that do not accept regular public transport services).

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect new requirements.

Specific guidance may include the following:

- The intent of AS1428.2 (1992) *Clause 27.1(a) Street furniture*, is to ensure mobility aid spaces besides resting point seats should allow the mobility aid to be clear of the access path. The resting point should be configured so that the backrest of the resting point seat aligns with the backrest of a device positioned in the allocated space.
- Where more than one resting point is provided along an access path resting points should be placed alternately on either side of the access path in equal or near equal proportions.
- Access paths may be located on local council footpaths where these footpaths connect transport nodes such as bus and tram stops. Therefore, resting points with seating and resting point allocated spaces may be located on council footpaths.

28. Requirements for handrails in over bridges and subways

Status quo

Transport Standards section 11.2 Handrails to be provided on access paths, would remain unchanged and no additional guidance would be issued.

11.2 Handrails to be provided on access paths

- (1) Handrails must be placed along an access path wherever passengers are likely to require additional support or passive guidance.
- (2) A handrail must not infringe an area on a roadside boarding point that may be needed to deploy a boarding device.

This section pertains to premises (except premises to which the Premises Standards apply) and infrastructure (except airports that do not accept regular public transport services).

Non-regulatory option

The Transport Standards Guidelines and/ or The Whole Journey Guide may be updated to encourage operators and providers that overbridges and subways have continuous handrails on both sides, broken only at entry and exit points.

Guidance would be relevant to premises (except premises to which the Premises Standards apply) and infrastructure (except airports that do not accept regular public transport services).

Specific guidance may include:

- Access paths on overbridges and through subways should have handrails on both sides. Continuous handrails on overbridges and in subways assist people with vision impairment in wayfinding and offer support to people who have fatigue or balance difficulties.
- Handrails may be broken at stair, walkway and ramp entry points, at lift doors, and at any other entry and exit points for the overbridge or subway. If a concourse serves as an overbridge or subway, handrails may need to break at service-related facilities and fixtures.
- Safety and access must not be compromised by the installation of continuous handrails on overbridges and subways. If retrofitting handrails to existing narrow overbridges or subways, the viability of the access path must be considered. Free-flowing two-way access and emergency egress should not be compromised by installation of handrails.
- If 1800 millimetre or more clear space between opposite handrails cannot be achieved on overbridges and subways, one or both handrails should be omitted. If only a single handrail is viable due to space constraints, the continuous handrail should be on the side of the overbridge or subway on which the stairs, lifts or ramps enter.
- It is important that design accounts for safety concerns such as potential shorting from overhead wires.
- While the above advice pertains to overbridges and subways, other access paths such as walkways also benefit from installation of handrails. This is recognised in Transport Standards section 11.2 and it would be regarded as good practice to consider handrails along walkways provided that they do not interfere with functions at such locations as boarding points, rest areas, manoeuvring areas and the like.
- While handrails may have an outside diameter of 30 to 50 millimetres, an outside diameter of 30 to 40 millimetres is seen as the optimal range for people who have smaller hands and for children.

Regulatory option

Transport Standards section 11.2 would be amended to include the following (including any requirements retained or amended from the status quo):

- Access paths on overbridges and through subways must have handrails on both sides.
- Handrails may be broken at stair, walkway and ramp entry points, at lift doors, and at any other entry and exit points for the overbridge or subway.
- When concourses serve as overbridges or subways, handrails may break at facilities and fixtures such as fare gates, ticket vending machines, public information displays, service counters, staff doors, public toilet doors or access corridors and the like.

These requirements would pertain to premises (except premises to which the Premises Standards apply) and infrastructure (except airports that do not accept regular public transport services).

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect new requirements.

Specific guidance may include:

- Continuous handrails on overbridges and in subways assist people with vision impairment in wayfinding and offer support to people who have fatigue or balance difficulties. If a concourse serves as an overbridge or subway, handrails may need to break at service related facilities and fixtures.
- Safety and access must not be compromised by the installation of continuous handrails on overbridges and subways. If retrofitting handrails to existing narrow overbridges or subways, the viability of the access path must be considered. Free-flowing two-way access and emergency egress should not be compromised by installation of handrails.
- If 1800 millimetres or more clear space between opposite handrails cannot be achieved on overbridges and subways, one or both handrails should be omitted. If only a single handrail is viable due to space constraints, the continuous handrail should be on the side of the overbridge or subway on which the stairs, lifts or ramps enter.
- It is important that design accounts for safety concerns such as potential shorting from overhead wires.
- While the above advice pertains to overbridges and subways, other access paths such as walkways also benefit from installation of handrails. This is recognised in Transport Standards section 11.2 and it would be regarded as good practice to consider handrails along walkways provided that they did not interfere with functions at such locations as boarding points, rest areas, manoeuvring areas and the like.
- While handrails may have an outside diameter of 30 to 50 millimetres, an outside diameter of 30 to 40 millimetres is seen as the optimal range for people who have smaller hands and for children.

29. Location of fare system elements

Status quo

The Transport Standards would remain unchanged and no additional guidance would be issued.

The Transport Standards sections relevant to the location of fare system elements, such as those addressing minimum access paths, circulation spaces, manoeuvrability requirements, reach ranges, wayfinding signage and illumination, would remain disconnected from and without any specific reference to the location of fare system elements.

Non-regulatory option

The Transport Standards Guidelines and / or The Whole Journey Guide may be updated to encourage the uptake of best practice for locations of fare system elements to meet the current and future needs of people with disability and also provide clarity, certainty and flexibility to providers and operators.

Specific guidance may include:

- Fare system elements should be installed in a manner that ensures all relevant Transport Standards requirements concerning access paths, passing areas, circulation spaces, manoeuvring areas, illumination and tactile ground surface indicator (TGSIs) are satisfied and maintained.
- Fare system elements should be located to ensure appropriate circulation space to allow enhanced convenience.
- People with disability should not have to undertake additional actions to access mobility aid accessible fare system elements.
- Fare system elements specifically designed as mobility aid accessible, such as wide access gates, should be located:
 - adjacent to standard access fare system elements with the same function.
 - where possible, orientated to avoid the effect of glare on digital screens.
- Where fare system elements are free-standing or installed, all elements required for operation should be within reach of all passengers and meet the requirements of ASEN301549 (2020) *Accessibility requirements suitable for public procurement of ICT products and services, section 8.3.1 Forward or side-reach*.
- Where any conflict of requirements between the Transport Standards and ASEN301549 (2020) or other Australian or International Standards exist, the Transport Standards requirements should take precedence.
- Fare system elements should, where possible, be supplemented by either digital or physical wayfinding methods to support independent travel. Physical or digital signage must meet all relevant Transport Standards requirements.

Regulatory option

The Transport Standards would be amended to co-locate and simplify existing requirements relevant to the location of fare system elements in a new section of the Transport Standards. This section would also contain some improved design requirements to improve accessibility, and would include the following:

- Fare system elements specifically designed as mobility aid accessible:
 - must be located adjacent to other standard access fare system elements with the same function
 - should, where possible, be oriented to minimise the effect of glare on digital screens.
- Where fare system elements are free-standing or installed, all elements required for operation must be within reach of all passengers and meet the requirements of ASEN301549 (2020) section 8.3.1 Forward or side-reach.
- After installation, required reach ranges must be maintained.
- Where any conflict of requirements between the Transport Standards and ASEN301549 (2020) or other Australian or International Standards exist, Transport Standards requirements take precedence.
- Fare system elements should, where possible, be supplemented by either digital or physical wayfinding methods to support independent travel. Physical or digital signage or TGSIs must meet all relevant Transport Standards requirements.

- The new section of the Transport Standards would also cross reference existing requirements in the Transport Standards, stating fare system elements must be installed in a manner that ensures requirements concerning access paths, handrails, passing areas, appropriate circulation space, manoeuvring areas, illumination and TGSIs are satisfied and maintained.

30. Allocated spaces and priority seating in waiting areas

Status quo

Transport Standards section 7.1 Minimum number of seats to be provided, and section 7.2 Minimum number of allocated spaces to be provided, would remain unchanged and no new or additional guidance would be issued.

7.1 Minimum number of seats to be provided

If a waiting area is provided, a minimum number of 2 seats or 5% of the seats must be identified as available for passengers with disabilities if required.

This Section pertains to premises and infrastructure (except airports that do not accept regular public transport services).

7.2 Minimum number of allocated spaces to be provided

If a waiting area is provided, a minimum of 2 allocated spaces or 5% of the area must be available for passengers with disabilities if required.

This Section pertains to premises and infrastructure (except airports that do not accept regular public transport services).

Non-regulatory option

The Transport Standards Guidelines and / or The Whole Journey Guide may be updated to encourage adequate provision of allocated spaces and priority seating in waiting areas. Rather than a percentage that offers no indication of whether the number should be rounded up or down, the guidance would encourage that the number is clearly rounded up. This can be done by requiring allocated spaces and priority seats per quanta of total seats in the waiting area.

Specific guidance may include the following:

- Allocated spaces and priority seating should be provided at a ratio of one per 20 seats or part thereof with a minimum of two allocated spaces and two priority seats required (refer to Table 3, Number of allocated spaces and priority seats per total number of seats, in the regulatory option, for an illustrative example).
- The allocated space should not compromise the access path.
- If the seating consists of only a single bench seat, the entire seat should be considered priority seating. If multiple priority seats are designated as part of bench seating, each priority seat should have a width of no less than 450 millimetres.
- A waiting area provides seating and / or shelter for the express use of passengers waiting for the arrival of a public transport conveyance. Priority seats and allocated spaces must be provided at waiting areas.
- Just as the entire platform edge is regarded as a boarding point so the entirety of a platform that offered seating and / or shelter at various points would be regarded as a waiting area.
- Waiting areas include any of the following that offer seating and / or shelter:

- Departure lounges in airports or coach terminals.
- Any rail station platform, light rail platform or tram stop platform.
- Bus stops, bus interchange platforms and bus station platforms (except where a stop is used exclusively for disembarkation and no seating or shelter is provided).
- Taxi ranks and passenger loading zones.
- Ferry wharves and pontoons.
- If a boarding point does not have seating and / or shelter associated with it, it would not be classed as a waiting area.
- Examples of this would be a basic accessible bus or tram stop comprising only a slab or platform, TGSIs and signs, or a basic accessible taxi rank comprising boarding points only.
- Allocated spaces and priority seating should offer the same amenity and convenience as other seats and should be distributed evenly around the waiting area.
- For example, on a train station platform with a dedicated waiting room, all allocated spaces and priority seats are not required to be located within the waiting room, rather they may be distributed throughout the platform.
- Allocated spaces and priority seating in waiting areas should be identified through signage or line marking. Where practicable, braille and tactile signage should be provided.

Regulatory option

Transport Standards Sections 7.1 Minimum number of seats to be provided and Section 7.2 Minimum number of allocated spaces to be provided, would be amended to include the following (including any requirements retained or amended from the status quo):

- If seating is provided in a waiting area, clearly identified allocated spaces and priority seats available for passengers with disabilities must be provided at a ratio of one per 20 seats or part thereof with a minimum of two allocated spaces and two priority seats required.
- The allocated space must not compromise the access path.
- If the seating consists of only a single bench seat, the entire seat must be considered priority seating. If multiple priority seats are designated as part of bench seating, each priority seat must have a width of no less than of 450 millimetres.

The number of allocated spaces and priority seats required using this approach versus the current percentage approach (with minimum of two seats) is illustrated below.

Table 3: Number of allocated spaces and priority seats per total number of seats

1:20	5%	Total seats in waiting area
2	2	10
2	2	20
2	2	30
2	2	40
3	2.5	50
3	3	60
4	3.5	70

These requirements would apply to premises and infrastructure (except airports that do not accept regular public transport services).

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect the new requirements and provide additional information regarding the definition of a waiting area.

Specific guidance may include:

- A waiting area provides seating and / or shelter for the express use of passengers waiting for the arrival of a public transport conveyance. Priority seats and allocated spaces must be available to passengers with disabilities wherever waiting areas are provided.
- Just as the entire platform edge is regarded as a boarding point so the entirety of a platform that offered seating and / or shelter at various points would be regarded as a waiting area.
- Allocated spaces and priority seating in waiting areas should be identified through signage or line marking. Where practicable, braille and tactile signage should be provided to identify priority seats in waiting areas.
- Waiting areas include any of the following that offer seating and/or shelter:
 - Departure lounges in airports or coach terminals.
 - Any rail station platform, light rail platform or tram stop platform.
 - Bus stops, bus interchange platforms and bus station platforms.
 - Taxi ranks and passenger loading zones.
 - Ferry wharves and pontoons.
- If a boarding point did not have seating and / or shelter associated with it, it would not be classed as a waiting area.
 - Examples of this would be a basic accessible bus or tram stop comprising only a slab or platform, TGSIs and signs, or a basic accessible taxi rank comprising boarding points only.
 - Stops used exclusively for disembarkation and where no seating or shelter is provided are not considered waiting areas.

31. Accessible toilets with equal proportion of left- and right-hand configurations

Status quo

The Transport Standards do not contain requirements for equal or near equal proportions of left or right-handed accessible toilets in ferries or trains. The Transport Standards only require an accessible toilet be provided in addition to any other toilet/s or as the only toilet.

Transport Standards section 15.3 Unisex accessible toilet – ferries and accessible rail cars, would remain unchanged and no additional guidance would be issued.

15.3 Unisex accessible toilet – ferries and accessible rail cars

If toilets are provided, there must be at least one unisex accessible toilet without airlock available to passengers using wheelchairs or mobility aids.

This section pertains to ferries and accessible rail cars.

Non-regulatory option

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide to include advice for equal or near equal proportions of left and right-handed accessible toilets when a ferry or train set has more than one unisex accessible toilet.

Specific guidance may include the following:

- The functionality of the toilets is enhanced by providing left hand and right-hand transfer options in a set of rail cars or on a ferry that has more than one accessible toilet. The toilets should be available in left and right hand in equal or near equal proportions.
- If toilets are provided, there should be at least one unisex accessible toilet without airlock available to passengers using wheelchairs or mobility aids.
- If unisex accessible toilets of left and right hand are in sections of trains or ferries reserved for a particular class of travel, operational processes should be in place to permit passengers in other classes and who require use of a unisex accessible toilet of that hand, to use the toilet and then return to their seating area.

Regulatory option

Transport Standards section 15 would be amended to include the following (including any requirements retained or amended from the status quo):

- If toilets are provided, there must be at least one unisex accessible toilet without airlock available to passengers using wheelchairs or mobility aids.
- If two or more unisex accessible toilets are provided in a set of rail cars or on a ferry, these must be of both left and right hand and provided in equal or near equal proportion.

These requirements would apply to ferries and trains.

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect new requirements.

Specific guidance may include:

- If toilets are provided there should be accessible toilets in sufficient numbers to enable passengers who have disabilities to reach and use toilets with equal amenity, dignity and convenience as other passengers. Accessible toilets should therefore be connected to allocated spaces and priority seats via access paths, or direct assistance to reach the accessible toilets should be provided.
- If two or more accessible toilets are provided in a set of rail cars or on a ferry procured after the commencement of the modernised Transport Standards, the toilets should be available in left and right hand in equal or near equal proportions. If unisex accessible toilets of left and right hand are in sections of trains or ferries reserved for a particular class of travel, operators should assist passengers in other classes and who require use of a unisex accessible toilet of that hand to use the toilet and then return to their seating area.

32. Emergency call buttons in accessible toilets

Status quo

The Transport Standards do not have requirements for emergency call buttons in accessible unisex toilets. As a result, people in emergency situations in accessible toilets may not be able to reach an emergency call button to request help.

The Transport Standards would remain unchanged and no guidance would be issued.

Non-regulatory option

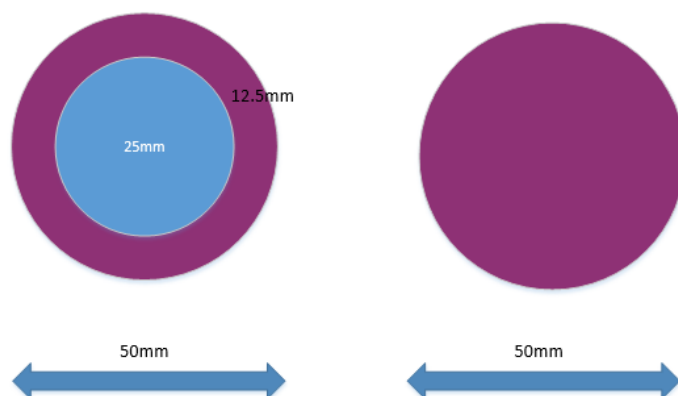
The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to include advice on accessible toilets to encourage the provision of emergency call buttons in accessible toilets and would recommend emergency call buttons be reachable from the floor and pan. Guidance would stipulate emergency call buttons should be installed at split level, to allow operation of the button by a person standing, sitting or a person collapsed on the floor.

Guidance would apply to ferries, accessible rail cars, premises except premises to which the Premises Standards apply, and infrastructure.

Specific guidance may include:

- Unisex accessible toilets should have at least two emergency call buttons located in proximity to the pan. One button should be adjacent to the pan, 900 to 1200 millimetres above finished floor and within reach of a person sitting on the pan. The other button should be at 300 to 400 millimetres above finished floor and forward of the pan.
- If spatial constraints prevent the installation of two emergency call buttons, a single button in the range of 450 to 700 millimetres above finished floor might be considered.
- People who must transfer between their mobility aid and a toilet pan may on occasion fall. They should therefore have the option to summon help if they are on the floor and unable to transfer from there, back into their mobility aid. Having a second emergency call button in the vicinity of the pan and reachable from the floor will assist in this exercise.
- On occasion, people who have transferred onto the pan from a wheelchair or other mobility aid may not be able to transfer back to the aid from the pan, or may find themselves in some form of distress. An emergency call button that can be reached from the pan should be installed in unisex accessible toilets.
- Buttons should have a minimum dimension of 25 millimetres diameter, though larger is preferred, be raised above the surrounding surface and be 50 to 60 millimetres clear of any obstruction.
- Emergency call buttons should have a luminance contrast of not less than 30 per cent with the surrounding surface. If a call button is 50 millimetres in diameter or greater, the luminance contrast may be between the button and surrounding surface. If the call button is less than 50 millimetres in diameter, a border around the button for no less than 50 millimetres diameter may be used (refer figure 1 below). Emergency call buttons should be identified by braille and tactile signs.

Figure 1: Luminance contrast examples for emergency call buttons



- Calls from emergency call buttons should go to the staff who would usually receive calls from the help and assistance intercoms and the like located on conveyances and platforms. Such staff include drivers, guards, ferry masters and control centre staff. To allay the concerns of the person requesting help, an audible and visible means of acknowledging that the call has been received and acted upon should be considered. While not required, a passenger will benefit if emergency call buttons have an associated intercom. If an associated intercom is provided, it should be associated with a magnetic induction loop for the benefit of hearing aid passengers.
- The use of emergency call buttons should also be considered for ambulant toilets.

Regulatory option

Transport Standards section 15 would include new requirements for emergency call buttons in accessible toilets.

There are two sub-options presented for consideration in relation to the location of emergency call buttons in proximity to the pan.

- The Transport Standards would include the following new requirements:
- Unisex accessible toilets must have at least two emergency call buttons located in proximity to the pan. There are two sub-options for the location of the emergency call buttons:

Sub-option 1

- One button is to be adjacent to the pan, 900 to 1200 millimetres above finished floor and within reach of a person sitting on the pan. The other button is to be at 300 to 400 millimetres above finished floor and forward of the pan.

Sub-option 2

- One button may share the space with the flush control adjacent to the pan as per AS1428.1 (2009) Design for access and mobility, Clause 15.2.5 Figure 40.B. The other button must be 300 to 400 millimetres above finished floor and 150 to 900 millimetres forward of the pan.
- Buttons must conform to AS1428.1 (2009) Clause 13.5.4, and be 50 to 60 millimetres clear of any obstruction.
- Emergency call buttons must have a luminance contrast of not less than 30 per cent with the surrounding surface. If a call button is 50 millimetres in diameter or greater, the luminance contrast may be between the button and surrounding surface. If the call button is less than 50 millimetres in diameter, a border around the button for no less than 50 millimetres diameter may be used (refer figure 1 above). Luminance contrast testing must be as per AS1428.1 (2021) Appendix B.
- Emergency call buttons must be identified by braille and tactile signs.

These requirements would apply to ferries, accessible rail cars, infrastructure and premises (except premises to which the Premises Standards apply).

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect the new requirements.

Specific guidance may include:

- If spatial constraints prevent the installation of two emergency call buttons an equivalent access process should be used.
- Calls from emergency call buttons should go to the staff who would usually receive calls from the help and assistance intercoms and the like that are located on conveyances and platforms. Such staff include drivers, guards, ferry masters and control centre staff.

- To allay the concerns of the person requesting help, an audible and visible means of acknowledging that the call has been received and acted upon should be considered.
- While not required, a passenger will benefit if emergency call buttons have an associated intercom. If an associated intercom is provided, it should be associated with a magnetic induction loop for the benefit of hearing aid passengers.
- The use of emergency call buttons should also be considered for ambulant toilets.

33. Ambulant toilets

Status quo

The Transport Standards do not contain requirements for the provision of ambulant toilets in conveyances, infrastructure or in premises to which the Premises Standards do not apply.

The Transport Standards would remain unchanged and no Guidance would be issued.

Non-regulatory option

The Whole Journey Guide would be updated to encourage installation of ambulant toilets in ferries, accessible rail cars, premises (except premises to which the Premises Standards apply) and on infrastructure.

Specific guidance may include the following:

- Where there are one or more toilets in addition to an accessible unisex toilet, a toilet suitable for a person with an ambulant disability in accordance with AS1428.1 (2009), *Design for access and mobility, Clause 16* should be provided.
- People with ambulant disability benefit from the accessibility features provided by toilets designed for them, such as bilateral grabrails and extra length that accommodates a walking aid.
- Providing toilets accessible for people with ambulant disability either singularly or as a mix with other toilets takes a universal design approach for the provision of sanitary facilities in that a greater diversity of passengers can be accommodated.
- If only a single toilet is being provided in addition to the unisex accessible toilet, this extra toilet should be accessible to people with ambulant disability and designated as unisex. This will permit the greatest efficiency of use.
- Where two or more ambulant toilets are provided in addition to the unisex accessible toilets, the toilets may be designated as gender specific as some people feel uncomfortable using unisex toilets or have a strong cultural imperative to use gender specific facilities.
- People procuring, designing or operating public transport services should be informed by the likely passenger demography when deciding on whether unisex or gender separate toilets accessible to people with ambulant disability should be provided when two or more toilets are provided in addition to a unisex accessible toilet.

Regulatory option

The Transport Standards would include new requirements for the provision of ambulant toilets in ferries, accessible rail cars, premises (except premises to which the Premises Standards apply) and on infrastructure.

The Transport Standards would include the following new requirements:

- Where there is one or more toilet in addition to an accessible unisex toilet, a toilet suitable for a person with an ambulant disability in accordance with AS1428.1 (2009) *Clause 16* must be provided.
- If only one additional toilet suitable for a person with an ambulant disability is provided, this must be designated as unisex.
- If two or more additional toilets suitable for a person with an ambulant disability are provided, these may be designated as gender specific.

These requirements would apply to ferries, accessible rail cars, infrastructure and premises except premises to which the Premises Standards apply.

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect the new requirements.

Specific guidance may include the following:

- People with ambulant disability benefit from the accessibility features provided by toilets designed for them such as bilateral grabrails and extra length that accommodates a walking aid.
- Providing toilets accessible for people with ambulant disability either singularly or as a mix with other toilets takes a universal design approach to the provision of sanitary facilities in that a greater diversity of passengers can be accommodated.
- If only a single toilet is being provided in addition to the unisex accessible toilet, this extra toilet should be accessible to people with ambulant disability and designated as unisex. This will permit the greatest efficiency of use.
- Where two or more toilets are provided in addition to the unisex accessible toilets, the toilets accessible to people with ambulant disability may be designated as gender specific. Some people feel uncomfortable using unisex toilets or have a strong cultural imperative to use gender specific facilities. People procuring, designing or operating public transport services should be informed by the likely passenger demography when deciding on whether unisex or gender separate toilets accessible to people with ambulant disability should be provided when two or more toilets are provided in addition to a unisex accessible toilet.

34. Lift specifications and enhancements

Status quo

Transport Standards Part 13, Lifts references an Australian Standards for lift requirements that is dated and does not consider technological advances to ensure they are fully accessible to all people with disability.

Transport Standards Part 13, Lifts would remain unchanged and no additional guidance would be issued.

Part 13 Lifts

13.1 Compliance with Australian Standard – premises and infrastructure

Lift facilities must comply with AS1735.12 (1999).

This section applies to premises (except premises to which the Premises Standards apply) and infrastructure except airports that do not accept regular public transport services.

Non-regulatory option

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to include best practice guidance for enhanced lift accessibility and would update the referenced Australian Standard in the guidance to AS1735.12 (2020). The guidance would pertain to premises (except premises to which the Premises Standards apply) and infrastructure except airports that do not accept regular public transport services.

Specific guidance may include:

- Lift facilities may aim to comply with AS1735.12 (2020) as this is the current industry standard for accessible lifts. AS1735.12 (1999) is now obsolete in many of its technical requirements.
- In some instances, AS1735.12 (2020) includes technical requirements for fixtures and fittings that differ with those in other Australian Standards referenced in the Transport Standards. Where any discrepancy between the requirements of the Transport Standards and AS1735.12 (2020) occur, the requirements of the Transport Standards take precedence.
- For example, space between the handrail and the wall is not less than 35 millimetres in AS1735.12 (2020) but is not less than 50 millimetres in AS1428.1 (2009), *Design for Access and mobility* (AS1428.1 (2009)). AS1428.1 (2009) is the referenced standard in Transport Standards Part 11 Handrails and Grabrails and so the 50-millimetre dimension takes precedence. Other technical anomalies should be dealt with in the same manner.

Regulatory option

Transport Standards section 13.1 would be amended to include the following (including any requirements retained or amended from the status quo):

- Lift facilities must comply with AS1735.12 (2020).
- Where any discrepancy between the requirements of AS1735.12 (2020) and technical requirements of the Transport Standards occur, the requirements of the Transport Standards take precedence.

These requirements would apply to premises (except premises to which the Premises Standards apply) and infrastructure (except airports that do not accept regular public transport services.)

The Transport Standards Guidelines and / or The Whole Journey Guide would also be updated to include the following guidance:

- In some instances, AS1735.12 (2020) will present technical requirements for fixtures and fittings that differ with those in other Australian Standards referenced in the Transport Standards. For example, space between the handrail and the wall is not less than 35 millimetres in AS1735.12 (2020) but is not less than 50 millimetres in AS1428.1 (2009). AS1428.1 (2009) is the referenced standard in Transport Standards Part 11 Handrails and Grabrails and so the 50-millimetre dimension takes precedence. Other technical anomalies should be dealt with in the same manner.

35. Specifications for escalators and inclined travellers

Status quo

The Transport Standards does not provide minimum width requirements for escalators and inclined travellers.

The Transport Standards would remain unchanged and no new or updated guidance would be issued.

Non-regulatory option

The Whole Journey Guide would be updated to include guidance which recommends a minimum width of 850 millimetres for escalators and inclined travellers and that they should not be the sole means of access.

Specific guidance may entail the following:

- Many passengers who have disabilities that do not affect mobility, balance or cognition will use them in preference to stairs, ramps or lifts. Escalators should be located within the area of main pedestrian flow and wherever possible co-located with lifts.
- Escalators, inclined travellers and stairs should not be the sole means of access. As per stairs, escalators and inclined travellers are not accessible to a range of passengers who have disabilities and where they are installed an accessible alternative such as lift or ramp must be available.
- As per moving footways, the minimum clear width of an escalator or inclined traveller should be 850 millimetres. The 850-millimetre width is acceptable as escalators and inclined travellers are unidirectional with no need for passengers to pass each other in opposing directions.
- However, if the minimum clear width can exceed 900 millimetres the escalator will better accommodate people using crutches and similar mobility aids. If the clear width exceeds 1200 millimetres, then carers and companions can travel beside the passenger rather than before or behind, making support easier.

Guidance would pertain to premises, (except premises to which the Premises Standards apply) and infrastructure, (except airports that do not accept regular public transport services.)

Regulatory option

The Transport Standards would include new minimum width specifications for escalators and moving walkways and that they are not to be the sole means of access.

The Transport Standards would include the following new requirements:

- Escalators, inclined travellers and stairs must not be the sole means of access.
- The minimum unobstructed width of an escalator or inclined traveller must be at least 850 millimetres.

The requirements would pertain to premises, (except premises to which the Premises Standards apply) and infrastructure, (except airports that do not accept regular public transport services.)

The Transport Standards Guidelines and The Whole Journey Guide would be updated to reflect new requirements.

Specific guidance may include the following:

- Many passengers who have disabilities that do not affect mobility, balance or cognition will use them in preference to stairs, ramps or lifts. Escalators should be located within the area of main pedestrian flow and wherever possible co-located with lifts.
- Escalators and inclined travellers should not be the sole means of access. As per stairs, escalators and inclined travellers are not accessible to a range of passengers who have

disabilities and where they are installed an accessible alternative such as lift or ramp must be available.

- As per moving footways, the minimum clear width of an escalator or inclined travellers should be 850 millimetres. The 850-millimetre width is acceptable as escalators and inclined travellers are unidirectional with no need for passengers to pass each other in opposing directions.
- However, if the minimum clear width can exceed 900 millimetres the escalator will better accommodate people using crutches and similar mobility aids. If the clear width exceeds 1200 millimetres, then carers and companions can travel beside the passenger rather than before or behind, making support easier.

36. Poles, objects and luminous contrast

Status quo

The Transport Standards requires 30 per cent luminance contrast with a background for obstacles that abut an access path, but does not provide a point of reference for measuring or calculating luminance contrast. In addition, the Transport Standards does not define a background.

Section 2.5, Poles and obstacles, etc., of the Transport Standards would remain unchanged and no additional guidance would be issued.

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 per cent.

This section pertains to premises (except premises to which the Premises Standards apply) and infrastructure (except airports that do not accept regular public transport services).

Non-regulatory option

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to include best practice guidance for determining the luminance contrast of poles and obstacles adjacent to access paths.

Specific guidance may include:

- The luminance contrast requirements are intended to assist people who have low vision in avoiding collisions with objects that immediately abut access paths. Luminance contrast is the most effective means of ensuring objects can be detected visually. Luminance contrast must be maintained in wet and dry conditions and under all operational lighting conditions.
- Poles, columns, stanchions, bollards and fixtures should not project into an access path.
- Obstacles that abut an access path or a contrasting strip at least 75 millimetres wide on the obstacle located in a zone 900 to 1000 millimetres above ground level should have a luminance contrast of not less than 30 per cent when viewed against the surrounding floor or pavement or against other fixed surfaces that are within two metres of the obstacle. A luminance contrast of 45 per cent is recommended and 60 per cent is ideal.
- Luminance contrast testing of surfaces, objects and fixtures other than tactile ground surface indicators should be determined as per AS1428.1 (2021), Design for access and mobility, Appendix B.

- Determining the luminance contrast of an object against a multi-coloured background such as a mural or an exposed aggregate pavement can be a challenge. In these circumstances, professional guidance should be sought on the best way to ensure a contrast, or the object abutting the access path should be relocated if practicable.

Regulatory option

Transport Standards section 2.5 would be amended to include the following (including any requirements retained or amended from the status quo).

There are two options proposed for consideration. Option 1 addresses whether the scope of the requirement should only concern access paths and Option 2 addresses whether the scope of the requirement should apply to all public areas.

Option 1

Section 2.5 Poles and obstacles, etc, of the Transport Standards would be amended to include the following:

- Poles, columns, stanchions, bollards and fixtures must not project into an access path.
- Obstacles that abut an access path:

Sub-option 1

- Must have a luminance contrast of not less than 30 per cent when viewed against the surrounding floor or pavement or against other fixed surfaces that are within two metres of the obstacle.

Sub-option 2

- Must have a luminance contrast strip at least 75 millimetres wide of not less than 60 per cent located 900 to 1000 millimetres above ground when viewed against the surrounding floor or pavement or against other fixed surfaces that are within two metres of the obstacle.
- Luminance contrast testing of surfaces, objects and fixtures other than tactile ground surface indicators must be determined as per AS1428.1 (2021), Appendix B.

Option 2

Section 2.5 Poles and obstacles, etc, of the Transport Standards would be amended to include the following:

- Poles, columns, stanchions, bollards and fixtures must not project into an access path.
- Obstacles within public spaces:

Sub-option 1

- Must have a luminance contrast of not less than 30 per cent when viewed against the surrounding floor or pavement or against other fixed surfaces that are within two metres of the obstacle.

Sub-option 2

- Must have a luminance contrast strip at least 75 millimetres wide of not less than 60 per cent located 900 to 1000 millimetres above ground when viewed against the surrounding floor or pavement or against other fixed surfaces that are within two metres of the obstacle.

- Luminance contrast testing of surfaces, objects and fixtures other than tactile ground surface indicators must be determined as per Appendix B of AS1428.1 (2021).
- The requirements for both options would apply to premises, except premises to which the Premises Standards apply and infrastructure, except airports that do not accept regular public transport services.

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect new requirements.

Specific guidance for both options may include the following:

- The luminance contrast requirements are intended to assist people who have low vision in avoiding collisions with objects that immediately abut access paths. Luminance contrast is the most effective means of ensuring objects can be detected visually. Luminance contrast must be maintained in wet and dry conditions and under all operational lighting conditions.
- Determining the luminance contrast of an object against a multi-coloured background such as a mural or an exposed aggregate pavement can be a challenge. In these circumstances professional guidance should be sought on the best way to ensure a contrast, or the object abutting the access path should be relocated if practicable.

37. Lighting

Status quo

Transport Standards Part 20 Lighting, would remain unchanged and no Guidance would be issued.

Part 20 Lighting

20.1 Illumination levels — premises and infrastructure

Any lighting provided must comply with minimum levels of maintenance illumination for various situations shown in the notes to AS1428.2 (1992) Clause 19.1, Illumination levels.

This section pertains to premises, except premises to which the Premises Standards apply and infrastructure.

20.2 Illumination levels — conveyances

- (1) Any lighting provided must comply with minimum levels of maintenance illumination for various situations shown in the notes to AS1428.2 (1992) Clause 19.1, Illumination levels.
- (2) Lighting should be at least 150 lux at the entrance and at the point where a passenger pays his or her fare.

This section pertains to buses, coaches, ferries, trains, trams and light rail.

20.3 Dimming (conveyances)

Internal lighting may be dimmed as required to avoid reflection interfering with an operator's vision.

This section pertains to conveyances.

Non-regulatory option

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to include advice on lighting design within public transport environments. The objective of guidance is to ensure public transport environments deliver appropriate lighting solutions for the diverse and nuanced requirements of people with disability, and lighting solutions that meet the unique safety, contextual and operational requirements. A set of transport-specific technical guidelines to provide enhancements to the Transport Standards requirement would also be provided.

Specific guidance may include:

Lighting levels and uniformity

Any lighting associated with a public transport facility should comply with the following:

- For enclosed zones - AS/NZS1680.2.1 (2008), *Interior and workplace lighting*, Part 2.1: *Specific applications*— Circulation spaces and other general areas. Enclosed zones are defined as fully enclosed or underground transport environments, fully covered which receive no significant amount of natural light (direct or indirect). For example, an underground rail station.
- For unenclosed zones - AS/NZS1158.3.1 (2020), *Lighting for roads and public spaces*, Part 3.1: *Pedestrian area (Category P) lighting - Performance and design requirements*. Unenclosed zones are transport environments that are not covered under AS/NZS1680.2.1 (2008). For example, a covered waiting area on a train station, ferry terminal, bus interchange or ferry stop.
- For lifts - AS1735.12 (2020) *Lifts, escalators and moving walks*, Part 12: *Facilities for persons with disabilities*.
- Levels of illumination in Tables 4 to 7 (below) should be considered for areas not specified in the above standards.
- Many elements within a public transport environment are not outlined in the three standards listed above. Operators and providers should ensure appropriate lighting levels are provided for element within a public transport environment to enable safe completion of tasks. For example, wayfinding, signage, feature lighting and advertising should be serviced by an appropriately level of lighting to enable passengers and operators and providers alike to read and interact with them.

Illumination levels — conveyances

Lighting provided for boarding or alighting from a conveyance should be a minimum of 150 lux.

Interior lighting may be dimmed as required to avoid reflection interfering with an operator's vision.

Uniformity of illuminance

Uniformity of illuminance is a major contributor to lighting quality and can be calculated by measuring the average, minimum and maximum illuminance. Light intensity thresholds are usually identified in a way to provide required visibility level for a specific visual task.

Key illuminance uniformity measures are defined below:

- U1 = the ratio of the minimum to average illumination levels, as defined in AS/NZS1158.3.1 (2020).
- U2 = the ratio of the maximum to average illumination levels, as defined in AS/NZS1680.1 (2006).

Control of Light Spill

Any lighting provided, including lighting in public spaces, should comply with Australian Standard AS/NZS 4282 (2019). The standard provides information on the potential obtrusive effects of lighting in public spaces, how to design such lighting systems and information on the impact of artificial light on biota.

The Australian Government Department of Environment and Energy, National Light Pollution Guidelines for Wildlife Including Marine Turtles, Seabirds and Migratory Shorebirds provides guidance on good practice lighting design for exterior areas that is also applicable to design principles for suburban and regional train stations and stops.

Lighting Regimes

Lighting regimes should be designed so that illuminance levels for task and ambient lighting can be provided separately to ensure appropriate volumes and consistency of illumination is provided. For example, consider providing focussed lighting for difficult visual tasks, such as reading, separately from ambient lighting throughout a space. This focussed lighting should be provided at counter tops, fare system elements, wayfinding and signage, hazards, emergency information, stairs and ramps, road and path edges.

Choice of wall finishes should consider the needs of various passengers, including people with low vision, visual hyper / hyposensitivity, and intellectual or cognitive impairment.

Lighting Temperature and Colour

Any task lighting associated with the public transport facility should have a colour temperature between 3000 to 3500 kelvins. Lighting colour temperature is important to a variety of people, including people with vision impairment and people on the autism spectrum. For information about lighting colour choice, refer to *CIE 227 (2017) Technical Report - Lighting for Older People and People with Visual Impairment in Buildings*.

Lighting Hardware

Adjustable and customisable lighting choices is beneficial for persons with different lighting needs. For example, people with low vision might require more illumination to complete tasks, whereas persons on the autism spectrum may prefer dimmer lighting for comfort. Providing adjustable lighting can ensure all passengers receive the level of illumination that suits their needs.

For information about lighting hardware choice, refer to *CIE 227 (2017) Technical Report - Lighting for Older People and People with Visual Impairment in Buildings*.

Regulatory options

The Transport Standards would be amended with the aim of ensuring public transport environments deliver appropriate lighting solutions for the diverse and nuanced requirements of people with disability and meet the unique safety, contextual and operational requirements for their context. Guidance would be provided for all options.

No change would be made to Transport Standards, section 20.3 Dimming.

Four regulatory options are proposed:

- Option 1: Removal of current requirements and replaced with guidance.
- Option 2: New Australian Standards requirements.
- Option 3: New Australian Standards requirements and additional prescriptive requirements.

- Option 4: New prescriptive requirements.

Option 1 Removal of current requirements and replaced with guidance

Transport Standards, section 20.1 Illumination levels – premises and infrastructure, would be amended to a performance statement and be supported by guidance material. Sections 20.2 Illumination levels – conveyance and 20.3 Dimming requirements for conveyances would remain unchanged.

Requirements at Transport Standards section 20.1 Illumination levels – premises and infrastructure would be removed and replaced with the following requirements:

- Any lighting associated with a public transport facility must be provided to a level appropriate to the location and to enable safe completion of tasks.

These requirements would apply to premises, (except premises to which the Premises Standards apply,) and infrastructure.

This option assumes that lighting designers will utilise guidance below in the design of public transport infrastructure to enable them to meet the performance-based standard, with requirements for conveyances being unchanged.

The Whole Journey Guide and / or the Transport Standards Guidelines would be updated to include guidance on levels of illuminance (below).

Specific guidance may include:

- Any lighting associated with the public transport facility must comply with:
- enclosed zones must comply with requirements in AS/NZS1680.2.1 (2008).
- unenclosed zones must comply with requirements in AS/NZS1158.3.1 (2020).
- lifts must comply with requirements in AS1735.12 (2020).
- Many elements within a public transport environment are not outlined in the standards above. Operators and providers should ensure appropriate lighting levels are provided for each part, area or element to enable safe completion of tasks. For example, wayfinding, signage, feature lighting and advertising should be serviced by an appropriately level of lighting to enable passengers and operators alike to read and interact with them.

Option 2 New Australian Standards requirements

This option would amend the Transport Standards to include new Australian Standards requirements for elements specific to public transport environments at Transport Standards, section 20.1 Illumination levels – premises and infrastructure and 20.2 Illumination levels – conveyance.

Section 20.1, Illumination levels – premises and infrastructure, would be amended to include the following requirements:

- Any lighting associated with the public transport facility must comply with the greater of the following:
- Enclosed zones must comply with requirements in AS/NZS1680.2.1 (2008). Enclosed Zones are defined as fully enclosed or underground transport environments, fully covered which receive no significant amount of natural light (direct or indirect). For example, an underground railway station or bus station.
- Unenclosed zones must comply with requirements in AS/NZS1158.3.1 (2020). Unenclosed zones are transport environments that are not covered under Clause (1). For example, a covered waiting area on a train station, ferry terminal, bus interchange or ferry stop.

- Lifts must comply with requirements in AS1735.12 (2020).

These requirements would pertain to conveyances, premises, except premises to which the Premises Standards apply, and infrastructure.

Transport Standards, section 20.2, Illumination levels – conveyances, would be amended to include the following requirements:

- Any lighting provided for boarding or alighting from a conveyance must be a minimum of 150 lux. Any fixtures or of facilities provided within conveyances must comply with the requirements of section 20.1 Illumination levels – premises and infrastructure.

These requirements would apply to conveyances.

The Whole Journey Guide and / or the Transport Standards Guidelines would be updated with the content in the guidance option below to include guidance on levels of illuminance (below).

Specific guidance may include:

- Many elements within a public transport environment are not outlined in the standards above. Operators and providers should ensure appropriate lighting levels are provided for each part, area or element to enable safe completion of tasks. For example, wayfinding, signage, feature lighting and advertising should be serviced by an appropriately level of lighting to enable passengers and operators alike to read and interact with them.

Option 3 New Australian Standards requirements and additional prescriptive requirements

This option proposes a combination of references to Australian Standards and prescriptive requirements for elements specific to public transport environments at Part 20 Lighting, including section 20.1 Illumination levels – premises and infrastructure and 20.2 Illumination levels – conveyance.

Transport Standards, Part 20 Lighting would be amended to include the following requirements:

- Any task lighting associated with a public transport facility:

Sub-option 1

Must have a colour temperature between 3000 to 3500 kelvins. Task lighting is defined as dedicated lighting provided to enable the completion of an activity. For example, the reading of a sign or use of fare system elements.

Sub-option 2

Should have a colour temperature between 3000 to 3500 kelvins. Task lighting is defined as dedicated lighting provided to enable the completion of an activity. For example, the reading of a sign or use of fare system elements.

These requirements would pertain to conveyances, premises, (except premises to which the Premises Standards apply) and infrastructure.

Transport Standards, section 20.1 Illumination levels – premises and infrastructure, would be amended to include the following requirements:

- Any lighting associated with the public transport facility must comply with the greater of the following:

- Enclosed zones must comply with requirements in AS/NZS1680.2.1 (2008). Enclosed Zones are defined as fully enclosed or underground transport environments, fully covered which receive no significant amount of natural light (direct or indirect). For example, an underground railway station or bus station.
- Unenclosed zones must comply with requirements in AS/NZS1158.3.1 (2020) Unenclosed zones are transport environments that are not covered under Clause (1). For example, a covered waiting area on a train station, ferry terminal, bus interchange or ferry stop.
- Lifts must comply with requirements in AS1735.12 (2020)
- Levels of illumination in Tables 8 to 11 (below) for areas not specified in the above three standards.

These requirements would pertain to conveyances, premises, except premises to which the Premises Standards apply, and infrastructure.

Transport Standards, section 20.2, Illumination levels — conveyances, would be amended to include the following requirements:

- Any lighting provided for boarding or alighting from a conveyance must be a minimum of 150 lux. Any fixtures or of facilities provided within conveyances must comply with the requirements of section 20.1 Illumination levels – premises and infrastructure.

These requirements would pertain to conveyances.

The Whole Journey Guide and / or the Transport Standards Guidelines would be updated include guidance on levels of illuminance (below) and the following definitions.

Definitions

- Boarding point: A door or location at which passengers enter or exit a conveyance.
- Customer service point: Any dedicated location where a passenger receives assistance or information, pays a fare or communicates with staff.
- Static information displays (hard copy): A visual display of fixed information that is not self-illuminated (backlit). For example, printed timetable or station layout.
- Fare system elements: Any hardware that a passenger interacts with that is associated with the purchase or payment of fares. For example, fare payment devices, fare gates, and fare validators. Self-illuminated or backlit displays are excluded from these requirements when provided in isolation with no other lighting.
- Pedestrian level crossings (rail): Any crossing of a railway at grade for both vehicular traffic and other road passengers, including pedestrians.

Note: Many elements within a public transport environment are not outlined in the tables below. Operators and providers should ensure appropriate lighting levels are provided for each element within a public transport environment to enable safe completion of tasks. For example, wayfinding, signage, feature lighting and advertising should be serviced by an appropriate level of lighting to enable passengers and operators alike to read and interact with them.

Option 4 New comprehensive prescriptive requirements

Transport Standards, Part 20 Lighting, would be amended to include new prescriptive lighting design requirements for elements within public transport environments. No change would be made to Transport Standards, section 20.3 Dimming.

Note: For guidance on lighting uniformity and transition between elements refer to AS/NZS1680.2 (2008) for enclosed zones and AS/NZS1158.3.1 (2020) for unenclosed zones.

The Transport Standards would include the following amendments and / or new requirements:

- Any task lighting associated with the public transport facility:

Sub-option 1

Must have a colour temperature between 3000 to 3500 kelvins. Task lighting is defined as dedicated lighting provided to enabling the completion of an activity. For example, the reading of a sign or use of fare system elements.

Sub-option 2

Should have a colour temperature between 3000 to 3500 kelvins. Task lighting is defined as dedicated lighting provided to enabling the completion of an activity, for example, the reading of a sign or use of fare system elements.

These requirements would pertain to conveyances, premises, (except premises to which the Premises Standards apply,) and infrastructure.

Transport Standards, section 20.1, Illumination levels — premises and infrastructure, of the Transport Standards would be amended to include the following requirements:

- Any lighting associated with the public transport facility must comply with the levels of illumination provided at Tables 12 to 15 (below).

Transport Standards, section 20. 2, Illumination levels — conveyances, would be amended to include the following requirements:

- Any lighting provided for boarding or alighting from a conveyance must be a minimum of 150 lux. Any fixtures or of facilities provided within conveyances must comply with the requirements of Transport Standards, section 20.1 Illumination levels — premises and infrastructure.

The Whole Journey Guide and / or the Transport Standards Guidelines would be updated to include guidance on levels of illuminance (below) and the following definitions.

Definitions

- Enclosed zones: Fully enclosed or underground transport environments, fully covered which receive no significant amount of natural light (direct or indirect). For example, an underground railway station or bus station.
- Unclosed zones: Transport environments that are not covered under the enclosed zones definition. For example, a covered waiting area on a train station, ferry terminal, bus interchange or ferry stop.
- Boarding point: The door or location at which passengers enter or exit a conveyance. Light source may be provided from within the conveyance.
- Customer services counter: Any location where a passenger receives assistance or information, pays a fare or communicates, with staff.
- Static information displays (hard copy): A visual display of fixed information that is not self-illuminated (backlit). For example, printed timetable or station layout.
- Fare system elements: Any hardware that a passenger interacts with that is associated with the purchase or payment of fares. For example, fare vending machines, fare gates, and validators. Self-illuminated or backlit displays are excluded from these requirements when provided in isolation with no other lighting.
- External pathways: Pathways exterior to, but still associated with, the public transport asset. For example, pathways to and from carparks.
- Pedestrian level crossings (rail): Any crossing of a railway at grade for both vehicular traffic and other road passengers, including pedestrians.

Note: Many elements within a public transport environment are not outlined in the tables below. Operators and providers should ensure appropriate lighting levels are provided for element within a public transport environment to enable safe completion of tasks. For example, wayfinding, signage, feature lighting and advertising should be serviced by an appropriate level of lighting to enable passengers and operators alike to read and interact with them.

Guidance – Levels of Illuminance

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect the new requirements.

Specific guidance may include the following:

Uniformity of illuminance

Uniformity of illuminance is a major contributor to lighting quality and can be calculated by measuring the average, minimum and maximum illuminance. Light intensity thresholds are usually identified in a way to provide required visibility level for a specific visual task.

Key illuminance uniformity measures are defined below:

- U1 = the ratio of the minimum to average illumination levels, as defined in AS/NZS1158.3.1 (2020)
- U2 = the ratio of the maximum to average illumination levels, as defined in AS/NZS 1680.1 (2006)

Control of Light Spill

Any lighting provided, including lighting in public spaces, should comply with Australian Standard AS/NZS4282 (2019). The standard provides information on the potential obtrusive effects of lighting in public spaces, how to design such lighting systems and information on the impact of artificial light on biota.

The Australian Government Department of Environment and Energy, National Light Pollution Guidelines for Wildlife Including Marine Turtles, Seabirds and Migratory Shorebirds provides guidance on good practice lighting design for exterior areas, which is also applicable to design principles for suburban and regional train stations and stops.

Lighting Regimes

Lighting regimes should be designed so that illuminance levels for task and ambient lighting can be provided separately to ensure appropriate volumes and consistency of illumination is provided. For example, consider providing focussed lighting for difficult visual tasks, such as reading, separately from ambient lighting throughout a space. This focussed lighting should be provided at counter tops, fare system elements, wayfinding and signage, hazards, emergency information, stairs and ramps, road and path edges.

Choice of wall finishes should consider the needs of various passengers, including people with low vision, visual hyper/ hyposensitivity, and intellectual or cognitive impairment.

Lighting Temperature and Colour

Any task lighting associated with the public transport facility should have a colour temperature between 3000 to 3500 kelvins. Lighting colour temperature is important to a variety of people, including those with vision impairment and people on the autism spectrum. For information about

lighting colour choice, refer to *CIE 227:2017 Technical Report - Lighting for Older People and People with Visual Impairment in Buildings*.

Lighting Hardware

Adjustable and customisable lighting choices is beneficial for persons with different lighting needs. For example, people with low vision might require more illumination to complete tasks, whereas persons on the autism spectrum may prefer dimmer lighting for comfort. Providing adjustable lighting can ensure all passengers receive the level of illumination that suits their needs.

For information about lighting hardware choice, refer to *CIE 227:2017 Technical Report - Lighting for Older People and People with Visual Impairment in Buildings*.

Tables for level of illumination

Table sources:

Public Transport Authority of Western Australia, *Specification Lighting Design, Installation and Maintenance Requirements*.

Government of South Australia Department of Infrastructure and Transport, *Engineering Standard Design-Standards-Electrical Infrastructure Part 129014*,
https://dit.sa.gov.au/__data/assets/pdf_file/0004/113827/DOCS_AND_FILES-5786255-v4-Station_D_Part_-_Part_D074_Design_-_Electrical_Infrastructure.pdf, 17 February 2022

Table 4: Non-regulatory option - Enclosed zones

Element Type*	Transport Element	EAV (lx)	E Min (lx)	EV Min (lx)	U1
Access Paths	Entrances, Pathways, Walkways, ramps, stairs and subways	160			0.5
Waiting areas	General platform and waiting areas	160			0.5
Waiting areas	Within 900mm of boarding point		150		
Facilities and Fixtures	Static information displays (hard copy)	200		AS1735.12 (2002)	0.5
Facilities and Fixtures	Fare System Elements	200		AS1735.12 (2002)	0.5
Facilities and Fixtures	Toilet and locker rooms	200		AS1735.12 (2002)	0.5
Facilities and Fixtures	Customer Service Points	AS1428.2 (1992)		AS1735.12 (2002)	0.5

*For lifts, refer to Transport Standards Part 13 Lifts

Table 5: Non-regulatory option - Unenclosed zones

Element Type	Transport Element	EAV (lx)	E Min (lx)	EV Min (lx)
Level Crossings	Pedestrian Level Crossings (Rail)	30	10	10

Table 6: Non-regulatory option - Unenclosed Zones - Elements within or adjacent to road reserve

Element Type	Transport Element	EAV (lx)	E Min (lx)	EV Min (lx)	U1	U2
Waiting Areas	General platform, waiting areas and boarding areas	20	8	7	0.3	10

Appendix A – Detailed reform options

Waiting Areas	Covered areas	20				
Facilities and Fixtures	Static information displays			AS1735.12 (2002)		
Facilities and Fixtures	Fare System Elements (excluding fare validators)			AS1735.12 (2002)		
Car parking	Accessible car parking space	AS/NZS 1680.0 (2009)	14	7		10
Car parking	Taxi ranks and passenger loading zones	AS/NZS 1680.0 (2009)	14	7		10

Table 7: Non-regulatory option - Unenclosed zones - Elements not within or adjacent to road reserves

Element Type	Transport Element	EAV (lx)	E Min (lx)	EV Min (lx)	U1	U2
Waiting Areas	Train Platform edge and ferry wharf edges		30			
Waiting Areas	General platform and waiting areas	42	21	14		7
Waiting Areas	Covered areas	160			0.5	
Facilities and Fixtures	Fare System Elements (excluding fare validators) and Static information displays not within or adjacent to road reserve	200		AS1735.12 (2002)	0.5	

Table 8: Regulatory Option 3 - Enclosed zones

Element Type*	Transport Element	EAV (lx)	E Min (lx)	EV Min (lx)	U1
Access Paths	Entrances, Pathways, Walkways, ramps, stairs and subways	160			0.5
Waiting areas	General platform and waiting areas	160			0.5
Waiting areas	Within 900mm of boarding point		150		
Facilities and Fixtures	Static information displays (hard copy)	200		AS1735.12 (2002)	0.5
Facilities and Fixtures	Fare System Elements	200		AS1735.12 (2002)	0.5
Facilities and Fixtures	Toilet and locker rooms	200		AS1735.12 (2002)	0.5
Facilities and Fixtures	Customer Service Points	AS1428.2 (1992)		AS1735.12 (2002)	0.5

*For lifts, refer to Transport Standards Part 13 Lifts

Table 9: Regulatory Option 3 - Unenclosed zones

Element Type	Transport Element	EAV (lx)	E Min (lx)	EV Min (lx)
Level Crossings	Pedestrian Level Crossings (Rail)	30	10	10

Table 10: Regulatory Option 3 - Unenclosed zones - Elements within or adjacent to road reserve

Element Type	Transport Element	EAV (lx)	E Min (lx)	EV Min (lx)	U1	U2
Waiting Areas	General platform, waiting areas and boarding areas	20	8	7	0.3	10
Waiting Areas	Covered areas	20				
Facilities and Fixtures	Static information displays			AS1735.12 (2002)		
Facilities and Fixtures	Fare System Elements (excluding fare validators)			AS1735.12 (2002)		
Car parking	Accessible car parking space	AS/NZS 1680.0 (2009)	14	7		10
Car parking	Taxi ranks and passenger loading zones	AS/NZS 1680.0 (2009)	14	7		10

Table 11: Regulatory Option 3 - Unenclosed Zones – Elements not within or adjacent to road reserves

Element Type	Transport Element	EAV (lx)	E Min (lx)	EV Min (lx)	U1	U2
Waiting Areas	Train Platform edge and ferry wharf edges		30			
Waiting Areas	General platform and waiting areas	42	21	14		7
Waiting Areas	Covered areas	160			0.5	
Facilities and Fixtures	Fare System Elements (excluding fare validators) and Static information displays not within or adjacent to road reserve	200		AS1735.12 (2002)	0.5	

Table 12: Regulatory Option 4 - Enclosed Zones

Element Type*	Transport Element	EAV (lx)	E Min (lx)	EV Min (lx)	U1
Access Paths	Entrances, Pathways, Walkways, ramps, stairs and subways	160			0.5
Waiting areas	General platform and waiting areas	160			0.5

Waiting areas	Within 900mm of boarding point		150		
Facilities and Fixtures	Static information displays (hard copy)	200		AS1735.12 (2002)	0.5
Facilities and Fixtures	Fare System Elements	200		AS1735.12 (2002)	0.5
Facilities and Fixtures	Toilet and locker rooms	200		AS1735.12: 2002	0.5
Facilities and Fixtures	Customer Service Points	AS1428.2 (1992)		AS1735.12: 2002	0.5

*For lifts, refer to Transport Standards Part 13 Lifts

Table 13: Regulatory Option 4 - Unenclosed zones

Element Type	Transport Element	EAV (lx)	E Min (lx)	EV Min (lx)
Level Crossings	Pedestrian Level Crossings (Rail)	30	10	10

Table 14: Regulatory Option 4 - Unenclosed zones - Elements within or adjacent to road reserve

Element Type	Transport Element	EAV (lx)	E Min (lx)	EV Min (lx)	U1	U2
Access Paths	Access Paths	20				10
Waiting Areas	General platform, waiting areas and boarding areas	20	8	7	0.3	10
Waiting Areas	Covered areas	20				
Facilities and Fixtures	Static information displays			AS1735.12 (2002)		
Facilities and Fixtures	Fare System Elements (excluding fare validators)			AS1735.12 (2002)		
Car parking	Accessible car parking space	AS/NZS 1680.0 (2009)	14	7	0.3	10
Car parking	Taxi ranks and passenger loading zones	AS/NZS 1680.0 (2009)	14	7	0.3	10
Parking	Standard car parking spaces	AS/NZS 1680.0 (2009)	3	3		10
Parking	Accessible car parking space	AS/NZS 1680.0 (2009)	14	7	0.3	10
Parking	Taxi ranks and passenger loading zones	AS/NZS 1680.0 (2009)	14	7	0.3	10

Table 15: Regulatory Option 4 – Unenclosed Zones – Elements not within or adjacent to road reserve

Element Type	Transport Element	EAV (lx)	E Min (lx)	EV Min (lx)	U1	U2
Access Paths	Access Paths	42	21	14		7
Waiting Areas	Train Platform edge and ferry wharf edges		30			
Waiting Areas	General platform and waiting areas	42	21	14		7
Waiting Areas	Covered areas	160			0.5	

Facilities and Fixtures	Fare System Elements (excluding fare validators) and Static information displays not within or adjacent to road reserve	200		AS1735.12 (2002)	0.5	
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38. Signals and process for requesting boarding devices

Status quo

Transport Standards section 8.7 Signals requesting use of boarding device, would remain unchanged and no additional guidance would be issued.

8.7 Signals requesting use of boarding device

- (1) Any signal for requesting the deployment of a boarding device must be located in an allocated space.
- (2) If possible, a signal is to be placed according to the dimensions given in AS1428.2 (1992) Clause 11.4, Call buttons.

This section applies to buses, (except dedicated school buses), coaches, ferries, trains, trams and light rail.

Non-regulatory option

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to include advice on good practice processes for requesting boarding devices.

Specific guidance may include:

- Communication of the need for boarding and alighting assistance in real time (the time of need) rather than through prior booking. This is necessary if people with disability are to have the same flexibility and amenity of travel as other passengers. Communication may be directly with staff or with automated systems. Timing of the notification for alighting assistance should not exceed that of other passengers requesting a vehicle or vessel to stop.
- A request signal device that must be touched or pressed should be located in the allocated space between 900mm and 1250mm above finished floor and 500mm from any internal corner, as per AS1428.1 (2009), Clause 13.5.3 (c), Location.
- If an electronic notification system has an audio component that requires verbal interaction, the communication devices should be linked to a hearing augmentation system that conforms to AS1428.5 (2021), Design for access and mobility, Part 5: Communication for people who are deaf or hearing impaired, section 3.2.
- Controls and operating mechanisms should be operable with one open hand and should not require tight grasping, pinching, or twisting of the wrist and should have a switch with one surface dimension at least 25 millimetres. The force required to press a button should be in the range of 2.5 to 5 newtons. Call and control buttons should have an integral, continuously operating light. Controls should activate the notification device before the button becomes level with the surrounding surface as per AS1428.1 (2009) Clause 13.5.4, Power-operated door controls.
- Staff training is essential for effective real time communication. Without disability awareness training that includes the needs of people who have complex communication impairments, misunderstandings will occur.

Regulatory option

The Transport Standards would be amended to include requirements for signals and a process for requesting boarding assistance that is located either in or on conveyances will be made more explicit.

Transport Standards section 8.7 would be amended to include the following (including any requirements retained or amended from the status quo):

- Passengers who require assistance to alight must be able to communicate in real time to notify that they wish to alight.
- A request signal device that must be touched or pressed should be located in the allocated space and positioned as per AS1428.1 (2009) Clause 13.5.3 (c), Location.
- Timing of the notification for alighting assistance must not exceed that of other passengers requesting a vehicle or vessel to stop.
- If an electronic notification system has an audio component it must be linked to a hearing augmentation system that conforms to AS1428.5 (2021) section 3.2.
- The force required to press a button must be in the range of 2.5 to 5 newtons.
- Controls and operating mechanisms must be operable with one open hand and must not require tight grasping, pinching, or twisting of the wrist and shall have a switch with one surface dimension of at least 25 millimetres. Controls must comply with AS1428.1 (2009), Clause 13.5.4, Power-operated door controls.
- Call and control buttons:

Sub-option 1

Call and control buttons should have an integral, continuously operating light.

Sub-option 2

Call and control buttons must have an integral, continuously operating light.

These requirements pertain to buses (except dedicated school buses), coaches, ferries, trains, trams and light rail.

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to provide advice concerning the new requirements.

Specific guidance may include:

- Communication of the need for boarding and alighting assistance in real time (at the time of need) rather than through prior booking, is necessary if people with disability are to have the same flexibility and amenity of travel as other passengers. Communication may be directly with staff or with automated systems.
- Staff training is essential for effective real time communication. Without disability awareness training that includes the needs of people who have complex communication impairments, misunderstandings will occur.
- Wherever practicable, controls for communication or signalling devices should be located more than 500 millimetres away from internal corners. Where this is unachievable, controls should be at the maximum practicable distance from internal corners.

39. Notification by passenger of need for boarding device

Status quo

Transport Standards section 8.8 Notification by passenger of need for boarding device, would remain unchanged and no Guidance material would be issued.

8.8 Notification by passenger of need for boarding device

- (1) It must be possible for a passenger to notify the operator of a conveyance that he or she needs a boarding device to board or alight from a conveyance.
- (2) If a request signal device is used, it may be located on the conveyance or at the boarding point according to the dimensions given in AS1428.2 (1992) Clause 11.4, Call buttons.

This section pertains to conveyances, (except dedicated school buses,) premises, and infrastructure, (except airports that do not accept regular public transport.)

Non-regulatory option

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide to include advice for passenger notification of need for boarding device.

Specific guidance may include the following:

- Communication may be directly with staff or with automated systems.

Sub-option 1

- Communication of the need for boarding assistance in 'real time' for unbooked services that is at the time of need rather than through prior booking, is necessary if passengers with disabilities are to have the same flexibility and amenity of travel as other passengers

Sub-option 2

- While some passengers who may need boarding assistance on unbooked services may choose to book the assistance, and operators may legitimately advise this, it should not be mandatory. Mandating booking would limit the ability to travel spontaneously or if called upon to do so, unexpectedly. Prior booking is often advisable if assistance to board or alight is required, but this should not be a deterrent for the need for travel that arises at short notice.
- For booked services, the need for boarding assistance should be confirmed at booking.
- A request signal device that must be touched or pressed should be located in proximity to the boarding point between 900mm and 1250mm above finished floor, 500mm from any internal corner, as per AS1428.1 (2009) Clause 13.5.3 (c).
- If an electronic notification system has an audio component, it should be linked to a hearing augmentation system that conforms to AS1428.5 (2010) section 4.
- Controls and operating mechanisms should be operable with one open hand and should not require tight grasping, pinching, or twisting of the wrist and should have a switch with one surface dimension at least 25 millimetres. Buttons should not require too much force, being in the range of 2.5-5 N. While buttons may be installed on notification devices, controls that only need to be touched rather than depressed will assist people with poor hand function.
- Call and control buttons should have an integral, continuously operating light that both changes colour and issues an audible confirmation of a recorded call. Controls should activate

the notification device before the button becomes level with the surrounding surface as per AS1428.1 (2009) Clause 13.5.4.

- Notification by passenger of the need for boarding device may trigger the need to provide direct assistance to board.

Regulatory option

Transport Standards section 8.8 would be amended to include the following (including any requirements retained or amended from the status quo):

- Passengers must be able to communicate in real time their need for boarding assistance or a boarding device prior to boarding.
- For unbooked services:

Sub-option 1

- Prior booking may be recommended but cannot be required from passengers who need boarding assistance.

Sub-option 2

- At unstaffed stations, there may be a need to provide advance notice. This should not exceed one hour.
- A request signal device that must be touched or pressed should be located in proximity to the boarding point and be positioned between 900 millimetres and 1250 millimetres above the finished floor, 500 millimetres from any internal corner, as per AS1428.1 (2009) Clause 13.5.3 (c).
- If an electronic notification system has an audio component it must be linked to a hearing augmentation system that conforms to AS1428.5 (2021) section 3.2.
- The force required to press a button must be in the range of 2.5 to 5 newtons.
- Controls and operating mechanisms must be operable with one open hand and must not require tight grasping, pinching, or twisting of the wrist and shall have a switch with one surface dimension of at least 25 millimetres. Controls must comply with AS1428.1 (2009) Clause 13.5.4.
- Call and controls buttons:

Sub-option 1

Call and control buttons should have an integral, continuously operating light.

Sub-option 2

Call and control buttons must have an integral, continuously operating light.

- These requirements would pertain to premises and infrastructure, (except airports that do not accept regular public transport services.)
- Amendments to section 8.8 are also being considered in chapter 44, nominated assistance points as there are overlaps between the reform issues.
- The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect new requirements.
- Specific guidance may include the following:
- While buttons may be installed on notification devices, controls that only need to be touched rather than depressed will assist people with poor hand function.
- For booked services, the need for boarding assistance should be confirmed at booking.

- Notification by passenger of the need for boarding device may trigger the need to provide direct assistance to board.
- Communication of the need for boarding assistance in 'real time' for unbooked services, which is at the time of need rather than through prior booking, is necessary if passengers with disabilities are to have the same flexibility and amenity of travel as other passengers. Communication may be directly with staff or with automated systems.
- At unstaffed stations, there may be a need to develop Equivalent Access solutions for notice of need for boarding assistance.

40. Portable boarding ramp edge barriers

Status quo

- Transport Standards section 6.2 Boarding ramps, would remain unchanged and no Guidance material would be issued.

6.2 Boarding ramps

A boarding ramp must comply with AS/NZS3856.1 (1998) Clause 2.1.8 (b), (c), (f) and (g).

This section pertains to conveyances, except dedicated school buses and small aircraft.

Non-regulatory option

- The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to include advice for edge barriers on portable boarding ramps.
- Specific guidance may include the following:
- Edge barriers on portable boarding ramps are important safety and confidence building features for people who use mobility aids. Portable boarding ramps should therefore have edge barriers on both sides.
- While edge barriers should always be at a safe height above the ramp surface, the recommended 75-millimetre minimum height above the ramp surface of AS3856.1 (2021) should be considered. Dimensions of 65 to 75 millimetres above the ramp surface for kerbs and kerb rails that are required in the built environment might also be considered. Edge barriers may be curved, chamfered or tapered at either end in order to reduce the likelihood of catching ankles, wheelchair footplates or the like as a passenger enters the ramp. Ramp edge barriers should contrast in luminance and colour with the ramp surface.
- Existing portable boarding ramps may not have edge barriers provided they are safe and fit for purpose. These should be replaced by compliant ramps when they reach their end of service life.
- Even though fixed boarding ramps are not covered in this requirement (that is, ramps fixed to infrastructure), the provision of edge barriers should be investigated for feasibility and installed where possible.

Regulatory options

Transport Standards section 6.2 would be amended to include the following (including any requirements retained or amended from the status quo).

There are three regulatory options that were consulted on relating to the height of edge barriers. Option 1 is a performance-based standard. Option 2 sets a prescriptive requirement for edge barrier heights. Option 3 sets a perspective requirement for edge barrier heights and cites an Australian Standard.

Option 1

All portable boarding ramps that are not fixed to conveyances must have vertical edge barriers of a safe height above the ramp surface on both sides. Edge barriers may be curved, chamfered, or tapered at either end.

Option 2

All portable boarding ramps that are not fixed to conveyances must have vertical edge barriers 65 to 75 millimetres above the ramp surface on both sides. Edge barriers may be curved, chamfered or tapered at either end.

Option 3

All portable boarding ramps that are not fixed to conveyances must have vertical edge barriers 75 millimetres above the ramp surface as per AS3856.1 (2021), clause 7.1 (b) on both sides. Edge barriers may be curved, chamfered, or tapered at either end.

All of the options pertain to buses, (except dedicated school buses), trains, trams and light rail.

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated for all three options to include advice for edge barriers on portable boarding ramps.

Specific guidance for all options may include the following:

Edge barriers on portable boarding ramps are important safety and confidence building features for people who use mobility aids. Portable boarding ramps should therefore have edge barriers on both sides.

While edge barriers should always be at a safe height above the ramp surface, the recommended 75-millimetre minimum height above the ramp surface of AS3856.1 (2021) might be considered. Dimensions of 65 to 75 millimetres lower range above the ramp surface for kerbs and kerb rails that are required in the built environment might also be considered (this advice relevant to Options 2 and 3 above only). Edge barriers may be curved, chamfered or tapered at either end in order to reduce the likelihood of catching ankles, wheelchair footplates or the like as a passenger enters the ramp. Ramp edge barriers should contrast in luminance and colour with the ramp surface.

Existing portable boarding ramps may not have edge barriers provided they are safe and fit for purpose. These should be replaced by compliant ramps when they reach their end of service life.

Even though fixed boarding ramps are not covered in this requirement, the provision of edge barriers should be investigated for feasibility and installed where possible.

41. Boarding ramp and removable gangway definitions

Status quo

The Transport Standards would remain unchanged and no guidance material would be issued.

The Transport Standards would continue to be silent on the difference between removable gangways and boarding ramps.

Non-regulatory option

Guidance would be provided in the Transport Standards Guidelines and / or The Whole Journey Guide to include advice on the distinction between removable gangways and vehicle boarding ramps.

Specific guidance may include the following definitions:

Boarding ramps

Boarding ramps are deployable ramps of flat profile along the length of the access path that bridge the gap between static boarding points and vehicle entrances.

Removable gangway

A gangway may be removable. Removable gangways are deployable ramps of convex profile along the length of the access path equipped with handrails that bridge the gap between pontoon boarding point and ferry decks. Removable gangways require a convex profile to maintain contact with both the vessel deck and pontoon while both may be in motion.

Regulatory option

The Transport Standards would include new definitions for boarding ramps and removable gangways:

Boarding ramps

Boarding ramps are deployable ramps of flat profile along the length of the access path that bridge the gap between static boarding points and vehicle entrances.

Removable gangway

A gangway may be removable. Removable gangways are deployable ramps of convex profile along the length of the access path equipped with handrails that bridge the gap between pontoon boarding point and ferry decks. Removable gangways require a convex profile to maintain contact with both the vessel deck and pontoon while both may be in motion.

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect new requirements.

42. Removable gangway design – ferries

Status quo

Transport Standards section 6.2 Boarding ramps, would remain unchanged and no guidance material would be issued.

6.2 Boarding ramps

A boarding ramp must comply with AS/NZS3856.1 (1998) *Clause 2.1.8 (b), (c), (f) and (g)*.

This section pertains to conveyances except dedicated school buses and small aircraft.

Non-regulatory option

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to include advice on removable gangways.

Specific guidance may include the following:

- Removable gangways should be constructed in accordance with the National Standard for Commercial Vessels (NSCV), *Part C: Design and construction, section 1 Arrangement, accommodation and personal safety, Chapter 6.16.3, Gangways*. Additional advice below will enhance the accessibility of the removable gangway design.

- Removable gangways must be able to maintain two points of contact on moving pontoon and ferry decks. They must also accommodate lateral movement of the ferry to and from the pontoon. A convex profile is required and removable gangways with convex profiles are standard for most ferry systems.
- Removable gangway should have a 50 to 75-millimeter strip on the gangway's leading edges, should provide a luminance contrast in wet and dry conditions with the surfaces on which they are deployed by at least 30 per cent. Luminance contrast of more than 45 per cent, such as 60 per cent, is preferable.
- To minimise the risk of a passenger falling into the water while boarding or alighting, removable gangways should have bilateral handrails and edge barriers (kerbs) as safety and support features. Handrails should have a consistent finish across the entire length and have a luminance contrast in wet and dry conditions with the pontoon and ferry deck by at least 30 per cent. Luminance contrast of more than 45 per cent, such as 60 per cent, is preferable.
- Where possible, removable gangways should exceed a minimum 800-millimeter clear width between handrails. Any extra width must be balanced against occupational health and safety concerns that the weight added to the structure introduce. However, even modest increases in clear width will enhance the accessibility of the removable gangway for passengers using mobility aids.
- To ensure independent access, the gradient along the curve of the removable gangway should not exceed 1:8 at any point when the gangway is deployed for boarding and alighting. If gradient on the curve exceeds 1:8 then assisted access should be available. Gangways may be articulated to achieve the 1:8 maximum gradient over the curve.
- Removable gangways must be long enough to achieve a safe overlap on both decks due to the risk posed by lateral movement of the ferry while berthed. Removable gangway length is ultimately limited by occupational health and safety considerations. Removable gangways are a sturdy apparatus that must be of a size and weight that is safe for the deckhand to deploy and is suitable to be stationed on a pontoon or ferry.

Regulatory option

Transport Standards section 6.2 would be amended to include the following (including any requirements retained or amended from the status quo):

- Removable gangways must comply with the National Standard for Commercial Vessels (NSCV), Part C: Design and construction, section 1 Arrangement, accommodation and personal safety, Chapter 6.16.3, Gangways.
- Removable gangways may be convex in profile:
- For unassisted access, no part of the curve should exceed a gradient of 1:8 while the removable gangway is deployed.
- If gradient on the curve exceeds 1:8 then assisted access must be available.
- Gangways may be articulated to achieve the 1:8 maximum gradient over the curve.
- Removable gangways must have a 50 to 75-millimeter strip on the gangway's leading edges, must provide a luminance contrast with the surfaces on which they are deployed by at least 30 percent. Luminance contrast of more than 45 per cent, such as 60 per cent, is preferable.
- Removable gangways must have handrails both sides and at least 800 millimetres clear width between handrails, with a greater width preferred if safe and practicable.
- Handrails must comply with AS1428.1 (2009), *Design for access and mobility*, Clause 12 (b) with a preference for handrail diameter in the 30 to 40-millimeter range.

These requirements would pertain to ferries and pontoon wharves.

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to include advice on removable gangways.

Specific guidance would include the following:

- Removable gangways must be able to maintain two points of contact on moving pontoon and ferry decks. They must also accommodate lateral movement of the ferry to and from the pontoon. A convex profile is required and removable gangways with convex profiles are standard for most ferry systems. To ensure independent access, the gradient along the curve of the removable gangway should not exceed 1:8 at any point when the gangway is deployed for boarding and alighting.
- To minimise the risk of a passenger falling into the water while boarding or alighting, removable gangways should have bilateral handrails and edge barriers (kerbs) as safety and support features.
- Removable gangways must be long enough to achieve a safe overlap on both decks due to the risk posed by lateral movement of the ferry while berthed. Removable gangway length is ultimately limited by occupational health and safety considerations. Removable gangways are a sturdy apparatus that must be of a size and weight that is safe for the deckhand to deploy and is also of a size that is suitable to be stationed on a pontoon or ferry.
- Where possible, removable gangways should exceed the minimum 800-millimeter clear width between handrails. Any extra width must be balanced against the weight added to the structure, but even modest increases in clear width will enhance the accessibility of the removable gangway for passengers using mobility aids.

43. Nominated assistance boarding points

Status quo

Transport Standards section 8.2 When boarding devices must be provided, and 8.8 Notification by passengers of need for boarding device, would remain unchanged and no Guidance would be issued.

8.2 When boarding devices must be provided

- (1) A manual or power assisted boarding device must be available at any accessible entrance to a conveyance that has:
 - (a) a vertical rise or gap exceeding 12 millimetres (AS/NZS3856.1 (1998) *Clause 2.1.7 (f)*); or
 - (b) a horizontal gap exceeding 40 millimetres (AS/NZS3856.1 (1998) *Clause 2.1.8 (g)*).

This section pertains to conveyances, (except dedicated school buses) and small aircraft.

8.8 Notification by passenger of need for boarding device

- (1) It must be possible for a passenger to notify the operator of a conveyance that he or she needs a boarding device to board or alight from a conveyance.
- (2) If a request signal device is used, it may be located on the conveyance or at the boarding point according to the dimensions given in AS1428.2 (1992) *Clause 11.4, Call buttons*.

This section pertains to the following conveyances: buses, except dedicated school buses, coaches, ferries, trains, trams and light rail, as well as premises, and infrastructure, except airports that do not accept regular public transport services.

Non-regulatory option

The Whole Journey Guide and / or the Transport Standards Guidelines would be updated to include advice concerning requirements for assistance points to facilitate boarding. The guidance would encourage operators and providers to provide independent boarding where possible.

Specific guidance may include:

- Where independent boarding cannot be provided:
- Public transport operators and providers may provide a nominated assistance point on infrastructure and premises, from which direct assistance can be provided to an accessible door on a conveyance.
- Direct assistance procedures (including how to assist moving passengers from the nominated assistance point to an accessible door on a conveyance) should be informed through consultation with people with disability. Passengers at the nominated assistance point should be able to communicate with public transport staff (whether by face-to-face or by means of a communication device).
- Operators and providers should adopt solutions that:
- Are operator and provider agnostic and mode agnostic (choosing whichever mode gets you to your destination via the fastest, most efficient or most direct route, depending on preference).
- Seek to achieve equivalency to the greatest extent possible for amenity and access to facilities from the assistance point (e.g. provision of information, shelter).
- Seek to consider future modification and innovations while offering a consistent customer outcome regardless of operational and staff changes.
- Acknowledge the importance of staff training which includes knowing the correct boarding procedures and options available for customer requiring direct assistance.
- Clarify the nominated assistance point does not need to be co-located where you board a conveyance. Rather it is where you can talk to staff about boarding and get information and assistance with boarding.
- Ensure the nominated assistance point is clearly identified by a symbol and tactile element.
- Ensure the nominated assistance point is located in an area that is easily accessed in terms of amenity and dignity, and easily identified by people with disability.
- Reference case studies of how operators and providers provide a nominated assistance point.

Regulatory options

The Transport Standards would be amended to include new requirements for nominated assistance points. There are two regulatory options that were consulted on relating to the provision of nominated assistance points. Option 1 would introduce a new section for nominated assistance points. Option 2 would amend section 8.8 Notification by passengers of need for boarding device for nominated assistance points.

Option 1

The Transport Standards would be amended to include the following new requirements:

- Independent boarding should be provided at all accessible entrances to a conveyance, noting that some entrances will only become accessible upon the deployment of a

boarding device in accordance with Transport Standards section 8.2, When boarding devices must be provided.

- Where independent boarding is not provided:
- Operators and providers may provide a nominated assistance point on infrastructure and premises from which direct assistance can be provided to an accessible door on a conveyance.
- Direct assistance procedures including how to assist moving passengers from the nominated assistance point to an accessible door on a conveyance must be informed through consultation with people with disability. Passengers at the nominated assistance point must be able to communicate with public transport staff (whether by face-to-face or by means of a communication device).
- There are five sub-options on how to define an accessible door.

Where a door on a conveyance is marked as being accessible, it must have:

Sub-option 1

Access to a seat.

Sub-option 2

Access to a priority seat.

Sub-option 3

Access to an allocated space.

Sub-option 4

Access to other accessible facilities, such as an accessible toilet, where available.

Sub-option 5

All of the above.

Option 2

Transport Standards section 8.8 Notification by passengers of need for boarding device, would be amended to include the following requirements:

- It must be possible for a passenger waiting to board a conveyance to notify the operator that he or she needs a boarding device.
- If a request signal device is used, it may be located on the conveyance or at the boarding point according to the dimensions given in AS1428.2 (1992), *Design for access and mobility, Part 2: Enhanced and additional requirements - Buildings and facilities, Clause 11.4, Call buttons*.
- Operators and providers may choose to designate a nominated assistance point for a passenger to request direct assistance at the boarding point. The nominated assistance point must be located on or adjacent to an access path.

These requirements would apply to buses (except dedicated school buses), coaches, ferries, trains, trams, light rail, premises and infrastructure (except airports that do not accept regular public transport services).

Any proposed option will need to consider interactions with other relevant parts of the Transport Standards, such as consolidation of on-board facilities.

Amendments to section 8.8 are also being considered in chapter 40, notification by passenger of need for boarding device as there are overlaps between the reform issues.

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect the new requirements and provide advice for operators and providers to provide solutions that:

- are operator and provider agnostic and mode agnostic
- seek to achieve equivalency to the greatest extent possible for amenity and access to facilities from the assistance point (e.g. provision of information, shelter)
- seek to consider future modification and innovations while offering a consistent outcome for passengers regardless of operational and staff changes
- acknowledge the importance of staff training which includes knowing the correct boarding procedures and options available for passengers requiring direct assistance.
- clarify the nominated assistance point does not need to be co-located where a passenger boards a conveyance, it is where passengers can talk to staff about boarding, get information and assistance with boarding
- ensure the nominated assistance point is clearly identified by a symbol and tactile element.
- ensure that the nominated assistance point is located in an area that is easily accessed, in terms of amenity and dignity, and easily identified by passengers who have disability
- reference case studies of how operators and providers provide a nominated assistance point.

44. Identification of lead stops

Status quo

The Transport Standards would remain unchanged and no Guidance would be issued.

The Transport Standards would continue to have no requirements for lead stop identification. People with disability will continue to have difficulty with service recognition at bus stations, bus interchange or bus zones.

Non-regulatory option

The Whole Journey Guide and / or the Transport Standards Guidelines would be updated to include advice on technical specifications for how people with disability are able to identify lead stops at bus stations, bus interchanges and bus zones.

Specific guidance may include the following:

- A lead stop is a bus stop which is designed to have a single platform boarding point for passengers. Buses queue behind each other at lead stops as opposed to independent designated stops for different services. Lead stops are typical for bus stops with a high frequency of services passing through and are designed to reduce dwell times.
- Lead stops should be clearly identifiable by people with disability. If a bus station, interchange or zone has multiple lead stops, each should be identifiable and distinguishable from the others.
- Lead stops offer an effective means for passengers who have mobility, vision or cognitive impairments to board their bus at locations where multiple buses might be standing at the kerbside. The bus will come to the waiting passenger as opposed to the passenger having to locate their bus.
- Having a clearly identifiable lead stop will permit passengers to wait for their service in the correct location. This may be achieved by using a combination of cues including but not limited to overhead and tactile signs, tactile ground surface indicators and smartphone wayfinding or

other electronic device solutions. Customer liaison officers should also be considered at times of peak crowding to assist people with disability locate the lead stop.

- When providing lead stop solutions, bus operation aspects should be coordinated with the overall service, including clearly identifying the lead stop boarding point. The training of bus drivers to understand the requirements and why lead stop arrangements promote accessible boarding is encouraged.

Regulatory option

The Transport Standards would include new requirements for lead stop identification at bus stations, bus interchanges and bus zones.

The Transport Standards would be updated to include the following new requirements:

- Where passengers board at a lead stop, the lead stop must be clearly identifiable by people with disability. If a bus station, interchange or zones has multiple lead stops each must be identifiable and distinguishable from the others.

These new requirements would apply to bus stations in premises and bus zones and interchanges as part of public transport infrastructure.

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect the new requirements.

Specific guidance may include the following:

- A lead stop is a bus stop which is designed to have a single platform boarding point for passengers. Buses queue behind each other at lead stops as opposed to independent designated stops for different services. Lead stops are typical for bus stops with a high frequency of services passing through and are designed to reduce dwell times.
- Lead stops should be clearly identifiable by people with disability. If a bus station, interchange or zone has multiple lead stops, each should be identifiable and distinguishable from the others.
- Lead stops offer an effective means for passengers who have mobility, vision or cognitive impairments to board their bus at locations where multiple buses might be standing at the kerbside. The bus will come to the waiting passenger as opposed to the passenger having to locate their bus.
- Having a clearly identifiable lead stop will permit passengers to wait for their service in the correct location. This may be achieved using a combination of cues including but not limited to overhead and tactile signs, TGSIs and smartphone wayfinding or other electronic device solutions. Customer liaison officers should also be considered at times of peak crowding to assist people with disability locate the lead stop.
- When providing lead stop solutions, bus operation aspects should be coordinated with the overall service, including clearly identifying the lead stop boarding point. The training of bus drivers to understand the requirements and why lead stop arrangements promote accessible boarding is encouraged.

45. Pontoon boarding points on infrastructure

Status quo

The Transport Standards would remain unchanged and no requirements concerning pontoon boarding points would be added.

Non-regulatory option

The Whole Journey Guide and /or the Transport Standards Guidelines would be updated to include advice on pontoon boarding points, to ensure they have maximum stability and lowest possible gradients in their operating environment.

Specific guidance may include the following:

- Pontoons should have a flat and stable surface to which a removable gangway or other boarding device can be deployed.
- Ferry pontoon design should minimise vertical, horizontal and rocking movement of the boarding point. AS3962 (2020) Marina Design, section 4 Loading and stability should be consulted as a means to maximise pontoon stability.
- Pontoons are unique boarding points in that they are floating structures subject to dynamic and variable forces. This makes absolute stability, which is achievable on a bus stop slab or rail platform, difficult to design for. As such, a design that provides safe and functional pontoon stability site by site should be achieved.
- Ferries of significantly different freeboard must often use the same pontoon. This can mean steep removable gangway gradients if the grade separation between pontoon and ferry decks is significant.
- For independent access, gradients along the removable gangway must not exceed 1:8. Gradients steeper than this may require the need for direct assistance by staff.
- Grade separated boarding points, options of removable gangways with varying lengths or a means of adjusting pontoon freeboard could be considered as ways to address the issue of excessive removable gangway gradient.

Regulatory option

The Transport Standards would be amended to provide requirements for pontoon boarding points to ensure they have maximum stability and lowest possible gradients in their operating environment.

The Transport Standards would include the following new requirements:

- Pontoons must have a flat and stable surface to which a removable gangway or other boarding device can be deployed.
- Ferry pontoon design must minimise vertical, horizontal and rocking movement of the boarding point as per AS3962 (2020) Marina Design, section 4 Loading and stability.

The Transport Standards Guidelines and / or the Whole Journey Guide would be updated to reflect the new requirements and include specific guidance for pontoon wharves.

Specific guidance would include the following:

- Pontoons are unique boarding points in that they are floating structures subject to dynamic and variable forces. This makes absolute stability, which is achievable on a bus stop slab or rail platform, difficult to design for. As such, a design that provides safe and functional pontoon stability, site by site, should be achieved.
- Ferries of significantly different freeboard must often use the same pontoon. This can mean steep removable gangway gradients if the grade separation between pontoon and ferry decks is significant.
- Grade separated boarding points, options of removable gangways with varying lengths or a means of adjusting pontoon freeboard could be considered as ways to address the issue of excessive removable gangway gradient.

46. Bus, tram and light rail boarding points on infrastructure

Status quo

The Transport Standards would remain unchanged and no additional guidance would be issued.

The Transport Standards would continue to not have requirements for bus, tram and light rail boarding points to ensure they are accessible for people with disability.

Non-regulatory option

The Whole Journey Guide and / or the Transport Standards Guidelines would be updated to include advice on bus, tram and light rail boarding points.

Specific guidance may include the following:

- Boarding points on bus, tram and light rail stops, except for bitumen surfaces, should have a flat and stable surface to which a boarding device can be safely deployed and should have a gradient and camber (crossfall) no steeper than 1:40. The gradient and camber (crossfall) of a bitumen boarding point should be no steeper than 1:33.
- The extent of the boarding point on a bus or tram stop, bus interchange or bus station or light rail station platform varies with the layout of the infrastructure. Broadly, it includes the area in which boarding devices must be deployed, and in which people must manoeuvre to enter the boarding device or conveyance door. It would not include any waiting area with seats and or shelter that may have been provided at the stop or platform.
- For a number of bus and tram stops and some light rail stations there will be locations (i.e. hilly areas, road reserves or other public areas that have limited space) where a compliant boarding point via either a prescriptive or equivalent access solution will not be achievable.
- While crossfall can often be dealt with through excavation and retention work, gradient is constrained by road gradient. Gradients of boarding points and roads will need to closely align as any difference between the gradient of the boarding point and that of the road will compromise the accessible deployment of the boarding ramp.
- Where boarding points intersect with bicycle paths or shared pathways, appropriate measures should be in place to ensure that the technical requirements for the pathways do not conflict with those of the boarding point. Further, it should be promoted that people boarding or alighting from the service have priority at the boarding point over other transient passengers of the space.

Regulatory option

The Transport Standards would include new requirements in relation to bus, tram and light rail boarding points. There are two regulatory options that were consulted on. Option 2 includes additional requirements for roads with a gradient steeper than 1:40.

Option 1

The Transport Standards would be amended to include requirements for bus, tram and light rail boarding points.

The Transport Standards would include the following new requirements:

- Boarding points must have a flat and stable surface to which a boarding device can be safely deployed and have a gradient no steeper than 1:40 (AS1428.1 (2009) Clause 6.5.1).

- The camber (crossfall) of a boarding point must be no steeper than 1:40, except for bitumen surfaces, where 1:33 is permitted (AS1428.1 (2009) Clause 10.1(d)).

These requirements pertain to premises and bus, tram and light rail boarding points on infrastructure.

Option 2

The Transport Standards would be amended to include requirements for bus, tram and light rail boarding points, including specific requirements for road gradients where the gradient is steeper than 1:40.

The Transport Standards would include the following new requirements:

- Boarding points must have a flat and stable surface to which a boarding device can be safely deployed and have a gradient no steeper than 1:40 (AS1428.1 (2009) Clause 6.5.1).
- The camber (crossfall) of a boarding point must be no steeper than 1:40, except for bitumen surfaces where 1:33 is permitted (AS1428.1 (2009) Clause 10.1(d)).
- Where road gradient is at a gradient steeper than 1:40 and a 1:40 boarding point gradient would prevent safe deployment of a boarding device, the boarding point gradient may match that of the road.

These requirements would pertain to premises and bus, tram and light rail boarding points on infrastructure.

Under both options, the Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect new requirements and include guidance for light rail, bus and tram boarding points.

Specific guidance may include the following:

- The extent of the boarding point on a bus or tram stop, bus interchange or bus station or light rail station platform varies with the layout of the infrastructure. Broadly, it includes the area in which boarding devices must be deployed, and in which people must manoeuvre to enter the boarding device or conveyance door. It would not include any waiting area with seats and or shelter that may have been provided at the stop or platform.
- For a number of bus and tram stops and some light rail stations there will be locations (i.e. hilly areas, road reserves or other public areas that have limited space) where a compliant boarding point via either a prescriptive or equivalent access solution will not be achievable.
- While crossfall can often be dealt with through excavation and retention work, gradient is constrained by road gradient. Gradients of boarding points and roads will need to closely align as any difference between the gradient of the boarding point and that of the road will compromise the accessible deployment of the boarding ramp.
- Where boarding points intersect with bicycle paths or shared pathways, appropriate measures should be in place to ensure that the technical requirements for the pathways do not conflict with those of the boarding point. Further, it should be promoted that people boarding or alighting from the service have priority at the boarding point over other transient passengers of the space.

47. Hail-and-ride boarding points on infrastructure

Status quo

Transport Standards section 8.4 Hail-and-ride services, would remain unchanged and no additional guidance would be issued.

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 millimetres higher than the road surface.

This section pertains to premises and infrastructure, except airports that do not accept regular public transport services.

8.4 Hail-and-ride services

- (1) If a hail-and-ride service is offered, passengers must be able to hail the service at nominated accessible boarding points where boarding devices can be deployed.
- (2) The boarding points must offer equal access to public transport services.

This section applies to hail-and-ride services, except dedicated school buses and infrastructure.

Non-regulatory option

The Whole Journey Guide and / or the Transport Standards Guidelines would be updated to include advice on good practice for hail and ride boarding points, which would explain differences between vehicles, operator and provider, and passenger responsibilities.

Specific guidance may include the following:

- Vehicles may have either side or rear loading boarding devices.
- The accessible boarding points must offer equal access to the hail-and-ride. For example, passengers with mobility aids should be able to cross kerbs in order to board rear loading conveyances. This may be achieved through the use of portable ramps or by using existing kerb ramps at or adjacent to the boarding point.
- Operators would not be expected to nominate or identify accessible boarding points, rather the expectation is that any safe location along the route people could hail and board a service.
- Passengers should understand that it is their responsibility to select a boarding point that is accessible and at which a hail-and-ride vehicle can safely and lawfully stop. It is the responsibility of the operator to ensure that the passenger is able board the vehicle from this accessible boarding point.

Regulatory option

The Transport Standards would be amended to include requirements for hail-and-ride boarding points.

Transport Standards section 8.4 would be amended to include the following:

- If a hail-and-ride service is offered, passengers must be able to hail the service at accessible boarding points where boarding devices can be deployed.

- The accessible boarding points must offer equal access to public transport services.

These requirements would pertain to hail-and-ride services, (except dedicated school buses).

The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect new requirements and include specific guidance for hail and ride services except dedicated school buses.

Specific guidance may include the following:

- Vehicles may have either side or rear loading boarding devices. Passengers with mobility aids should be able to cross kerbs in order to board rear loading conveyances. This may be achieved through the use of portable ramps or by using existing kerb ramps at or adjacent to the boarding point.
- Operators would not be expected to nominate or identify accessible boarding points, rather the expectation is that any safe location along the route people could hail and board a service.
- Passengers should understand that it is their responsibility to select a boarding point that is accessible and at which a hail and ride vehicle can safely and lawfully stop. It is the responsibility of the operator to ensure that the passenger is able to board the vehicle from this accessible boarding point.

48. Accessible taxi ranks

Status quo

The Transport Standards would remain unchanged and no Guidance would be issued.

The Transport Standards would continue to not provide accessibility specifications for taxi ranks to encourage that on-street taxi ranks will be accessible to passengers with mobility impairments.

Non-regulatory option

The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to include advice on accessibility specifications for taxi ranks.

There are three sub-options for the number of vehicle spaces that should be accessible.

Specific guidance may include the following:

- If unloading from a wheelchair accessible taxi a mobility aid user should be able to safely move from the carriageway behind the taxi to the footpath.
- While the first and last taxi spaces in a taxi rank should be the accessible spaces, intermediate spaces may also be made accessible at the discretion of the asset owner. This would be particularly advantageous at longer ranks if the wheelchair accessible taxi was well back in the queue.
- If a taxi rank has one vehicle space it should be accessible. If it has more than one vehicle space:

Sub-option 1

The first and last vehicle space should be accessible.

Sub-option 2

The first, second and last vehicle space should be accessible.

Sub-option 3

Where there are more than five spaces the first and last vehicle space should be accessible. In addition, one space for every four spaces between the first and last space should be accessible.

- Accessible taxi spaces within a rank should conform to the requirements for disability parking spaces as per AS2890.5 (2020) Parking facilities Part 5: On-Street parking (AS2890.5 (2020)) Clause 4.5.2 (a), (b), (c) and (f). Line marking should be installed to delineate accessible vehicle spaces in a taxi rank. This would be useful in allowing other drivers to judge the space required for deployment of the wheelchair accessible taxi's boarding lift platform and the circulation space required by the mobility aid user. Temporary taxi ranks should have the same specifications as permanent taxi ranks.
- If kerb ramps are installed, they should be placed to the rear of the accessible taxi space. The rear section of the accessible taxi space should be boldly marked in order to warn the drivers of following vehicles in the queue not to encroach into the accessible taxi space. This encroachment will block the deployment of the boarding lift platform and block the kerb ramp at grade separated taxi ranks. Blocks of colour, chevrons or hatching, in combination with the international symbol and messages such as 'Keep Clear', might be considered as appropriate markings for the area at the rear of the accessible vehicle space.
- If an accessible taxi space is at the same grade as the adjacent footpath, bollards and warning tactile ground surface indicators (TGSIs) as per AS1428.4.1 (2009) Design for access and mobility (AS1428.4.1 (2009)) Clause 2.5 and Figure 2.5 (B) should be installed for the length of the same grade section.
- Most taxi ranks on-street will fall under the jurisdiction of the local authority. Authorities should therefore be mindful of the accessibility requirements for taxi ranks and install them accordingly. In choosing the location for taxi ranks, the gradient and crossfall of the road and footpath should be carefully assessed. The traffic volume of the road at peak times should also be considered, with further guidance on this matter available from Austroads publications.
- As per bus stops there will sometimes be a conflict between the ideal location for the taxi rank and the gradient of the road reserve. If no other location is available for the taxi rank the Unjustifiable Hardship clauses of the Transport Standards will apply to the rank.
- Accessible taxi ranks should be connected via access paths to local facilities and attractors, particularly to their accessible entrances.
- Temporary taxi ranks should have the same specifications as permanent taxi ranks.

Regulatory option

The Transport Standards would be amended to include requirements for accessible on-street taxi ranks to ensure that on-street taxi ranks will be accessible to passengers with mobility impairments.

There are three sub-options for the number of vehicle spaces that should be accessible.

The Transport Standards would include the following new requirements:

- Taxi ranks are boarding points that must connect to accessways.
- If a taxi rank has one vehicle space it must be accessible. If it has more than one vehicle space:

Sub-Option 1

The first and last vehicle space must be accessible.

Sub-Option 2

The first, second and last vehicle space must be accessible.

Sub-Option 3

Where there are more than five spaces the first and last vehicle space must be accessible. In addition, one space for every four spaces between the first and last space must be accessible.

- Accessible taxi spaces within a rank must conform to the requirements for disability parking spaces as per AS2890.5 (2020) Clause 4.5.2 (a), (b), (c) and (f).
- Kerb ramps must be placed to the rear of the accessible taxi space.
- If an accessible taxi space is at the same grade as the adjacent footpath, bollards and warning TGSIs as per AS1428.4.1 (2009) Clause 2.5 and Figure 2.5 (B) must be installed for the length of the same grade section.

These requirements would pertain to infrastructure.

The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect new requirements and include specific guidance for buses, trams and light rail and ferries.

Specific guidance may include the following:

- Intermediate vehicle spaces in a taxi rank might be also be made accessible at the discretion of the asset owner. This would be particularly advantageous at longer ranks if the WAT was well back in the queue.
- Line marking should be installed to delineate accessible vehicle spaces in a taxi rank. This would be useful in allowing other drivers to judge the space required for deployment of the wheelchair accessible taxi's boarding lift platform and the circulation space required by the mobility aid user. The rear section of the accessible taxi space should be boldly marked in order to warn the drivers of following vehicles in the queue not to encroach into the accessible taxi space. This encroachment will block the deployment of the boarding lift platform and block the kerb ramp at grade separated taxi ranks. Blocks of colour, chevrons or hatching, in combination with the international symbol and messages such as 'Keep Clear', might be considered as appropriate markings for the area at the rear of the accessible vehicle space.
- As per bus stops and passenger loading zones most taxi ranks on-street will fall under the jurisdiction of the local authority. Authorities should be mindful of the accessibility requirements for taxi ranks and install them accordingly. In choosing the location for taxi ranks, the gradient and crossfall of the road and footpath should be carefully assessed. Like bus stops there may be a conflict between the ideal location for the taxi rank and the gradient of the road reserve. The traffic volume of the road at peak times should also be considered, with further guidance on this matter available from Austroads publications.
- Temporary taxi ranks should have the same specifications as permanent taxi ranks.
- Accessible taxi ranks should be connected via access paths to local facilities and attractors, particularly to their accessible entrances.

49. Accessible passenger loading zones on-street

Status quo

The Transport Standards would remain unchanged and no Guidance would be issued.

The Transport Standards would continue to not provide accessibility specifications for on-street passenger loading areas.

Non-regulatory option

The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to include advice for on-street passenger loading zones pertaining to infrastructure and would encourage operators and providers to ensure on-street passenger loading zones be recognised as WAT and small conveyance boarding points with specific technical requirements.

There are three sub-options for the number of vehicle spaces that should be accessible.

Specific guidance may include the following:

- Designated on-street passenger loading zones are boarding points for taxis, including WAT, and other public transport vehicles. They are also loading zones for any other member of the public as per the signage installed at each loading zone.
- The performance outcome sought for the passengers of wheelchair accessible taxis is that mobility aid passengers can access the carriageway from the footpath if they are to board a rear loading wheelchair accessible taxi. If unloading from a WAT a mobility aid user should be able to safely move from the carriageway behind the taxi to the footpath. Local authorities should consider permitting WAT to dwell for five or more minutes due to timeframes imposed by the necessary loading and unloading procedure for passengers travelling in wheelchairs or similar mobility aids.
- While the first and last vehicle spaces in a passenger loading zone should be the accessible spaces, other spaces may also be made accessible at the discretion of the asset owner. This would be advantageous at longer passenger loading zones if the wheelchair accessible taxi or other public transport conveyance was well back in the queue.
- If a passenger loading zone has more than one vehicle space:

Sub-option 1

The first and last vehicle space should be accessible.

Sub-option 2

The first, second and last vehicle space should be accessible.

Sub-option 3

Where there are more than five spaces the first and last vehicle space should be accessible. In addition, one space for every four spaces between the first and last space should be accessible.

- Accessible passenger loading spaces should conform to the requirements for on-street disability parking spaces as per AS2890.5 (2020) Parking facilities, Clause 4.5.2 (a), (b), (c) and (f). Line marking should be installed to delineate accessible passenger loading zones. This would be useful in allowing other drivers to judge the space required for deployment of the wheelchair accessible taxi's boarding lift platform and the circulation space required by the mobility aid user. Temporary loading zones should have the same specifications as permanent loading zones.
- If a kerb ramp is installed in an accessible passenger loading zone vehicle space, it should be placed to the rear of the accessible vehicle space. The rear section of the accessible vehicle space should be boldly marked to warn the drivers of following vehicles in the queue not to encroach into the accessible vehicle space. This encroachment will obstruct the deployment of the boarding lift platform and block the kerb ramp at grade separated loading zones. Blocks of colour, chevrons or hatching, in combination with messages such as 'Keep Clear', may be considered as appropriate markings for the area at the rear of the accessible vehicle space.

- If an accessible passenger loading zone vehicle space is at the same grade as the adjacent footpath, bollards and warning TGSIs as per AS/NZS1428.4.1 (2009) Design for access and mobility, Clause 2.5 and Figure 2.5 (B) should be installed for the length of the same grade section.
- Most on-street passenger loading zones will fall under the jurisdiction of the local authority. Authorities should therefore be mindful of the accessibility requirements for passenger loading zones and install them accordingly. In choosing the location for accessible passenger loading zones, the gradient and crossfall of the road and footpath should be carefully assessed. The traffic volume of the road at peak times should also be considered, with further guidance on this matter available from Austroads publications.
- Private property owners and governments often own or manage off-street carparks that may incorporate passenger loading zones. While not directly covered by this advice, owners and managers should consider this advice in designing accessible passenger loading zones as part of their parking facilities.

Regulatory option

The Transport Standards would be amended to include new requirements for on-street passenger loading zones to ensure that on-street passenger loading zones will be recognised as wheelchair accessible taxi and small conveyance boarding points with technical requirements listed in Transport Standards.

There are three sub-options for the number of vehicle spaces that should be accessible.

The Transport Standards would include the following new requirements:

- On-street passenger loading zones are boarding points for wheelchair accessible taxis and other public transport conveyances.
- If a passenger loading zone has more than one vehicle space:

Sub-option 1

The first and last vehicle space must be accessible.

Sub-option 2

The first, second and last vehicle space must be accessible.

Sub-option 3

Where there are more than five spaces the first and last vehicle space must be accessible. In addition, one space for every four spaces between the first and last space must be accessible.

- Accessible passenger loading spaces must conform to the requirements for on-street disability parking spaces as per AS2890.5 (2020), Clause 4.5.2 (a), (b), (c) and (f).
- If a kerb ramp is installed in an accessible passenger loading zone vehicle space, it must be placed to the rear of the accessible vehicle space.
- If an accessible passenger loading zone vehicle space is at the same grade as the adjacent footpath, bollards and warning TGSIs as per AS/NZS1428.4.1 (2009) Clause 2.5 and Figure 2.5 (B) must be installed for the length of the same grade section.

These requirements would pertain to infrastructure.

The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect new requirements and include guidance for infrastructure.

Specific guidance may include the following:

- Designated on-street passenger loading zones are boarding points for taxis, including wheelchair accessible taxis, and other public transport vehicles. They are also loading zones for any other member of the public as per the signage installed at each loading zone.
- The performance outcome sought for the passengers of wheelchair accessible taxis is that mobility aid passengers can access the carriageway from the footpath if they are to board a rear loading wheelchair accessible taxi. If unloading from a wheelchair accessible taxi a mobility aid user should be able to safely move from the carriageway behind the taxi to the footpath.
- Local authorities should consider permitting wheelchair accessible taxis to dwell for five or more minutes due to timeframes imposed by the necessary loading and unloading procedure for passengers travelling in wheelchairs or similar mobility aids.
- While the first and last vehicle spaces in a passenger loading zone should be the accessible spaces, other spaces may also be made accessible at the discretion of the asset owner. This would be particularly advantageous at longer passenger loading zones if the wheelchair accessible taxi or other public transport conveyance was well back in the queue.
- Line marking should be installed to delineate accessible passenger loading zones. This would be useful in allowing other drivers to judge the space required for deployment of the wheelchair accessible taxi's boarding lift platform and the circulation space required by the mobility aid user.
- Most on-street passenger loading zones will fall under the jurisdiction of local authorities. Authorities should therefore be mindful of the accessibility requirements for passenger loading zones and install them accordingly. In choosing the location for accessible passenger loading zones, the gradient and crossfall of the road and footpath should be carefully assessed. The traffic volume of the road at peak times should also be considered, with further guidance on this matter available from Austroads publications.
- The rear section of the accessible vehicle space should be boldly marked in order to warn the drivers of following vehicles in the queue not to encroach into the accessible vehicle space. This encroachment will obstruct the deployment of the boarding lift platform and block the kerb ramp at grade separated taxi ranks. Blocks of colour, chevrons or hatching, in combination with messages such as 'Keep Clear', might be considered as appropriate markings for the area at the rear of the accessible vehicle space.
- Temporary loading zones should have the same specifications as permanent loading zones.
- Private property owners and government often own or manage off-street carparks that may incorporate passenger loading zones. While not directly covered by this advice, owners and managers should consider this advice in designing accessible passenger loading zones as part of their parking facilities.

50. Accessible parking spaces in infrastructure off-street carparks

Status quo

The Transport Standards would remain unchanged and no Guidance would be issued.

The Transport Standards would continue to have no off-street parking requirements.

Non-regulatory option

The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to include advice for off-street parking areas.

Specific guidance may include the following:

- Off-street public parking areas that form part of, or are directly associated with, public transport services should provide accessible parking spaces in the proportions noted in the Premises Standards and with the same layout and dimensions.
- Accessible parking spaces should be located as close as practicable to accessible entrances of premises or infrastructure and connected to them via accessways. Wherever practicable, accessible parking spaces should be directly adjacent to accessible entrances or within 60 metres of accessible entrances. They should be on the same level as the accessible entrance where practicable and connected to accessible entrances via an access path.
- In some instances, car parks that are intended and signed for the exclusive use of passengers cannot be located directly adjacent to the transport node. While not adjacent to the transport node these car parks are directly associated with the node and so fall under the Transport Standards. Accessible parking spaces should be located as close as practicable to the access paths leading from the car park to the transport node. Many people who are eligible for an Australian Disability Parking Permit experience rapid onset of fatigue or pain if obliged to walk more than a short distance. Accessible parking spaces should therefore be located as close as practicable to the entrance of the transport facility served by the carpark. Failure to appropriately locate accessible parking spaces may result in some people not being able to complete their journey or experiencing undue stress.
- These access paths from carparks distant from the transport facility will mostly fall under the jurisdiction of a local authority or private property owner. Ensuring that the access paths are fit for purpose may involve negotiations with the local authority or property owner.
- While the intention for accessible parking spaces would be to match the 1:50 ratio or part thereof found in the Premises Standards, the demography of the precinct in which the carpark is located should be considered. Locations that have a population of residents or visitors who are likely to have a higher proportion of Australian Disability Parking Permits than average should be considered for more than the minimum number of accessible parking spaces.

Regulatory option

The Transport Standards would be amended to include new requirements for off-street parking areas associated with public transport infrastructure and specifications for accessible parking spaces. This will ensure areas with off-street car parking associated with infrastructure and premises to which the Premises Standards does not apply, have accessible parking spaces.

The Transport Standards would include the following new requirements:

- Off-street public parking areas that form part of, or are directly associated with, public transport services must provide one accessible parking space for every 50 parking spaces (or part thereof) where there are more than five parking spaces and:

Sub-Option 1

Are not required to have designated accessible parking spaces where there is a total of not more than five car parking spaces in the parking area.

Sub-option 2

Must designate all parking spaces as accessible parking spaces where there is a total of not more than five car parking spaces in the parking area.

- Accessible parking spaces must be located as close as practicable to accessible entrances of the premises or infrastructure and connected to them via accessways.

- Accessible parking spaces must conform to the layouts and dimensions of AS/NZS2890.6 (2009) Design for access and mobility.

These requirements would apply to premises, except premises to which the Premises Standards apply and infrastructure.

The Transport Standards Guidelines and /or The Whole Journey Guide would be updated to reflect new requirements and include specific guidance for premises, except premises to which the Premises Standards apply and infrastructure.

Specific guidance may include the following:

- Many people who are eligible for an Australian Disability Parking Permit experience rapid onset of fatigue or pain if obliged to walk more than a short distance. Accessible parking spaces should therefore be located as close as practicable to accessible entrances of the premises or infrastructure and connected to them via accessways.
- Wherever practicable, accessible parking spaces should be directly adjacent to accessible entrances or within 60 metres of accessible entrances. They should be on the same level as the accessible entrance where practicable and connected to accessible entrances via an access path. Failure to appropriately locate accessible parking spaces may result in some people not being able to complete their journey or experiencing undue stress if they do.
- These access paths from carparks distant from the transport facility will mostly fall under the jurisdiction of a local authority or private property owner. Ensuring that the access paths are fit for purpose may involve negotiations with the local authority or property owner. In some instances, car parks that are intended and signed for the exclusive use of passengers cannot be located directly adjacent to the transport node. While not adjacent to the transport node these car parks are directly associated with the node and so fall under the Transport Standards. Accessible parking spaces should be located as close as practicable to the access paths leading from the car park to the transport node.
- While the intention for accessible parking spaces would be to match the 1:50 ratio or part thereof found in the Premises Standards, the demography of the precinct in which the carpark is located should be considered. Locations that have a population of residents or visitors who are likely to have a higher proportion of Australian Disability Parking Permits than average should be considered for more than the minimum number of accessible parking spaces.

51. Grabrails on access paths

Status quo

The Transport Standards would remain unchanged and no additional guidance would be issued.

The Transport Standards would continue to have no requirements for grabrails along access paths on conveyances.

Non-regulatory option

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to include advice on luminance contrasting grabrails on conveyances.

Specific guidance may include the following:

- People with disability who are ambulant (able to walk) benefit from grabrail support while travelling between the conveyance door and the priority seating. They also benefit from door mounted grabrails when boarding or alighting and in some circumstances, when the

conveyance is moving. This is particularly the case where passengers must negotiate a step up or down such as at entrance doors or beside steps in aisles.

- If practicable, grabrails might also be located adjacent to priority seats as an aid to sitting and standing. These grabrails will also benefit other passengers entering or exiting a conveyance or who stand while the conveyance is in transit.
- Apart from attachment points, grabrails should not be closer than 50 millimetres to an adjacent surface or obstruction.
- For the benefit of passengers who have a vision or cognitive impairment, grabrails should have a luminance contrast with the adjacent surface, attachment point or against other fixed surfaces that are within 2 meters of the grabrail by at least 30 per cent. Where luminance contrast must be achieved against a background or surface of variable colour, the dominant colour of the background should be the contrasting surface tested.
- Buses and Coaches are required to comply with various national and state requirements for grabrails. For example, in coaches or seat belted buses any grabrails fitted in the accessible area or the access path must not encroach the head impact zone as determined by Australian Design Rules. Grabrails that may be struck by the head of a seated occupant if the bus is involved in a collision must be padded as per the relevant State technical requirements.

Regulatory option

The Transport Standards would be amended to include new technical specifications for grabrails beside access paths on conveyances with accessibility requirement to ensure they meet the needs of people with disability.

The Transport Standards would include the following new requirements:

- Grabrails that conform to the requirements of AS1428.1 (2009), *Clause 17 (a), (b) and (c)* must be provided at all locations where passengers require support or stability during boarding, alighting or transit.
- Grabrails may have a combination of horizontal, vertical or angled alignment as the use of the space dictates, but apart from attachment points may not be closer than 50 millimetres to an adjacent surface or obstruction.
- Grabrails must have a luminance contrast with the adjacent surface, attachment point or against other fixed surfaces that are within 2 meters of the grabrail by at least 30 per cent.
- Luminance contrast testing of surfaces, objects and fixtures other than tactile ground surface indicators must be determined as per Appendix B of AS1428.1 (2009) *Design for access and mobility – General requirement for access – New building work*.

These requirements would apply to buses, coaches, ferries, trains, trams and light rail.

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect new requirements and include specific guidance for buses, trams and light rail and ferries.

Specific guidance may include the following:

- People with disability who are ambulant (able to walk) benefit from grabrail support while travelling between the conveyance door and the priority seating. They also benefit from door mounted grabrails when boarding or alighting and in some circumstances, when the conveyance is moving. This is particularly the case where passengers must negotiate a step up or down such as at entrance doors or beside steps in aisles. If practicable, grabrails might also be located adjacent to priority seats as an aid to sitting and standing. These grabrails will also benefit other passengers entering or exiting a conveyance or who stand while the conveyance is in transit.

- Buses and Coaches are required to comply with various national and state requirements for grabrails. For example, in coaches or seat belted buses any grabrails fitted in the accessible area or the access path must not encroach the head impact zone as determined by Australian Design Rules. Grabrails that may be struck by the head of a seated occupant if the bus is involved in a collision must be padded as per the relevant State technical requirements.
- Many school buses do not have allocated spaces. While grabrails on access paths should comply with this guidance, the guidance does not trigger a requirement to install allocated spaces with associated grabrails in school buses.
- For the benefit of passengers who have a vision or cognitive impairment, grabrails should have a luminance contrast with a background by at least 30 per cent. Where luminance contrast must be achieved against a background or surface of variable colour, the dominant colour of the background should be the contrasting surface tested.

52. Grabrails in allocated spaces

Status quo

Transport Standards section 11.7 Grabrails in allocated spaces, would remain unchanged and no changes to guidance would be made.

11.7 Grabrails to be provided in allocated spaces

Grabrails that comply with AS1428.2 (1992) *Clause 10.2, Grabrails*, must be provided in all allocated spaces.

This section pertains to buses, except dedicated school buses, coaches, ferries, trains, trams and light rail.

Non-regulatory option

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to encourage operators and provides to include a variety of grabrails with various orientations are permitted in allocated spaces and that they should be luminance contrasted.

Specific guidance may include:

- Grabrails should be fitted in such a way that they are functional for passengers with mobility aids using the allocated space. Grabrails may have a combination of horizontal, vertical or angled alignment as the use of the space dictates. The most functional outcome can be achieved through a process of consultation and co-design with the disability community.
- Apart from attachment points, grabrails should not be closer than 50 millimetres to an adjacent surface or obstruction.
- For the benefit of passengers who have a vision or cognitive impairment grabrails should have a luminance contrast with the adjacent surface, the grabrails attachment point or against other fixed surfaces that are within 2 meters of the grabrail. Where luminance contrast must be achieved against a background or surface of variable colour, the dominant colour of the background should be the contrasting surface tested.

These requirements would pertain to buses (except dedicated school buses), coaches, ferries, trains, trams and light rail.

Regulatory option

Transport Standards section 11.7 would be amended to include the following (including any requirements retained or amended from the status quo):

- Grabrails in allocated spaces must comply with AS1428.1 (2009), Design for access and mobility, Part 1: General requirements for access - New building work, clause 17(a), (b) and (c).
- Grabrails may have a combination of horizontal, vertical or angled alignment as the use of the space dictates but apart from attachment points may not be closer than 50 millimetres to an adjacent surface or obstruction.
- Grabrails must have a luminance contrast of at least 30 per cent with the adjacent surface or attachment point or against other fixed surfaces that are within 2 meters of the grabrail. Luminance contrast testing of grabrails must be determined as per AS1428.1 (2021), *Design for access and mobility, Part 1: General requirements for access - New building work Appendix B*.

These requirements would pertain to buses, coaches, ferries, trains, trams and light rail.

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect new requirements and provide the following additional guidance:

- Grabrails should be fitted in such a way that they are functional for passengers in mobility aids using the allocated space. Grabrails may have a combination of horizontal, vertical or angled alignment as the use of the space dictates. The most functional outcome can be achieved through a process of consultation and co-design.
- Buses and coaches are required to comply with various national and state requirements for grabrails.
- For example, in coaches or seat belted buses any grabrails fitted in the accessible area or the access path must not encroach the head impact zone as determined by Australian Design Rules. Grabrails that may be struck by the head of a seated occupant if the bus is involved in a collision must be padded as per the relevant state technical requirements.
- For the benefit of passengers who have a vision or cognitive impairment grabrails should have a luminance contrast with a background by at least 30 per cent. Where luminance contrast must be achieved against a background or surface of variable colour, the dominant colour of the background should be the contrasting surface tested.

53. Mobility aid movement in allocated spaces – passive restraints

Status quo

Transport Standards section 9.11 Movement of mobility aid in allocated space, would remain unchanged and no additional guidance would be issued.

9.11 Movement of mobility aid in allocated space

An allocated space must contain movement of a mobility aid towards the front and sides of a conveyance.

This section applies to buses (except dedicated school buses), trams and light rail.

Non-regulatory option

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to include more refined advice for containment of mobility aids in allocated spaces and provide a definition for passive restraint systems. Guidance may also recognise the different lateral forces that are experienced in different conveyances and provide specific advice for buses, trams and light rail, and ferries.

A definition of a passive restraining system may include:

- Passive restraining system
- A passive restraining system contains movement of a wheelchair within an allocated space.
- Passive restraints include the sides of a conveyance or excursion barriers such as rails and vertical padded boards that act as passive restraints against the tipping or sliding of a mobility aid towards the aisle, front or rear of the conveyance.
- Other innovative technical solutions that perform equal to or better than the requirements above may also be appropriate.

Specific guidance for **buses** may include:

- Forces experienced in buses resulting from certain turns (for example, cornering, sharp turns and roundabouts), lateral displacement due to kerb strike or sudden acceleration or deceleration may cause the mobility aids of passengers riding in an allocated space to tip or slide. These tipping or sliding movements may be in any of four directions; towards the front, rear, wall side of the bus or towards the aisle.
- Passive containment should be in place to prevent tipping or sliding out of the allocated space.
- Passengers who choose to travel without containment should be permitted to do so. Passengers may choose to orient themselves facing forward, to the rear or side of the vehicle.

Specific guidance for **trams and light rail** may include:

- Forces experienced in trams and light rail resulting from sudden acceleration or deceleration may cause the mobility aids of passengers riding in an allocated space to tip or slide. These tipping or sliding movements may be towards the front or rear of the allocated space.
- Passive containments should be in place to restrict these movements to within the allocated space.
- Some tram services are bidirectional and have consolidated allocated spaces one behind the other. Due to the limited space inside conveyances, some mobility aid passengers use one allocated space as an access path or manoeuvring area to access the adjacent allocated space. A passive containment system installed between consolidated allocated spaces should maintain this.
- Passengers who choose to travel without containments should be permitted to do so. Passengers may choose to orient themselves facing forward, to the rear or side of the vehicle.

Specific guidance for **ferries** may include:

- Ferries operating in waters that on occasion experience high wind and wave energy would benefit from passive restraints in allocated spaces. Open seas and open harbours exposed to strong winds are the environments likely to experience high seas. Riverine ferry operators are very unlikely to have any significant wave action with which they must deal.

- Ferries operating in Operational areas A to C as defined in the *National Standard for Commercial Vessels Part B General requirements (2018)* should have passive restraints at allocated spaces. Operational areas D to E would not impose movements on a vessel that would require passive restraints at allocated spaces.
- Passengers may choose to orient themselves facing forward, to the rear or side of the vehicle.

Regulatory option

The Transport Standards would be amended to include more defined requirements for containment of mobility aids in allocated spaces and define passive restraint systems. The Transport Standards would also include new requirements for buses, trams and light rail for mobility aids in allocated spaces.

Transport Standards section 9.11 Movement of a mobility aid in an allocated space, would be amended to include the following (including any requirements retained or amended from the status quo):

- Each allocated space must contain movement of a mobility aid towards the front, rear and sides of a bus.

These requirements would pertain to buses (except dedicated school buses).

The Transport Standards would include the following new requirements:

- Each allocated space must contain movement of a mobility aid towards the front, rear and wall side of a tram or light rail car.

These requirements would pertain to trams and light rail.

The Transport Standards would be amended to include a definition for passive restraining systems:

Passive restraining system

- A passive restraining system contains movement of a wheelchair within an allocated space.
- Passive restraints include the sides of a conveyance or excursion barriers such as rails and vertical padded boards that act as passive restraints against the tipping or sliding of a mobility aid towards the aisle, front or rear of the conveyance.
- Other innovative technical solutions that perform equal to or better than the requirements above may also be appropriate.

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect the new requirements and include specific guidance for buses, trams and light rail and ferries.

Specific guidance for **buses** may entail the following:

- Forces experienced in buses resulting from fast turns, lateral displacement due to kerb strike or sudden acceleration or deceleration may cause the mobility aids of passengers riding in an allocated space to tip or slide. These tipping or sliding movements may be in any of four directions; towards the front, rear, wall side of the bus or towards the aisle.
- Passive containment must be in place to prevent tipping or sliding out of the allocated space.
- Passengers who choose to travel without containment must be permitted to do so. Passengers may choose to orient themselves facing forward, to the rear or side of the vehicle.

Specific guidance for **trams and light rail** may entail the following:

- Forces experienced in trams and light rail resulting from sudden acceleration or deceleration may cause the mobility aids of passengers riding in an allocated space to tip or slide. These tipping or sliding movements may be towards the front or rear of the allocated space.
- Passive containments must be in place to restrict these movements to within the allocated space.
- Some tram services are bidirectional and have consolidated allocated spaces one behind the other. Due to the limited space inside conveyances, some mobility aid passengers use one allocated space as an access path or manoeuvring area to access the adjacent allocated space. A passive containment system installed between consolidated allocated spaces should maintain this.
- Passengers who choose to travel without containments should be permitted to do so. Passengers may choose to orient themselves facing forward, to the rear or side of the vehicle.

Specific guidance for **ferries** may entail the following:

- Ferries operating in waters that on occasion experience high wind and wave energy would benefit from passive restraints in allocated spaces. Open seas and open harbours exposed to strong winds are the environments likely to experience high seas.
- Ferries operating in Operational areas A to C as defined in the *National Standard for Commercial Vessels Part B General requirements (2018)* should have passive restraints at allocated spaces. Operational areas D to E would not impose movements on a vessel that would require passive restraints at allocated spaces.
- Passengers may choose to orient themselves facing forward, to the rear or side of the vehicle.

54. Mobility aid movement in allocated spaces – active restraints

Status quo

The Transport Standards would remain unchanged and no additional guidance would be issued.

The Transport Standards would continue to have no requirements for mobility aids in allocated spaces in conveyance where safety belts are mandatory.

Non-regulatory option

The Whole Journey Guide and / or the Transport Standards Guidelines would be updated to include advice on active restraints on public transport conveyances.

Specific guidance may include:

- An active restraint anchors a wheelchair or similar mobility aid into an allocated space. Anchorage belts are an example of active restraints. Active restraint systems are described in AS/NZS10542.1 (2015) Technical systems and aids for people with disability - Wheelchair tiedown and occupant-restraint systems - Requirements and test methods for all systems for use by people with disabilities who travel while seated in their mobility aids.
- Passengers and operators should be aware that use of active restraints should be used where safety belts are compulsory, unless the passengers have a dispensation through normal channels. Passengers may choose to travel facing towards the front or rear of the conveyance.

- As a safety measure, active restraint systems complying with ASNZS10542.1 (2015) should be operator deployable as default, rather than passenger deployable. Should a passenger travelling in a mobility aid request that a carer or travelling companion attach the active restraints to their mobility aid, this should only be done under the supervision of staff properly trained in the use of active restraint systems and would be at the operators and providers discretion.
- Staff who apply active restraint systems should be properly trained in their use. Verification of staff competency that would satisfy the jurisdiction in which the service operates should be available on request.
- Emerging technologies may make equivalent access solutions in which a passenger could deploy the active restraints possible. Innovation of this type is encouraged, however should comply with the safety and other requirements of the jurisdiction in which the service operates.
- Passengers should ensure that their wheelchairs and similar mobility aids comply with relevant safety requirements such as criteria for belt anchorage points. Compatibility with the requirements of ASNZS10542.1 (2015) is recommended and passengers are encouraged to contact the operator or provider for more information on wheelchair restraints.
- This is particularly important for mobility scooters as most of these lack the necessary attachment points for belts. Most wheelchairs will have the necessary attachment points but passengers should confirm this prior to purchase or travel.
- Conveyances on which seatbelts are not normally offered may also be fitted with active restraints, to be used at the discretion of the passenger travelling with a wheelchair.

Regulatory option

The Transport Standards would be amended to include new technical requirements for active restraints, define active restraining systems, and specifies where active restraining systems are mandatory.

The Transport Standards would include the following new requirements for movement of mobility aid in allocated spaces – active restraints:

- If safety belts are compulsory under legislation in a conveyance, active restraint must be fitted and conform to ASNZS10542.1 (2015) at a minimum.
- Passengers must use active restraints systems if safety belts are compulsory, unless the passengers have a dispensation through normal channels. Passengers may choose to travel facing towards the front of the conveyance.
- Active restraint systems must be operator deployable as default, rather than passenger deployable.

These requirements pertain to all conveyances.

The Transport Standards would be amended to include a definition for active restraining systems:

Active restraining systems

- An active restraint anchors a compatible wheelchair or similar mobility aid into an allocated space. Anchorage belts are an example of active restraints.
- Operators of services on which the use of safety belts are mandatory must provide active restraints for use by people travelling in wheelchairs.
- Passengers must use active restraints if they are compulsory, unless the passengers have a dispensation through normal channels.

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect the new requirements.

Specific guidance may include:

- Emerging technologies may make equivalent access solutions in which a passenger could deploy the active restraints a possibility. Innovation of this type is encouraged, however must comply with requirements of the relevant jurisdiction in which the service operates.
- Should a passenger request that a carer or travelling companion attach the active restraints to their mobility aid this could only be done under the supervision of staff properly trained in the use of active restraint systems and would be at the operator's discretion.
- Staff who apply active restraint systems must be properly trained in their use. Verification of staff competency that would satisfy the jurisdiction in which the service operates must be available on request.
- Passengers should ensure that their wheelchairs and similar mobility aids comply with relevant safety requirements such as criteria for belt anchorage points. Compatibility with the requirements of ASNZS10542.1 (2015) is recommended and passengers are encouraged to contact the operator or provider for more information on wheelchair restraints.
- This is particularly important for mobility scooters as most of these lack the necessary attachment points for belts. Most wheelchairs will have the necessary attachment points but passengers should confirm this prior to purchase or travel.
- Conveyances on which seatbelts are not normally offered may also be fitted with active restraints, to be used at the discretion of the passenger travelling with a wheelchair.

55. Appropriate seats on booked services

Status quo

Transport Standards section 28.4 Accessible seats to be available for passengers with disabilities, would remain unchanged and no additional guidance would be issued.

28.4 Accessible seats to be available for passengers with disabilities

- (1) Accessible seats must be kept for passengers with disabilities.
- (2) Operators must allocate unbooked accessible seats to other passengers only after all other standard seats are filled.

This section pertains to aircraft, coaches, ferries, dial-a-ride services and trains.

Non-regulatory option

The Whole Journey Guide and / or the Transport Standards Guidelines would be updated to include advice on booking seats appropriate to a passenger's needs and to specify the nature of appropriate versus accessible seats and is pertinent to booked services on aircraft, coaches, ferries, dial-a-ride services and trains.

Specific guidance may include:

- People with disability should be able to book seats that are located in parts of a conveyance that are appropriate for their travelling needs.
- Operators and providers should have booking policies that are able to accommodate the varying seating needs of people with disability in an appropriate manner, by offering appropriate seats.

- Appropriate seats do not require signs or other means of differentiation from other seats and are of the same design and configuration as other seats. Appropriate seats are identified during the booking process and accommodation made for passengers with disabilities unless all seats on the service were already booked. For example, an appropriate seat may be closest to the toilet to suit a particular person's needs.
- Passengers should identify their particular seating needs at the time of booking. While operators will accommodate passengers to the extent possible it may not always be possible to fully accommodate the need. For example, if a person with similar requirements had already booked the seat, that person would have priority.
- Passengers should be advised during the booking process the seats identified to be most appropriate for people with disability are to be reserved until other seats are taken. This is particularly important when passengers can select their own seats during the booking process.
- Passengers should be able to request appropriate seating in any class of service offered by the operator.

Regulatory option

The Transport Standards would be amended to include requirement for booking seats appropriate to a passenger's needs and specify the nature of appropriate versus accessible seating for people with disability.

Transport Standards section 28.4 Accessible seats to be available for passengers with disabilities, would be amended to include the following requirements (including any requirements retained or amended from the status quo):

- Passengers with disabilities must be able to book seats that are located in parts of the conveyance that are appropriate for their travelling needs.
- Operators and providers must appropriately accommodate passengers based on their needs unless all seats on the service are already booked.
- If different classes of travel are provided by a service, seats appropriate to the travelling needs of people with disability must be available in each class.

These requirements would apply to aircraft, coaches, ferries, dial-a-ride services and trains.

The Whole Journey Guide and / or the Transport Standards Guidelines would be updated to reflect the changes to the Transport Standards.

Specific guidance will include:

- Passengers should identify their particular seating needs at the time of booking so they can book an appropriate seat for their needs. For example, an appropriate seat may be closest to the toilet to suit a particular person's needs.
- While operators will accommodate passengers to the extent possible it may not always be possible to fully accommodate the need. For example, if a person with similar requirements had already booked the seat, that person would have priority.
- Appropriate seats do not require signs or other means of differentiation from other seats and are of the same design and configuration as other seats. Appropriate seats are identified during the booking process and accommodation made for people with disability unless all seats on the service were already booked.
- Passengers should be advised during the booking process the seats identified to be most appropriate for people with disability are to be reserved until other seats are taken. This is particularly important when passengers can select their own seats during the booking process.

- Passengers must be able to request appropriate seating in any class of service offered by the operator.

56. Conveyance dwell times at stops

Status quo

The Transport Standards would remain unchanged and no Guidance would be issued.

The Transport Standards would continue to be silent on dwell times.

Non-regulatory option

The Whole Journey Guide and / or the Transport Standards Guidelines would be updated to include advice that conveyances should not depart from stops until passengers including those with disabilities are safely seated, securely located or securely positioned in allocated spaces or have safely alighted.

Specific guidance pertaining to conveyances where the driver / master had a clean line of sight to the access path, allocated spaces and priority seats would include:

- Dwell times at stops must permit passengers, including those with disabilities to safely alight and to board and be safely seated or securely positioned in allocated spaces before the conveyance resumes movement. All passengers should be safely seated, have a firm grip on a grabrail or other support if standing, or be securely positioned in allocated spaces prior to a conveyance leaving a stop.
- Dwell times at stops should therefore balance the often-slower gait of people with disability with the imperative to maintain the timetable. Disability awareness training will better equip drivers to understand passenger needs and behaviour.
- In conveyances such as buses and coaches it is possible for drivers to observe if people with disability are safely seated in a priority seat or securely positioned in an allocated space prior to departing a stop.
- In conveyances where this is difficult or not possible, solutions should be implemented, such as sensors or signals that alert drivers that a longer dwell time is required at a particular stop. These might be passenger initiated or rely on other technical mechanisms.
- Locating the priority seats and allocated spaces so that they are convenient to entrances and ensuring that scheduled dwell times are of sufficient duration to allow passengers to reach priority seats and allocated spaces and be safely seated or securely positioned will enhance the amenity of boarding and alighting for people with disability.
- Autonomous vehicles are currently in service and likely to become more common in the short to medium term. Systems that allow for passengers to be safely seated, have a firm grip on a grabrail or other support if standing, or securely positioned in allocated spaces prior to a conveyance leaving a stop may be installed to meet this guidance. These might be passenger initiated or rely on sensors that are integrated with artificial intelligence systems.

Regulatory option

The Transport Standards would be amended to include new requirements for conveyance dwell time at stops.

The Transport Standards would include the following new requirements:

- Dwell times at stops must permit passengers, including those with disabilities, to safely alight and to board and be safely seated, be securely located, or be securely positioned in allocated spaces before the conveyance resumes movement.

These requirements would apply to all conveyances where the driver or master has a clear view of the priority seats and allocates spaces.

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect new requirements and to encourage automated vehicles with the ability to adjust dwell times based on sensors or passenger feedback to comply with these requirements.

Specific guidance may include the following:

- All passengers should to be safely seated, have a firm grip on a grabrail or other support if standing, or be securely positioned in allocated spaces prior to a conveyance leaving a stop.
- Dwell times at stops should balance the often-slower gait of people with disability with the imperative to maintain the timetable. Disability awareness training will better equip drivers to understand passenger needs and behaviour.
- In conveyances such as buses and coaches it is possible for drivers to observe if people with disability are safely seated in a priority seat or securely positioned in an allocated space prior to departing a stop.
- In conveyances where this is difficult, solutions should be implemented, such as sensors or signals that alert drivers that a longer dwell time is required at a particular stop. These might be passenger initiated or rely on other technical mechanisms.
- Autonomous vehicles are currently in service and likely to become more common in the short to medium term. Systems that allow for passengers to be safely seated, have a firm grip on a grabrail or other support if standing, or securely positioned in allocated spaces prior to a conveyance leaving a stop will need to be installed. These might be passenger initiated or rely on sensors that are integrated with artificial intelligence systems.

57. Stairs on trains

Status quo

Transport Standards section 14.3 Compliance with Australian Standards – conveyances and section 11.3 Handrails on steps, would remain unchanged and no additional guidance for stairs on trains would be issued.

14.3 Compliance with Australian Standards — conveyances

- (1) If stairs are provided on a conveyance mentioned below, they must comply with:
 - (a) AS1428.1 (2001) *Clause 9.1* (including the notes), Stair construction; and
 - (b) AS1428.2 (1992) *Clause 13.2, Configuration of steps, Clause 13.3, Warning strip at nosing of steps* and *Figures 8 and 9*.
- (2) However, the minimum access path width on stairs in the conveyance must be 850 millimetres.

This section pertains to ferries, trains, trams, and light rail.

11.3 Handrails on steps

- (1) A handrail on steps need not extend beyond the top or bottom of the steps.

- (2) A domed button may be placed 150 millimetres from any break or end of a handrail instead of an extension at a rail end (AS1428.2 (1992) Figure 5).

This section pertains to conveyances except dedicated school buses and small aircraft.

Non-regulatory option

The Whole Journey Guide and / or The Transport Standards Guidelines would be updated to include advice on internal stairs on board trains, including accessibility features and handrail geometry.

Specific guidance may include the following:

- Where internal stairs are provided, they should have opaque risers, nosing's that do not project beyond the riser and luminance contrasting strips at the front of the nosing, as per AS1428.1 (2009) – *Design for access and mobility – General requirements for access – New building work Clause 11.1 (c), (d), (e), (f) and (g)*.
- Stair and steps riser and going geometry should:
 - Sub-option 1**

Be safe and fit for purpose.
 - Sub-option 2**

Conform to the riser and going specifications of the National Construction Code, Table D2.13¹⁹.
- The minimum access path width on stairs and steps should be 850 millimetres.
- Stairs and steps should not intrude into access paths as this may present a tripping hazard or compromise the access path width.
- A handrail on steps or stairs need not extend beyond the top or bottom of the steps or stairs. This is to avoid compromising the access paths at the head or foot of the stairs.
- If the handrail is interrupted or terminates abruptly a domed warning indicator with a height of between 4 to 5 millimetres and a diameter of between 10 to 12 millimetres should be provided on the top of the handrail 150 millimetres from the end of the handrail.
- Handrails should have at least 30 per cent luminance contrast with any background wall or surface adjacent to the handrail, within a distance of 2000 millimetres from the handrail.
- Tactile ground surface indicators are not required at train, tram and light rail stairs and steps.
- Handrail profile should be either circular or oval as per AS1428.1 (2009) *Clause 12 (b)*.

Regulatory option

The Transport Standards would be amended to include modality specific requirements for stairs on trains. The regulatory option also includes updated Australian Standard references and handrail requirements for all conveyances (except dedicated school buses and small aircraft.).

Section 11.3 Handrails on steps, would be amended to include the following (including any requirements retained or amended from the status quo):

¹⁹Australian Building Codes Board, *The National Construction Code*, 24 December 2021, <https://ncc.abcb.gov.au/ncc-online/NCC/2019-A1/NCC-2019-Volume-One-Amendment-1/Section-D-Access-and-Egress/Part-D2-Construction-Of-Exits>

- A handrail on stairs or steps need not extend beyond the top or bottom of the steps and stairs.
- If the handrail is interrupted or terminates abruptly at the top or bottom step a domed warning indicator with a height of between 4 to 5 millimetres and a diameter of between 10 to 12 millimetres must be provided on the top of the handrail 150 millimetres from the end of the handrail.
- Handrails must have at least 30 per cent luminance contrast with any background wall or surface adjacent to the handrail, within a distance of 2000 millimetres from the handrail.
- Handrails must comply with AS1428.1 (2009) *Clause 12 Handrails*.

These requirements would apply to conveyances (except dedicated school buses and small aircraft).

The Transport Standards would include the following new requirements:

- Where internal stairs and steps are provided, they must have opaque risers and comply with AS1428.1 (2009) *Clause 11.1 (c), (d), (e), (f) and (g)*.
- Stair and step geometry must comply with:

Sub-option 1

The riser and going specifications of the National Construction Code, Table D2.13²⁰.

Sub-option 2

Riser and going dimensions that are safe and fit for purpose.

- The minimum access path width on stairs and steps must be 850 millimetres.
- Stairs and steps must not intrude into access paths.
- TGSIs are not required at train, tram and light rail stairs and steps.

These requirements would apply to trains, trams and light rail.

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect new requirements.

Specific guidance may include the following:

- People who have disabilities that do not affect their capacity to walk or climb stairs will benefit from stairs that are safe and fit for purpose. Stair and handrail geometry are constrained by the availability of space in carriages. Other features such as luminance contrast of tread nosing's and handrails are unaffected by space though and are important safety features for people who have low vision.

58. Stairs on ferries

Status quo

The Transport Standards would remain unchanged and no Guidance would be issued.

The Transport Standards would continue to lack modality specific requirements for ferry stairs.

²⁰ Australian Building Codes Board, *The National Construction Code*, 24 December 2021, <https://ncc.abcb.gov.au/ncc-online/NCC/2019-A1/NCC-2019-Volume-One-Amendment-1/Section-D-Access-and-Egress/Part-D2-Construction-Of-Exits>

Non-regulatory option

The Whole Journey Guide and / or the Transport Standards Guidelines would be updated to include advice for stairs and handrails on ferries.

Specific guidance may include the following:

- Where stairs and steps are provided, they should have opaque risers, nosing's that do not project beyond the riser and luminance contrasting strips at the front of the nosing, as per AS1428.1 (2009) *Clause 11.1 (c), (d), (e), (f) and (g)*.
- Stair riser and going geometry should conform to:

Sub-option 1

NSCV, *Part C Design and construction section 1 Arrangement, accommodation and personal safety (2018) section 5.13.3.4.*

Sub-option 2

The riser and going specifications of the National Construction Code, Table D2.13.

Sub-option 3

Riser and going dimensions that are safe and fit for purpose.

- The minimum access path width on ferry stairs should be 900 v as per NSCV, Part C Design and construction section 1 Arrangement, accommodation and personal safety (2018), Table 19
- Stairs should not intrude into access paths as this may present a tripping hazard or compromise the access path width.
- TGSIs are not required at ferry stairs and steps.
- A handrail on stairs or steps need not extend beyond the top or bottom of the stairs or steps. This is to avoid compromising the access paths at the head or foot of the stairs.
- If the handrail is interrupted or terminates abruptly a domed warning indicator with a height of between 4–5 millimetres and a diameter of between 10–12 millimetres should be provided on the top of the handrail 150 millimetres from the end of the handrail.
- Handrails should have at least 30 per cent luminance contrast with any background wall or surface adjacent to the handrail, within a distance of 2000 millimetres from the handrail.
- Handrail profile should be either circular or oval as per AS1428.1 (2009) *Clause 12 (b)*.

Regulatory option

The Transport Standards would be amended to include new requirements for ferry stairs and handrails along ferry stairs.

The Transport Standards would include the following new requirements for ferry stairs:

- Where stairs and steps are provided, they must have opaque risers and comply with AS1428.1 (2009) *Clause 11.1 (c), (d), (e), (f) and (g)*.
- Stair and steps risers and goings dimensions must comply with:

Sub-option 1

NSCV, Part C Design and construction section 1 Arrangement, accommodation and personal safety (2018), section 5.13.3.4.

Sub-option 2

National Construction Code, Table D2.13.

Sub-option 3

Riser and going dimensions that are safe and fit for purpose.

- The minimum access path width on stairs and steps in the conveyance must be 900 millimetres as per NSCV, Part C Design and construction section 1 Arrangement, accommodation and personal safety (2018), Table 19.
- Stairs and steps must not intrude into access paths.
- TGSIs are not required at ferry stairs and steps.

This section would apply to ferries.

The Transport Standards would include the following new requirements for handrails:

- Handrails must comply with the National Standard for Commercial Vessels Part C Design and construction section 1 Arrangement, accommodation and personal safety (2018) Clause 5.12.
- A handrail on steps and stairs need not extend beyond the top or bottom of the stairs or steps.
- If the handrail is interrupted or abruptly terminated, a domed warning indicator with a height of between 4–5 millimetres and a diameter of between 10–12 millimetres must be provided on the top of the handrail 150 millimetres from the end of the handrail.
- Handrails must have at least 30% luminance contrast with any background wall or surface adjacent to the handrail, within a distance of 2000 millimetres from the handrail.
- Handrail profile must be as per AS1428.1 (2009) Clause 12 (b).

These requirements would apply to ferries.

The Transport Standards Guidelines would be updated to reflect new requirements and include specific guidance for ferries.

Specific guidance may include the following:

- The preferred riser height for ferry stairs is 190 millimetres with a preferred going depth of 275 millimetres.
- Handrails should not compromise access paths by intruding into them. Any intrusion may introduce striking hazards for passengers or block the use of the access path by some passengers.

59. Stairs on buses

Status quo

Transport Standards section 14.4, Compliance with Australian Design Rule 58 – conveyances and section 14.3 Compliance with Australian Standards – conveyances, would remain unchanged and no additional guidance would be issued.

14.3 Compliance with Australian Standards — conveyances

- (1) If stairs are provided on a conveyance mentioned below, they must comply with:
 - (a) AS1428.1 (2001) *Clause 9.1 (including the notes), Stair construction*; and
 - (b) AS1428.2 (1992) *Clause 13.2, Configuration of steps, Clause 13.3, Warning strip at nosing of steps and Figures 8 and 9.*
- (2) However, the minimum access path width on stairs in the conveyance must be 850 millimetres.

This section applies to ferries, trains, trams and light rail.

14.4 Compliance with Australian Design Rule 58 — conveyances

- (1) Stairs must comply with Australian Design Rule 58 to the extent that that rule sets requirements that conflict with these Standards.
- (2) In any other case, section 14.3 applies.

This section applies to buses except dedicated school buses.

Non-regulatory option

The Whole Journey Guide and / or the Transport Standards Guidelines would be updated to include advice on the accessibility of stairs on buses.

Specific guidance may include the following:

- Steps and stairs should comply with Australian Design Rule 58 to the extent that that rule sets requirements that conflict with the Disability Standards for Accessible Public Transport.
- Step edges and stair tread nosing's should have opaque risers, nosing's that do not project beyond the riser and luminance contrasting strips at the front of the nosing, as per AS1428.1 (2009) *Clause 11.1 (c), (d), (e), (f) and (g)*.
- Passenger doors should be fitted with handrails that are accessible when the doors are open and the minimum distance between the handrails of the door that provides the access path should be 850 millimetres. For outward opening doors, handrails should be permanently fixed to the body.
- Stairs and steps should not intrude into access paths as this may present a tripping hazard or compromise the access path width.
- TGSIs are not required at bus steps or stairs.
- Double deck buses employ stairs as the means of accessing or exiting the top deck. These stairs should have handrails for safety and support for people with disability.
- Steps address level changes within decks and at doors. While handrails are not required at steps other than those at doors, suitable grabrails should be considered. These grabrails will assist people with disability to negotiate the step and offer support while the bus is in transit.
- A handrail on steps or stairs need not extend beyond the top or bottom of the steps or stairs. This is to avoid compromising the access paths at the head or foot of the stairs.
- If the handrail is interrupted or abruptly terminated a domed warning indicator with a height of between 4 to 5 millimetres and a diameter of between 10 to 12 millimetres should be provided on the top of the handrail 150 millimetres from the end of the handrail.
- Handrails should have at least 30 per cent luminance contrast with any background wall or surface adjacent to the handrail, within a distance of 2000 millimetres from the handrail.
- Handrail profile should be either circular or oval as per AS1428.1 (2009) *Clause 12 (b)*.

Regulatory option

The Transport Standards would be amended to include updated requirements for stairs on buses, including accessibility features.

Transport Standards section 14.4 Compliance with Australian Design Rule 58 – conveyances, would be amended to include the following (including any requirements retained or amended from the status quo):

- Steps and stairs must comply with Australian Design Rule 58 to the extent that that rule sets requirements that conflict with these Standards.
- Step edges and stair tread nosing's must comply with AS1428.1 (2009) *Clauses 11.1 (c), (d), (e), (f), and (g)*.
- Passenger doors must be fitted with handrails accessible when the doors are open and the minimum distance between the handrails of the door that provides the access path must be a minimum of 850 millimetres. For outward opening doors, handrails must be permanently fixed to the body.
- Steps and stairs must not intrude into access paths.
- TGSIs are not required at bus steps or stairs.

This section would apply to buses (except dedicated school buses).

Transport Standards section 11.3, handrails on stairs – conveyances, would be amended to include the following:

- A handrail on stairs or steps need not extend beyond the top or bottom of the steps and stairs.
- If the handrail is interrupted or terminates abruptly at the top or bottom step a domed warning indicator with a height of between 4 to 5 millimetres and a diameter of between 10 to 12 millimetres must be provided on the top of the handrail 150 millimetres from the end of the handrail.
- Handrails must have at least 30 per cent luminance contrast with any background wall or surface adjacent to the handrail, within a distance of 2000 millimetres from the handrail.
- Handrails must comply with AS1428.1 (2009) *Clause 12 Handrails*.

This section would apply to conveyances, (except dedicated school buses) and small aircraft.

The Transport Standards Guidelines and / or The Whole Journey would be updated to reflect new requirements and include specific guidance for buses.

Specific guidance may include the following:

- Double deck buses employ stairs as the means of accessing or exiting the top deck. These stairs require handrails for passenger safety and support.
- Steps address level changes within decks and at doors. While handrails are not required at steps other than those at doors, suitable grabrails should be considered. These grabrails will assist passengers negotiate the step and offer support while the bus is in transit.

60. Doorway contrast and height

Status quo

Transport Standards section 12.4 Clear opening of doorways, would remain unchanged and no additional guidance would be issued. Transport Standards requirements for luminance contrast and height clearance of conveyance doors remain unchanged.

12.4 Clear opening of doorways

Doorways must comply with AS1428.2 (1992) *Clause 11.5.1, Clear opening of doorways*.

This section pertains to buses (except dedicated school buses), coaches, ferries, trains, trams and light rail.

Non-regulatory option

The Whole Journey Guide and / or the Transport Standards Guidelines would be updated to include advice for good practice for luminance contrast and height clearance of conveyance doors.

Specific guidance would pertain to buses (except dedicated school buses), coaches, ferries, trains, trams and light rail and may include the following:

- Doors located on an access path in conveyances other than buses and coaches must be not less than 850 millimetres clear open width from the floor or deck and this should continue to a height of at least 1980 millimetres. The 850 millimetres clear open width is an existing Transport Standards requirement derived from AS1428.2 (1992).
- Curved sections on the upper and lower vertical door frames should have a radius of not more than 225 millimetres where the vertical frame meets the upper horizontal frame and 50 millimetres where the vertical door frame meets the floor.
- Door vertical clearance in buses and coaches must comply with Australian Design Rule 58.
- For the benefit of passengers who have a vision or cognitive impairment doors or elements on or around access path doors should have a luminance contrast with a background by at least 30 per cent. Where luminance contrast is to be achieved against a background or surface of variable colour, the dominant colour of the background should be the contrasting surface tested.
- Any luminance contrast treatment of doors must not compromise a driver's vision but must meet the relevant State technical requirement for visibility.

Regulatory option

The Transport Standards would be amended to include updated requirements for luminance contrast and height clearance of conveyance doors.

Transport Standards section 12.4 would be amended to include the following requirements (including any requirements retained or amended from the status quo):

- Doors located on an access path in conveyances other than buses and coaches must be not less than 850 millimetres clear open width from the floor or deck to a height of at least 1980 millimetres (AS1428.1 (2009) *Clause 13.2* and *Clause 6.2*). Curved sections on the upper and lower vertical door frames must have a radius of not more than 225 millimetres where the vertical frame meets the upper horizontal frame and 50 millimetres where the vertical door frame meets the floor.
- Door vertical clearance in buses and coaches must comply with Australian Design Rule 58.
- Doors and gates on an accessway must luminance contrast with their surroundings as per AS1428.1-2009 *Clause 13.1*. Fully glazed doors must have a luminance contrasting strip as per AS1428.1-2009 *Clause 6.6*.
- Any luminance contrast treatment of doors must not compromise a driver's vision but must meet the relevant State technical requirement for visibility.

These requirements would pertain to buses (except dedicated school buses), coaches, ferries, trains, trams and light rail.

The Transport Standards Guidelines and / or The Whole Journey Guide would be updated to reflect new requirements and include specific guidance for buses, coaches, trains, trams, light rail and ferries.

Specific guidance may include the following:

- For the benefit of passengers who have a vision or cognitive impairment doors or elements on or around doors should have a luminance contrast with a background by at least 30 per cent. Where luminance contrast must be achieved against a background or surface of variable colour, the dominant colour of the background should be the contrasting surface tested.

61. Implementation approach

Implementation options

These implementation options are applicable if legislative amendments are required as a result of Transport Ministers agreeing any regulatory options as part of this reform process.

There are three implementation options proposed.

- Existing assets would need to comply with new regulatory requirements based on a new compliance schedule. Compliance target dates for individual sections of the Transport Standards would be developed with stakeholders.
- Existing assets would need to comply with new regulatory requirements based on a new compliance schedule. Compliance target dates for transport assets (e.g. trams, bus stops, taxi ranks, websites and digital information etc.) be developed with stakeholders.
- Existing assets would only need to comply with new regulatory requirements when certain circumstances are met, triggering compliance obligations with the new requirements.

Option 1 New compliance schedule: Compliance target dates for individual sections of the Transport Standards

Regulatory amendments would apply retrospectively and existing assets would need to comply with these requirements based on a new compliance schedule.

A new compliance schedule would be inserted in the Transport Standards that outlines compliance target dates for **individual sections** of the Transport Standards. Compliance target dates would be developed through consultation with state and territory governments, public transport operators and providers and the disability community, for any new or amended sections of the Transport Standards that have been agreed through this reform process.

This option would ensure that bespoke target compliance dates for each individual amendment to the Transport Standards are fit-for-purpose.

A bespoke compliance schedule may introduce different compliance target dates for different individual amendments, taking into consideration the impact of retrospective application of each amendment. A schedule may also introduce staggered compliance dates (as per Schedule 1) for different sections of the Transport Standards.

For example:

- [New or amended requirements] must be 25 per cent compliant within five years, 55 per cent compliant within 10 years, 80 per cent compliant within 15 years and 100 per cent compliant within 20 years.

Transport Standards, section 32.1 Effect and application of these Standards, would remain unchanged. That is, if an existing asset has undergone substantial refurbishment or alteration, or meets any other trigger outlined in section 32.1, prior to the compliance target date, the asset must be made 100 per cent compliant during this activity.

Option 2 New compliance schedule: Compliance target dates for transport assets covered under the Transport Standards

Regulatory amendments would apply retrospectively and existing assets would need to comply with these requirements based on a new compliance schedule.

A new compliance schedule would be inserted in the Transport Standards that outlines compliance target dates for **transport assets** (for example trams, bus stops, taxi ranks, websites and digital information etc.) covered under the Transport Standards.

Compliance target dates and a defined list of transport assets to be measured would be developed through consultation with state and territory governments, public transport operators and providers and the disability community. The list of measurable assets would need to be exhaustive to ensure all public transport infrastructure, premises and conveyances are covered.

A bespoke compliance schedule may introduce different compliance target dates for different transport assets, taking into consideration the impact of retrospective application for each asset. A schedule may also introduce staggered compliance dates (as per the current Schedule 1) for different transport assets under the Transport Standards.

For example:

- [Transport asset X] must be 25 per cent compliant within five years, 55 per cent compliant within 10 years, 80 per cent compliant within 15 years and 100 per cent compliant within 20 years.

Transport Standards section 32.1 Effect and application of these Standards, would remain unchanged. That is, if an existing asset has undergone substantial refurbishment or alteration, or meets any other trigger outlined in section 32.1, prior to the compliance target date, the asset must be made 100 per cent compliant during this activity.

Option 3 No compliance schedule: Trigger mechanism for compliance with the Transport Standards

Regulatory amendments would apply to all new assets.

Existing assets would only need to comply with new regulatory requirements when the circumstances set out in Transport Standards section 32.1 Effect and application of these Standards, are met. That is, where an existing asset meets one of the conditions in section 32.1 (such as substantial refurbishment or alteration, additional or replacement equipment, new or revised ancillary services, or the provision of new or updated information) the asset will be required to comply with the new regulatory requirements in the Transport Standards.

Meeting one of the conditions of section 32.1 will trigger compliance obligations with the new regulatory requirements.

For example:

- An operator or provider substantially refurbishes a group of tram cars. As a result, conditions under Transport Standards section 32.1 have been met that trigger new regulatory requirements for existing assets.

ⁱ Australian Human Rights Commission, *Guidelines: Equivalent Access under the Disability Standards for Accessible Public Transport 2002 (Cth)*, 14 November 2022, <https://humanrights.gov.au/our-work/disability-rights/publications/guidelines-equivalent-access-under-disability-standards>