

An Assessment of Accessible Accommodation in Australia: Supply and Demand

*Department of
Resources, Energy and
Tourism*

*An Assessment of
Accessible
Accommodation in
Australia: Supply and
Demand*

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Final Report

Acknowledgements

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- Department of Resources, Energy and Tourism (as Chair)
- Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education (regulatory representative)
- Tourism Research Australia
- Tourism Victoria (representative for the Investment and Regulatory Reform Working Group established under the National Long-Term Tourism Strategy)
- Nican (consumer representative)
- Tourism and Transport Forum (industry representative).

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Glossary of terms

Average length of stay	Average number of days each guest stayed during the reference period. It is a derived item calculated by dividing the number of guest nights occupied by the number of guest arrivals with the result expressed as a number of days.
Bed occupancy rate	Bed occupancy expressed as a percentage of total capacity available during the survey period.
Bed spaces	Bed spaces normally in place and available to accommodate paying guests during the survey period. Single beds, three-quarter beds and any beds designed to sleep one person are counted as one bed space. Double, queen and king size beds and any beds designed to sleep two people are counted as two bed spaces. Bunk beds have various configurations. If a bunk bed is designed to sleep two guests, it will count as two bed spaces. Any style of bed that is normally used as a bed is included. Fold away beds and sofas permanently made up as beds are included. Cots, divans and any other type of temporary beds not normally used as beds are excluded.
Capacity	Capacity is the measure of total accommodation stock available at an establishment to accommodate paying guests on the last day of the survey period. It may be given by various measures such as the maximum number of rooms, units, apartments or suites. Capacity closed temporarily for seasonal reasons is included.
Establishments	Hotels and resorts, motels, private hotels, guest houses and serviced apartments within the scope of the survey which operated for any part of the survey period.
Guest (visitor) arrivals	Paying guests counted only on the first night of their stay at the accommodation establishment during the survey period. Guest arrivals may also be known as 'check ins'. If the same individual returns for a second stay at the accommodation establishment during the same survey period, the first night of the second stay is regarded as a separate guest arrival.
Guest (visitor) nights occupied	The total number of paying guests counted on each night they stayed at the accommodation establishment during the survey period.
Guests with disability	A person has disability if they report they have a limitation, restriction or impairment, which has lasted, or is likely to last, for at least six months and restricts everyday activities.
Guests without disability	Guests who do not identify as having a disability. However, they may still have a requirement that leads them to request an accessible room.
Occupancy	Occupancy can refer to the total number of nights each room/unit/apartment/suite was occupied during the survey period or the total number of paying guests counted on each night they stayed at the accommodation establishment during the same period. Room occupancy rates and bed occupancy rates are calculated from room nights and guest nights.

Paying guest (visitor)	Guests occupying rooms provided for short-term non-residential accommodation.
Placed guest(s)	A guest who requires short-term accommodation and is placed in an accessible room, but does not have an accessibility requirement and does not request an accessible room.
Room nights available	The number of rooms/units available multiplied by the number of days for which they were available during the survey period. For establishments closing (other than for seasonal reasons) or opening during this period, operating periods only are included.
Room nights occupied	The nights each guest room/unit was occupied by a paying guest during the survey period.
Room occupancy rate	Room occupancy expressed as a percentage of total capacity available during the survey period, providing that, for establishments closing (other than for seasonal reasons) or opening during the survey period, the denominator of the above expression includes only operating periods.
Rooms	Rooms available for accommodating short-term paying guests at each hotel and resort, motel, guest house, and serviced apartment during the survey period. Units, apartments and suites are treated as rooms for these types of establishments.

Abbreviations

'000	Thousand
AAA	Australian Accommodation Association
ABS	Australian Bureau of Statistics
AHA	Australian Hotels Association
Cat No.	ABS catalogue number
DDA	Disability Discrimination Act
HMGSA	Hotels, motels, guest houses and serviced apartments
IVS	International Visitors Survey
PSC	Project Steering Committee
PwC	PricewaterhouseCoopers
PWD	Persons with disability
NCC	National Construction Code
NVS	National Visitor Survey
TRA	Tourism Research Australia
TTF	Tourism and Transport Forum

Executive summary

On 1 May 2011, the accessible room requirements which are detailed in the Disability (Access to Premises – Buildings) Standards 2010 (Premises Standards) came into effect. The requirements apply to new buildings under Class 3 of the National Construction Code (NCC) of Australia and mean that a minimum number of accessible rooms must be provided by short-term accommodation providers.

On 14 October 2011, Tourism Ministers agreed to investigate the accessible room requirements placed on short-term accommodation providers. The Department of Resources, Energy and Tourism was charged with managing this and commissioned PricewaterhouseCoopers (PwC) to undertake a study to examine the demand for, and supply of, accessible accommodation in Australia.

PwC was tasked with:

- providing evidence of current and future demand for, and supply of, accessible accommodation in Australia
- examining the role of product distribution and consumer information in relation to accessible rooms
- identifying any additional information and data gaps in relation to accessible accommodation not covered in the scope of this study which may need to be addressed prior to the Australian Government's scheduled formal review of the Premises Standards to commence on 1 May 2015.

For this, PwC has prepared a report that has been informed by three key areas of research:

- an examination of existing data sources on accessible accommodation
- two separate surveys: one for accommodation providers and the other for travellers with disabilities
- site visits as part of a qualitative assessment of accessible rooms in comparison to standard rooms.

Approach

In utilising these three key areas of research, the PwC approach focused on the development of robust evidence-based estimates of accessible accommodation. The assessment included estimates of all accommodation; the accessible accommodation component of all accommodation; and supply and demand of each disaggregated by location, pricing points and accommodation type.

The results of the supply of and demand for total accommodation reflect data from the Australian Bureau of Statistics (ABS) and estimates and projections provided by Tourism Research Australia (TRA). Current estimates of the supply of and demand for accessible accommodation are based on the results from the two surveys undertaken as part of the study, calibrated to the ABS and TRA data. Estimates of both are disaggregated by location, pricing points and accommodation and are similarly derived from the same datasets.

Forecasts of supply of accessible accommodation are calculated as a function of TRA projections of supply for all accommodation (derived from estimated room nights demanded and historical trends in occupancy rates). Specifically, growth in accessible accommodation takes into account the growth in supply of all accommodation, trends in construction activity

and the interaction of the current construction standards for accessible accommodation in the NCC.

Forecasts of demand for accessible accommodation are estimated by calculating demand separately for three user groups. Demand for accessible accommodation by people with disability¹ is based on disability prevalence rates and official demographic projections and applied to current demand profiles. Demand by people without disability but requiring an accessible room is estimated to grow in line with demand by people with disability, reflecting an ageing population and age-specific prevalence rates for disability by type of severity being broadly similar. Demand by people without disability and not requiring an accessible room (ie guests that require a room and are placed in an accessible room) is calculated as total demand minus demand for a standard room and demand for accessible accommodation by people that require accessible accommodation.

Key findings

Following the research undertaken as part of this study, PwC made the following key findings.

- Accessible rooms may be used by any guest, but establishments typically hold accessible rooms on a ‘last to let’ basis, primarily for guests with accessible room needs, but also in some cases because of the room attributes,² which is reflected in lower occupancy rates of accessible rooms.
- On average, accessible rooms are rented by people with disability around 30.2% of the time. The remaining time (69.8%) is split between demand from people without disability (34.9%) that have an accessibility need and demand from those that require accommodation and have no accessibility need (34.9%).³
- PwC has estimated that accessible rooms currently comprise 4.0% of the total supply of all accommodation and represent 2.8% of the rooms demanded. That is, the current occupancy rate for accessible rooms across Australia is estimated at 45.5%, compared with 65.9% for all rooms.

Summary table - supply⁴

	2012	2017	2022	2027	2032
Supply, room nights (mil)					
Total	112.5	125.5	133.1	141.7	149.2
Accessible rooms	4.5	6.3	7.8	8.3	8.8
Accessible rooms, %	4.0%	5.0%	5.9%	5.9%	5.9%

¹ A person has disability if they report they have a limitation, restriction or impairment, which has lasted, or is likely to last, for at least six months and restricts everyday activities (ABS 4430.0 – Disability, Ageing and Carers, Australia). It is noted that there is not a single universally accepted definition of disability. Additionally, survey results used in this study relied on self-reporting.

² Accessible rooms tend to be located by design in locations that are in close proximity to lift wells, which can be away from prominent views and may not be attractive to guests. Additionally, accessible room fit outs to meet the building requirements may appear different to the standard rooms in comparison and offer a different hotel experience.

³ Accessible rooms are not required to be held for the sole use of guests with a disability, nor are providers required to determine the nature of the accessibility requirement of someone requesting a room. It is noted that accessible rooms requested by people without disability are as reported by accommodation providers, and they are not required to determine if there is a person with disability using the room.

⁴ See Chapter 3 for details on how these projections were derived. Occupancy of accessible rooms is split between guests who request an accessible room and have a disability, those without a disability but request an accessible room, and guests without disability who request a room and are placed in an accessible room and do not have an accessibility requirement. It is noted that guests without disability but with accessibility requirements, may not necessarily be able to be accommodated in a standard room.

Summary table - demand

	2012	2017	2022	2027	2032
Demand, room nights (mil)					
Total	74.1	85.7	94.4	104.1	113.5
Accessible rooms	2.1	3.2	4.4	4.8	5.3
Requesting guests(s) with disability	0.6	0.7	0.8	0.9	1.0
Requesting guest(s) without disability	0.7	0.8	0.9	1.0	1.1
Placed guest(s) without disability	0.7	1.7	2.7	2.9	3.2
Demand, % of total					
Accessible rooms	2.8%	3.8%	4.6%	4.6%	4.6%
Requesting guests(s) with disability	0.8%	0.9%	0.9%	0.8%	0.9%
Requesting guest(s) without disability	1.0%	1.0%	1.0%	1.0%	1.0%
Placed guest(s) without disability	1.0%	2.0%	2.8%	2.8%	2.8%

Summary table - occupancy

	2012	2017	2022	2027	2032
Occupancy rates					
All rooms	65.9%	68.3%	70.9%	73.5%	76.1%
Accessible rooms	45.5%	51.5%	56.2%	58.2%	60.3%
Requesting guests(s) with disability	13.8%	11.6%	10.2%	10.6%	11.0%
Requesting guest(s) without disability	15.8%	13.2%	11.7%	12.1%	12.6%
Placed guest(s) without disability	15.8%	26.7%	34.2%	35.5%	36.7%

- Supply of accessible rooms is expected to rise from its current 4.0% of total supply to settle at 5.9% in the medium-term once the Premises Standards have worked their way fully through the sector.
- Demand for accessible accommodation by people with accessibility requirements will grow at around an average annual rate 2.2%. This compares with growth in demand for all accommodation of around an average annual rate of 2.1%.
- In the short-term, as the Premises Standards take hold, supply of accessible rooms is expected to initially outpace demand by people with accessibility needs and outpace supply of all accommodation. That is, the proportion of accessible rooms to all rooms increases. In the medium to longer term, demand for accessible rooms by people with accessibility needs will increase moderately faster than supply of accessible accommodation. That is, the occupancy rate of accessible rooms by people with disability increases through time.
- As a result of accessible rooms becoming an increased proportion of all rooms, it is estimated that they will be used more (60.9% of the time) by guests without accessibility needs to meet demand for all accommodation. The average occupancy rate of accessible rooms is expected to grow from 45.5% in 2012 to 60.3% by 2032. This compares with all accommodation moving from 65.9% and 76.1% over the same period.

- Results from PwC's survey of accommodation providers found that where guests without accessibility requirements were placed in accessible rooms, on average:
 - 19% of the time the accommodation provider received complaints
 - 47% of complaints had to do with the aesthetics or the "look and feel".
- Accessible rooms will continue to be occupied by guests with and without accessible needs and the aesthetics of accessible rooms is likely to continue to be an issue. In conducting this study, PwC has found that there are good examples of high quality accessible rooms that appeal both to people with and without disability.
- Results from PwC's survey of travellers with disability show that accessibility requirements can be very different for each individual, with a wide range of disability support needs reported and a substantial percentage of respondents, 28%, reported having more than one support need.
- Survey results also point towards information asymmetry (ie information not linking travellers with appropriate accommodation) as one possible cause of lower occupancy rates for accessible rooms by people with disability relative to standard rooms. Further, the inability to assess whether a particular room would meet their accessibility needs was widely reported as frustrating, potentially leading some people with disability not travelling at all.
- Overall, when asked about the quality of information available, the travellers with disability surveyed were split. Average satisfaction was rated as 2.7⁵ out of five for accommodation provider sites and 2.8 for third party information providers. Ratings above three were only given by 21% and 22% of respondents respectively. Many respondents reported using a second or third source to verify information.
- While information on accessible accommodation was viewed as poor, 45% of respondents thought that accommodation providers were generally 'helpful' or 'very helpful' at meeting their accessibility needs once issues were raised with accommodation staff or management.
- Findings from the survey also showed that service quality could not only increase satisfaction with a hotel experience, but could increase accessibility for some travellers, if staff were willing to help move furniture or orientate a guest with features of the room.

Conclusions

It is estimated that in the near term, growth in the supply of accessible rooms will increase faster than the growth in demand for guests requiring accessible rooms as the revised Premises Standards come into effect. Once the Premises Standards have worked their way fully through the short term accommodation sector, demand for accessible rooms starts to grow faster (albeit off a smaller base) than supply, as growth in supply steadies in line with normal replacement and construction cycles of the accommodation industry.

⁵ Where 1 = poor and 5 = excellent. Scores of 3 were taken as moderate.

Importantly, it is estimated that the number of instances that accessible rooms will be used by guests without disability will increase. This is because demand for all rooms is estimated to grow faster than supply of all rooms, so the instances where accessible rooms are let out when standard rooms are not available is likely to increase. It was also concluded that demand will also come from people without disability that request rooms for their accessibility features, despite not identifying as a person with disability.⁶

The net effect of the above is as demand for accessible rooms steadily grows, this will be reflected in increasing occupancy rates over the projection period. As an outcome of the Premises Standard, PwC determined that accessible rooms are likely to become of growing importance to accommodation providers.

Additionally, the finding that accessible rooms will be occupied for the majority of the time by people without accessibility requirements provides valuable insight to the industry going forward. That is, it will be important that providers ensure that their accessible rooms are designed in such a way that guests (with and without accessibility requirements) have the right hotel experience and return their business. This conclusion was confirmed in the survey results, site visits and consultations. In conducting this study, PwC has found that there were good examples of high quality accessible rooms that appeal both to people with and without disability.

Opportunities for further exploration

Based on the assessment of supply for, and demand of, accessible accommodation in Australia, PwC has identified the following opportunities for further exploration.

- **Opportunity 1** – Explore the option of revising room ratios to account for various levels of support need.
- **Opportunity 2** – Explore various models to develop and implement an information sharing arrangement for accessible accommodation based on the requirements of various stakeholders, including government, industry and travellers.
- **Opportunity 3** – Explore options to increase support for, and awareness of, innovative accessible design.
- **Opportunity 4** – Explore the development of an accessibility customer service tool kit.
- **Opportunity 5** – Explore the option to further survey or study specific areas of supply of and demand for accessible accommodation to develop a deeper understanding and provide additional information for policy formation.

⁶ Population ageing is projected to continue. The number of children is projected to increase by 45 per cent and the number of prime working age people is project to increase by 44 per cent between 2010 to 2050. This is expected to occur at the same time as the number of older people (65 to 84 years) more than doubles, and the number of very old (85 and over) more than quadruples ('Australia to 2050: future challenges', the Australian Government's intergenerational report, 2010).

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1 Introduction

1.1 Background

The Disability (Access to Premises – Buildings) Standards (the Premises Standards) came in to effect on 1 May 2011. The Premises Standards codify compliance under the Commonwealth’s *Disability Discrimination Act 1992* (DDA) in relation to buildings that are open to the public. The Premises Standards aims to provide certainty to industry on how to meet the requirements of discrimination law and eliminate unreasonable barriers to participation by giving greater and dignified access.⁷

During the development of the Premises Standards, issues were raised by the tourism industry and accommodation stakeholders in regards to the increased accessible room ratio requirements. Some stakeholders argued that the increased accessible room ratio would cause increased financial hardship on developers and accommodations providers as there was insufficient demand for rooms of this kind.

The House of Representatives Standing Committee on Legal and Constitutional Affairs (the Committee) did not support industry’s position on this matter and considered increased room requirements not excessive or unjustified. Instead, the Committee suggested that many of the issues raised could be eliminated through careful design, better marketing, staff education and consultation with the disability sector. In particular, the Committee noted that only anecdotal evidence was present to assert that demand was far outweighed by supply of accessible rooms.

In its *2010 Annual Review of Regulatory Burdens on Business*, the Productivity Commission (the Commission) discussed the issue of the ratio of accessible rooms.⁸ The Commission noted the Premises Standards were developed without a detailed quantitative demand and supply assessment but that evidence presented indicated a possibility that room requirements may be excessive. The Commission noted that it would be inappropriate to recommend changes so soon after the Premises Standards introduction but suggested an independent assessment of supply and demand should be made prior to the scheduled formal review of the standards.

On 14 October 2011, Australia’s Tourism Ministers agreed to further investigate the introduction of new accessible room ratios to examine if these requirements constituted a barrier to new accommodation investment. The Department of Resources, Energy and Tourism has commissioned PricewaterhouseCoopers (PwC) to undertake a study to examine the demand for, and supply of, accessible accommodation in Australia. The findings of this study will provide input to the scheduled formal review of the Standards due to commence on 1 May 2015 and be completed by 1 May 2016.

⁷ House Standing Committee on Legal and Constitutional Affairs. *Inquiry into the draft Disability (Access to Premises – Building) Standards*. Web: http://www.aph.gov.au/Parliamentary_Business/Committees/House_of_Representatives_Committees?url=laca/disabilitystandards/report/chapter1.htm. Last accessed: 27 March 2013.

⁸ Tourism and Transport Forum. “Productivity Commission Annual Review of Regulatory Burdens: Tourism Submission.” Submitted February 2010. Web: http://www.pc.gov.au/__data/assets/pdf_file/0009/95607/sub005.pdf. Last accessed 7 May 2013.

1.1.1 Premises standards

The technical requirements of the Premises Standards are mirrored in the National Construction Code (NCC), which in turn is referenced in state and territory building law. This enables the requirements of the Premises Standards to be met at the time of construction where accessibility can be incorporated in to the design process, rather than relying on compliance through a complaints-driven process under the DDA.

When construction of a new building or significant renovations of an existing building is undertaken it requires certification against the performance requirements in the NCC. As these requirements mirror the Premises Standards, compliance under the Premises Standards, and hence the DDA, is also met. The nature of the requirements imposed by the Premises Standards depends on the type of building in question.

While the Premises Standards encompass a wide array of construction requirements, with respect to specific room requirements, the key details (applicable to the scope of this project) are summarised in Table 1.⁹

Table 1: Accessible room requirements

Building class	Room requirements
Class 1b: Boarding house, guest house, hostel or holiday houses not otherwise included elsewhere	<p>If group of dwellings used for short term holiday accommodation:</p> <ul style="list-style-type: none"> • 4-10 dwellings, 1 must be accessible • 11-40, 2 accessible • 41-60, 3 accessible • 61-80, 4 accessible • 81-100, 5 accessible • Over 100, 5 accessible plus 1 for each 30 extra dwellings or part thereof. <p>A boarding house, B&B, hostel etc:</p> <ul style="list-style-type: none"> • 1 bedroom and associated bathroom, • Not less than 1 of each type of common space.
Class 2: Apartments	No number of room requirements. Accessibility requirements apply to all common areas and public accesses.
Class 3: Residential building other than class 1 or 2, including residential part of a hotel, hostel etc.	<p>If:</p> <ul style="list-style-type: none"> • 1-10 units, 1 must be accessible • 11-40, 2 accessible • 41-60, 3 accessible • 61-80, 4 accessible • 81-100, 5 accessible • 101-200, 5 plus 1 for each 25 extra or part thereof • 201-500, 9 plus 1 for each 30 extra or part thereof • More than 500, 19 plus 1 for each 50 extra or part thereof.

Source: *Disability (Access to Premises – Buildings) Standards 2010* (Cth)

⁹ In addition to the room requirements, each a class of building must also meet certain accessibility standards with respect to its public spaces and common areas.

The Premises Standards contain numerous access, accommodation and fire safety standards, and can influence construction costs, return on investment, revenue, product type, and product quality. There is industry concern that the application of the Premises Standards can result in rooms that are not as aesthetically pleasing compared to standard rooms and potentially results in lower occupancy.

The current NCC does generally allow for alternative, or performance based, solutions along with deemed-to-satisfy provisions. However, accommodation providers highlighted a hesitation to explore new options given potential risks around legal liability. This is because only exact adherence to the Premises Standards will guarantee that a building meets the requirements of the DDA standards and following deemed-to-satisfy provisions guarantees this adherence.

1.2 Engagement scope

The main task of this project is to examine the ways in which the Premises Standards interact with real world supply and demand pressures. Specifically, the scope of this project was to undertake five main tasks.

- 1 Conduct an analysis of existing data sources to determine:
 - a the current supply of accessible rooms in Australia in metropolitan and non metropolitan areas
 - b the level of potential demand for short term accessible accommodation including metropolitan and non-metropolitan areas, over the next 20 years taking into account factors including the ageing population
 - c trends in international travel for people with disability
 - d industry best practice in the design and distribution of accessible accommodation, including service quality.
- 2 Conduct a survey of tourism accommodation operators and industry associations to determine:
 - a current demand for existing accessible rooms, building upon existing studies where possible
 - b current industry practices in product distribution and consumer information in promoting and selling accessible rooms.
- 3 Conduct a survey of people with a physical disability requiring a mobility aid to determine:
 - a the availability of accessible accommodation in metropolitan and non-metropolitan areas based on actual booking experiences
 - b the amenity of accessible accommodation (including room design and location) and shared guest facilities based on actual experiences
 - c the level of available information when making travel planning decisions and purchasing accessible accommodation (eg realistic, accurate and detailed access information about the property to make an informed choice based on particular access needs) based on actual experiences
 - d service quality when utilising accessible accommodation based on actual experiences
 - e barriers to booking and utilising accessible accommodation.

- 4 A qualitative assessment of accessible rooms, based on a representative sample of premises in metropolitan areas, to ascertain if there are any significant differences in quality or aesthetics compared to a standard room in the same premises
- 5 Using the above information, and drawing on existing information on projected trends relating to people with disability, to estimate demand for accessible accommodation at present and into the future.

The scope of the project did not include:

- an audit or assurance of any kind
- a detailed study into disability, accessibility or accessible tourism, accessible transportation, or accessibility of common areas¹⁰
- an analysis of issues related to legal liability or discrimination in relation to accessible accommodation
- a review of compliance with legislated accessibility or disability requirements
- a review of adherence to industry code or best practice with respect to accessibility
- review of any existing policy or program aimed at addressing accessible accommodation or accessible tourism
- a review of the accessible accommodation regulations which came into effect on 1 May 2011
- a detailed literature review concerning accessibility, accessible tourism, or tourism economics
- a broader study of tourism or accessible tourism in Australia or around the world.

1.3 Report structure

The purpose of this document is threefold:

- 1 Describe and document the approach undertaken to conduct this study as well as highlight any limitations and constraints in undertaking this study
- 2 Present PwC's findings with respect to the supply of, and demand for, accessible accommodation in Australia including:
 - a the current supply of accessible accommodation in Australia compared to overall accommodation supply, including those with shared hotel amenities
 - b the current level of actual and potential demand for accessible accommodation in Australia and issues impacting on this demand
 - c expected future supply of, and demand for, accessible accommodation including scenarios based on accommodation providers addressing any issues identified as impacting on current demand

¹⁰ While this has not been studied in detail, accessibility and accessibility features of common areas have been considered and form part of our overarching analysis and recommendations.

- d geographical differences in supply and demand (ie metropolitan versus regional)
 - e any information gaps between what consumers need and expect when booking accommodation and during their stay compared to what is currently provided
 - f product differences in supply and demand (ie hotel, motel, serviced apartment, visitor hostel, caravan park).
- 3 Identify opportunities for further research, including:
- a options for accommodation providers to help maximise demand for accessible accommodation, including in relation to the design and distribution of accessible accommodating and service quality
 - b additional information in relation to accessible accommodation which may need to be addressed prior to the scheduled review of the Standards.

This report has been structured into five separate sections with supporting detail provided in the appendices:

- This first section explains the background to this study. This includes the history of the new standards, the reasons why an independent report was commissioned, and an outline of the scope of this engagement.
- The second section contains key results from two surveys and highlights key findings that have informed our assessment of supply and demand.
- The third section contains results and analysis of PwC's assessment informed by a data and literature review and survey results. This includes an assessment of current supply and demand and forecasts of supply and demand.
- The fourth section outlines case studies results from site visits to accommodation properties in Australia, as well as key themes emerging from each site visit.
- The final section outlines opportunities for further exploration and sets out possible next steps, including additional research and data to support the scheduled review of the Standards.

2 Surveys

2.1 Overview of surveys

A key objective of this study was to conduct surveys of both accommodation providers and travellers with disability to better understand both sides of the accessible accommodation transaction. This was to allow an assessment of supply and demand based on their actual operating and travelling experiences, respectively.

A key purpose of the accommodation provider survey was to collect both quantitative and qualitative information from accommodation providers to better understand:

- current demand for existing accessible rooms (building upon existing studies where possible)
- current industry practices in product distribution and consumer information in promoting and selling accessible rooms.

A key purpose of the survey of travellers with disability is to determine:

- the availability of accessible accommodation in metropolitan and non-metropolitan areas based on actual booking experiences
- the amenity of accessible accommodation (including room design and location) and shared guest facilities based on actual experiences
- the level of available information when making travel planning decisions and purchasing accessible accommodation (eg realistic, accurate and detailed access information about the property to make an informed choice based on particular access needs) based on actual experiences
- service quality when utilising accessible accommodation based on actual experiences
- barriers to booking and utilising accessible accommodation.

This section of the report outlines the findings from the two surveys and covers current supply of and demand for accessible accommodation, product distribution, availability and amenity of accessible rooms, information and service quality, and other barriers to travel faced by travellers with disability.

Details regarding the development and promotion of the surveys have been included in Appendix D and the full list of survey questions in Appendix F.

2.2 Survey of accommodation providers

The survey of accommodation providers received 244 responses. This represents 391 properties accounting for 18,275 rooms. This sample represents approximately a 5% margin of error at a 95% confidence interval. This overall response rate was good, with a fair distribution of respondents from regional and capital cities. However, at the state level, there was an uneven coverage of respondents which may not provide an accurate picture of accessible accommodation on a state by state basis.¹¹ As such PwC's analysis has been aggregated to the capital city, regional and national levels.

2.2.1 Current demand for accessible accommodation

Table 2 provides a summary of key quantitative data collected through the survey.

Table 2: Summary of respondent data

Key data	Regional	Capital City	Australia
Total properties, number	277	114	391
Average property age, years	21.1	17.5	18.8
Average star rating, number	4.0	4.3	4.2
Total rooms, number	6,528	11,747	18,275
Total accessible rooms, number	207	528	735
Rooms that are accessible, %	3.2	4.5	4.0
Average occupancy, %	51.5	82.9	71.6
Average occupancy of accessible rooms, %	37.7	54.7	49.9
Average room rate, \$	91.7	173.1	144.0
Average room rate of accessible rooms, \$	124.0	97.5	105.0

Source: PwC survey

The survey results show that the average occupancy for all rooms in 2012 is estimated at 71.6% nationally, 82.9% in capital cities and 51.5% in regional areas. This compares to a national overall occupancy rate of 65.9%.¹² Accessible room occupancy is estimated at 49.9% nationally, 54.7% in capital cities and 37.7% in regional areas. Respondents further indicated that, on average, 70% of the time they will rent an accessible room to customers without disability. In cases where accessible rooms are occupied, in 50% of those instances, the customer has requested an accessible room. In the other 50% of cases, the customer has been placed in an accessible room, when for example; a standard room was not available at check-in.

In 2010, the Tourism and Transport Forum, in conjunction with the Australian Hotels Association, undertook a survey to better estimate supply of and demand for accessible accommodation. The 2010 survey found that occupancy for accessible rooms for guests with

¹¹ For example, the survey received almost twice as many responses from Victoria as from New South Wales or Queensland. Both states represent significant tourist destinations.

¹² Australian Bureau of Statistics. "8635.0 – Tourist Accommodation, Australia, Dec 2012." Web: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/8635.0Main+Features1Sep%202012?OpenDocument>. Last accessed 13 March 2013.

accessible needs was 30.7%, compared to occupancy of 71.4% for non-accessible rooms.¹³ These results are comparable with the PwC survey results which shows that occupancy for guests who requested accessible rooms is estimated at 32.5% (see Table 3; note, occupancy for those with disability is 15.1% and for those without disability but requested accessible rooms¹⁴ occupancy is 17.4% yielding a total of 32.5%).¹⁵

Table 3: Summary of occupancy rates

Room occupancy rates, %	Regional	Capital City	Australia
All rooms	51.5	82.9	71.6
Accessible rooms	37.7	54.7	49.9
Guest(s) with disability	11.4	16.5	15.1
Requested by guest(s) without disability	13.2	19.1	17.4
Guest(s) without disability placed	13.2	19.1	17.4

Source: PwC survey

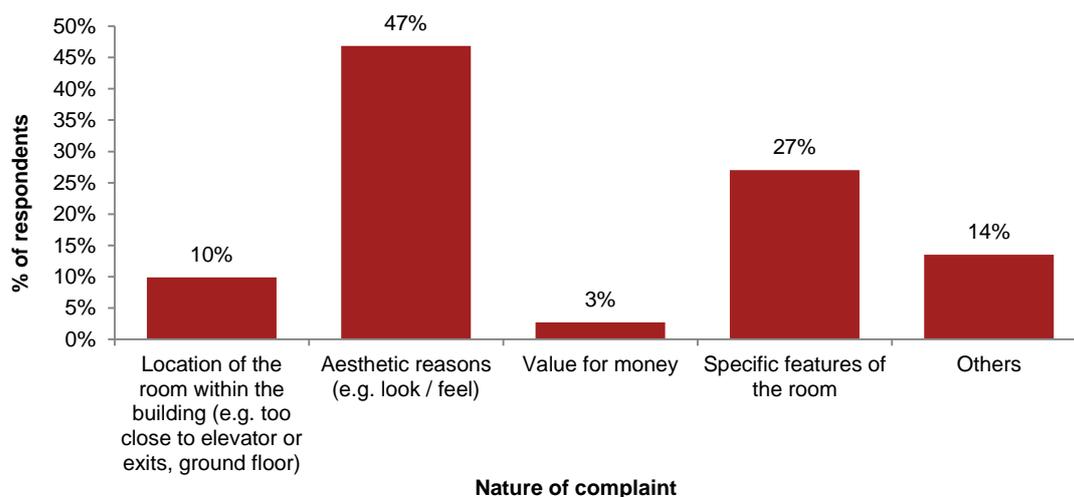
In situations where respondents placed customers without disability in accessible accommodation, on average the accommodation provider received complaints 19% of the time. Looking at these drivers in more detail, respondents indicated that 47% of those complaints were related to the aesthetics (or the “look and feel”) of the room. Further, 53% of respondents indicated that travellers without disability who had been placed in an accessible room received requests that they be moved.

Qualitatively, respondents indicated that primary issues typically related to the quality of the shower and bathroom facilities. Specifically, this would include elements required in the Premises Standards such as vertical grab bars in showers or specific dimension requirements for the toilets. Another 27% indicated that there were specific features of the room that were at the heart of the customer’s complaint. Again, qualitatively, respondents indicated that this may have to do with features such as lower counter tops or visual alarms in the room which detract from the overall hotel experience.

¹³ Tourism and Transport Forum. “Productivity Commission Annual Review of Regulatory Burdens: Tourism Submission.” Submitted February 2010. Web: http://www.pc.gov.au/__data/assets/pdf_file/0009/95607/sub005.pdf. Last accessed 7 May 2013

¹⁴ Survey responses on the reasons for the request included: to better accommodate elderly, more room space, room features (eg slip-proof surfaces, grab rails), better accommodate younger guests, more space in bathrooms, and walk in showers.

¹⁵ This is the sum of occupancy by guests with disability (15.05%) and requested by guests without disability (17.43%).

Figure 1: Nature of complaint from non-disabled guest allocated an accessible room

Source: PwC survey

However, of note, 55% of accommodation providers surveyed reported having received a request for accessible rooms from people without disability. In general, the most common reason for these requests was to better accommodate elderly travellers. Similar research has shown that businesses that established good accessibility, and advertised it, had the unexpected outcome of increased patronage by elderly travellers, and also families with young children.¹⁶

Given these reasons for complaints, one possible avenue for increasing the implied low demand rate would be to explore design options that minimise the aesthetic differences between accessible and standard rooms. However, when asked about incorporating accessible and universal design principles into the construction of accessible accommodation, 55% of respondents indicated that they were not familiar with universal design principles as compared to 25% of respondents who indicated that they are familiar.¹⁷ Of those respondents that were familiar with universal design principles, 53% indicated that they had actually explored building them into their future accommodation property designs.

While this does not conclusively provide an indication of the broader awareness of concepts such as universal design and universal access, it does suggest an opportunity to improve understanding and awareness.

2.2.2 Product distribution and consumer information

With respect to product distribution, accessible rooms are generally managed on a 'last to let' basis. This means that, in general, accommodation providers will hire out their standard rooms until a traveller with or without disability requests an accessible room or when standard rooms are unavailable at which point accessible rooms are allocated on a 'first come, first served basis'.

To promote and distribute accessible accommodation, it was found that providers typically use the same channels used to distribute standard accommodation. As shown in Figure 2, the primary method is to provide information to customers on the room features and specifically

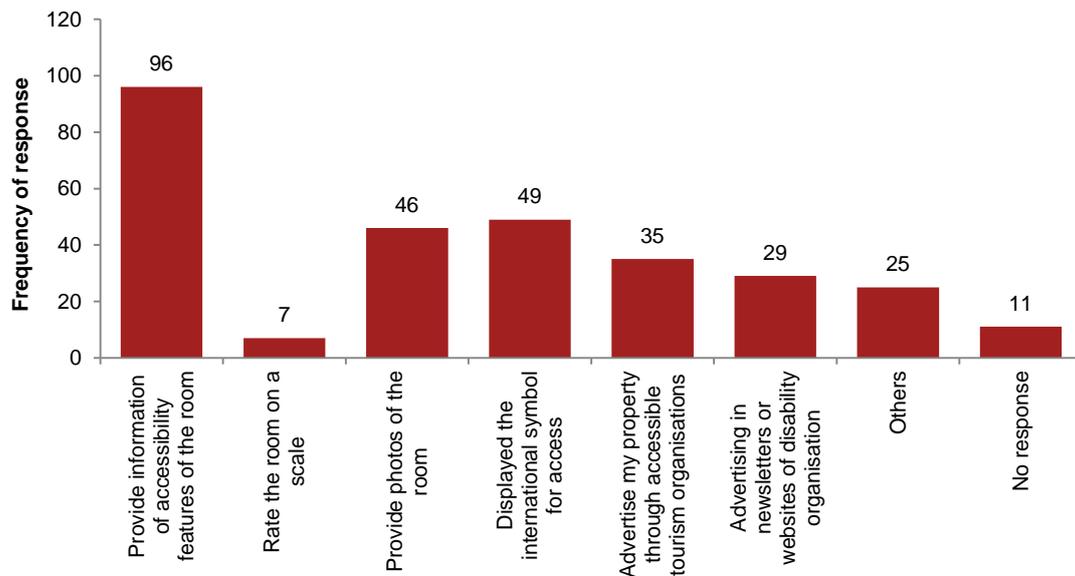
¹⁶ Darcy, Simon, Bruce Cameron, Shane Pegg and Tanya Packer (2008). "Developing Business Case Studies for Accessible Tourism". CRC for Sustainable Tourism. Web: <http://www.sustainabletourisonline.com/86/growing-niche-markets/developing-business-case-studies-for-accessible-tourism>. Last accessed 7 May 2013.

¹⁷ The role of the survey respondents varied between accommodation providers. In some cases, the respondent appeared to be in a management role while in other cases they appeared to be an owner/operator. As such, it is likely that their knowledge of universal design and access might vary depending on the nature of their occupation.

identify whether rooms are wheelchair accessible. However the precise nature of this information varies considerably with respect to the level of detail.

A number of providers indicated that they display the international symbol for access, however, since the use of accessibility symbols is not independently audited this is treated with caution by travellers. Many respondents to the travellers with disability survey indicated that they rely on photographs of the accommodation, rather than assume accessibility when symbol is displayed.

Figure 2: Method for promoting accessible accommodation



Source: PwC survey

Anecdotally, however, PwC’s site visits noted that marketing directly to people with disability is not actively pursued by accommodation providers on the basis of the estimated returns compared to other market segments. This was also reflected in some qualitative survey comments from accommodation providers that they did not actively market their accessible rooms, provide specific information on features and physical characteristics, or indicate in any way that they have accessible rooms.

Similarly, a 2010 study undertaken by Simon Darcy found that many accommodation properties with accessible rooms did not explicitly market these rooms publicly.¹⁸ This same report found that, through product testing, best practice information provision was by way of digital photography with a floor plan and detailed textual description of the property’s physical characteristics. Broadly, this combined approach was preferred over only using a single method or using an icon indicating accessibility. The study further highlighted that advertising or providing such information to people with disability could potentially result in a competitive advantage for accommodation providers.

An example of excellence in marketing was the collaborative marketing efforts of the deaf community and the Australia Hotel Motel and Accommodation Association. The two parties agreed on inclusive provisions and AHMA Association members who comply with those provisions are marketed through a website by the Deafness Forum.

¹⁸ Darcy, Simon (2010). “Inherent complexity: Disability, accessible tourism and accommodation information preferences” *Tourism Management* 31 (2010) 816-826.

Other websites, such as the Australia For All Alliance, are devoted entirely to providing information on accommodation and leisure venues which are accessible to people with disabilities. They provide a valuable community service in catering for people with disabilities and connecting them with accessible accommodation providers. For example, the Australia for All Alliance require photographs of the accessible toilet/shower areas and exterior of the building so that potential guests can see the fixtures and fittings and decide at that time of booking whether they meet their personal needs.¹⁹ This is designed to save any misunderstanding about the accessibility of the facility.

2.3 Survey of travellers with disability

In addition to the accommodation provider's survey, PwC received 402 responses from travellers with disabilities. At a 95% confidence level, this yields approximate margins of error of approximately 5%.

2.3.1 Availability and amenity of accessible accommodation

Availability

Based on the sample of survey responses, 58% of respondents indicated that they have been turned away because there are no accessible rooms available.²⁰ Of those individuals that indicated that they had been turned away, 80% indicated that they had been informed of the reason. The responses received generally centred on the situation where the accommodation was simply full and there was no available space, accessible or otherwise. The single greatest reason (at 38% of all responses) was an insufficient number of accessible rooms.²¹

Anecdotally, accommodation providers indicate that they generally will attempt to reallocate guests between accessible and standard rooms should the need arise; however this is depending on existing guests being willing to move and/or being able to logistically arrange such a reallocation.

From the accommodation provider survey, accessible rooms were sold out 103.46 nights per year. Given that this represents approximately 28% of the year, there is always the possibility of short-term undersupply of accessible accommodation (or undersupply of accommodation in general, if accessible rooms are being used as overflow), particularly in high season or during special events. In other situations respondents highlighted that:

- the room was double booked
- accessible features were unsuitable
- provider did not want guide dog in dedicated accessible room.

An important consideration with respect to availability of accessible accommodation is that accessible rooms are not required to be held *solely* for people with disability. As such, in periods of high demand this result is not surprising.

Amenity

The amenity of accessible accommodation covers two different aspects: appropriateness and quality. Survey respondents clearly articulated that appropriateness of accessible

¹⁹ Examples of accessible rooms, including descriptions and photos, can be seen at: <http://www.australiaforall.com>

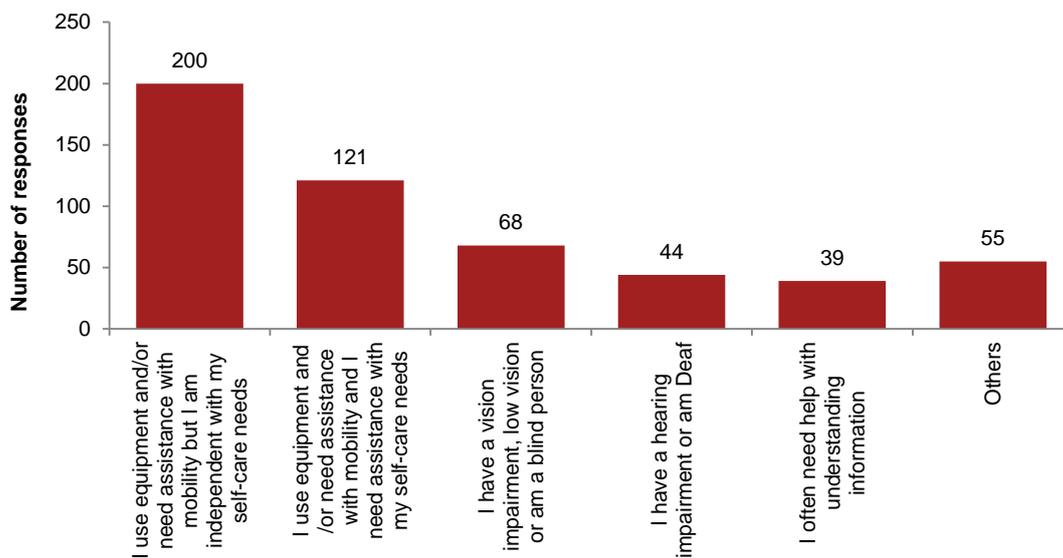
²⁰ The survey question only asked if they have ever been turned away, not if they were unable to get any accessible accommodation within a particular market or during specific time frames and/or events.

²¹ The survey question only asked if they have *ever* been turned away, not if they were unable to get any accessible accommodation within that particular market.

accommodation is dependent on the nature and level of disability support needs as not every disability has the same need or requires the same level of support.

When asked to describe their disability support needs, survey respondents predominately highlighted mobility issues with a clear split between respondents who reported that they are independent with their self-care need and those who require assistance with their self-care needs.

Figure 3: Disability support requirements

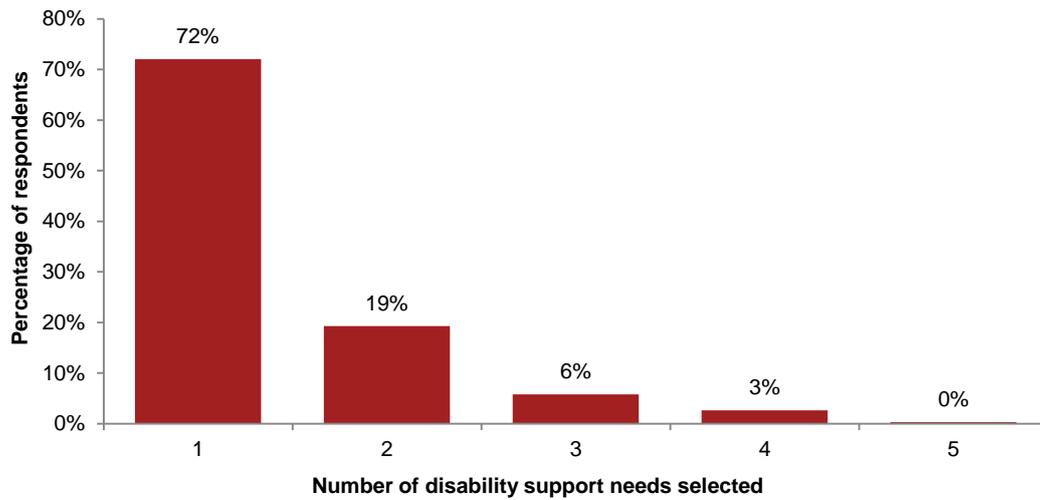


Source: PwC survey

Figure 3 illustrates the breadth of disability support requirement of travellers with disability. It is important to note that, while they represent a smaller group overall; vision, hearing and cognitive disabilities also figure significantly in the sample. As will be explored further in this report, these groups generally have support requirements that are typically not captured in the primary design focus of the Premises Standards. Indeed, some respondents were critical of this point, particularly in situations where travellers felt discriminated because accessibility features are built in a single, less aesthetically pleasing, “accessible” room. As one hearing impaired traveller remarked in a survey; *“I really have huge dislike for any hotels that place me in a disabled room. I am able bodied and only need a hospitality kit (flashing lights, TTY or shake awake)”*.

Further, with respect to Figure 4, respondents were allowed to select multiple disability support requirements. A proportion of respondents, some 28%, selected more than one disability support requirement further illustrating the complexity experienced by a significant percentage of individuals travelling with disability.

Figure 4: Number of disability support needs reported



Source: PwC survey

Finally, the survey allowed respondents to select ‘other’ if their disability did not fit in to one of the prescribed categories. Answers that were included as other disabilities were autism, intellectual disabilities, chronic fatigue, mental illness, chemical sensitivity and electrosensitivity.

Given the breadth of disability support requirement, in response, accommodation providers indicated that they have undertaken a number of steps to alter or modify their premises. Table 4 and Table 5 provide a summary of the most common responses by accommodation providers to meeting the needs of travellers with disability.

Table 4: Modifications or alterations to common areas

Modification	Rank
Alterations or modifications to entryways and landings	1
Modifications to handles and/or grab rails	2
Addition of, or alterations to, accessible toilet facilities	3
Alterations to doors	4
Removing obstructions from pathways	5
Alterations or modifications to kerbs	6
Addition of, or alterations to, slip proof surfaces	7
Braille and/or tactile signage	8
Addition of, or alterations to, seating or other surfaces (eg tables, counters)	9
Others	10
Braille and/or tactile information on amenities and services (eg menus, guide books)	11
Addition of, or alterations to, visual assistance equipment	12
Addition of, or alterations to, hearing assistance equipment	13

Source: PwC survey

Table 5: Modifications or alterations to accessible rooms

Modification	Rank
Modifications to handles and/or grab rails	1
Modifications to doors	2
Addition of, or alterations to, accessible toilet facilities	3
Addition of, or alterations to, modifications to entryways	4
Removing obstructions from pathways	5
Alterations to the height of electrical plugs, fixtures, faucets, handles, locks, or peep holes	6
Addition of, or alterations to, slip proof surfaces	7
Addition of, or alterations to, seating or other surfaces (eg height of tables, counters, seating)	8
Braille and/or tactile signage	9
Addition of, or alterations to, visual assistance equipment	10
Addition of, or alterations to, hearing assistance equipment	11

Source: PwC survey

These findings are contrasted with Table 6 and Table 7 which highlight problems encountered by travellers with disability.

Table 6: Features of common areas where most problems encountered, by disability type

Ranking	Mobility	Vision	Hearing	Cognitive
1	Kerbs or ramps	Signage	Captioning on TVs	Handles and grab rails
2	Paths of travel in and out of accommodation	Tactile signage	Visual alarms for emergency egress	Kerbs or ramps
3	Toilet facilities	Obstructions on pathways	Vision information	Enough space to turn
4	Obstructions on pathways	Lighting	Orientation or knowledge of staff	Doors and entry ways
5	Suitable car parks	Elevators	Audio display or closed captioning of hotel information	Obstructions on pathways

Source: PwC survey

Table 7: Features of rooms where most problems are encountered, by disability type

Ranking	Mobility	Vision	Hearing	Cognitive
1	Knowledge of staff of disability awareness issues	Knowledge of staff of disability awareness issues	Visual information to complement public announcement	Location and access of spare pillows, blankets, toilet rolls etc
2	Shower facilities	Signage	Visual alarms for emergency egress	Orientation or knowledge from staff regarding accessibility features
3	Access to balconies and outdoor areas	Orientation or knowledge from staff regarding accessibility features	Captioning on TVs	Enough space to turn
4	Location and access of spare pillows, blankets, toilet rolls etc	Obstruction in hallways	Knowledge of staff of disability awareness issues	Doors and entry ways
5	Doors and entry ways	Lighting	Orientation or knowledge from staff regarding accessibility features	Electrical plugs, fixtures, faucets, handles, locks, or peep holes

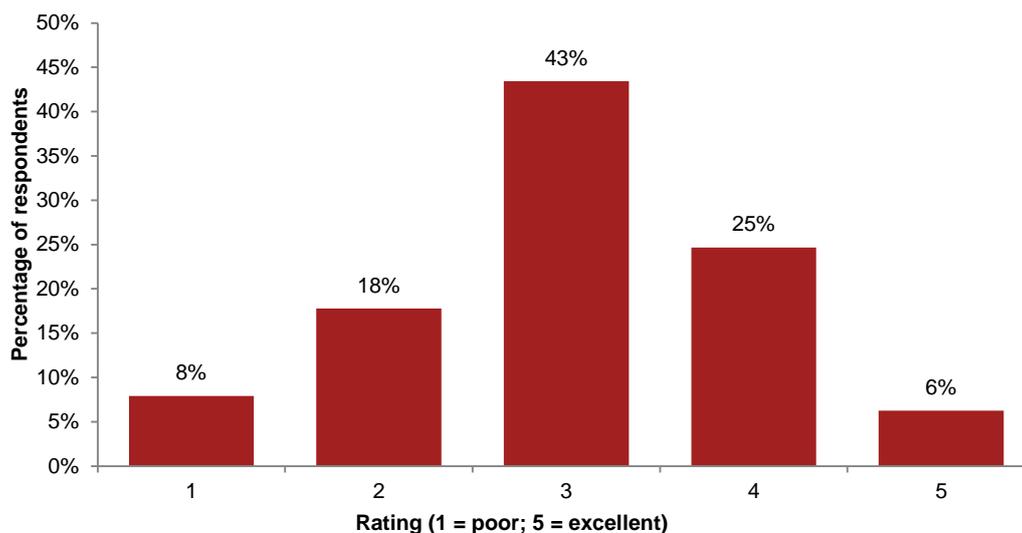
Source: PwC survey

Clearly, all building construction is required to comply with the Premises Standards and the NCC. This discussion is not meant to imply that developers are not compliant, rather it is

meant only to highlight where, in practice, design efforts are working to eliminate access problems or where additional efforts may be required.

Based on survey respondents' own experiences, there may be a number of important contextual and design factors not captured in the Premises Standards. It is also important to note that respondents might also have multiple accessibility requirements which further complicate this analysis. Anecdotally, when this issue was raised with a design architect, the architect indicated that in many ways the Premises Standards are so prescriptive in terms of technical requirements that it may in fact limit the range of design options available to developers and detract from hotel experience of guests with and without disability.

Figure 5: Quality of accessible room compared to a standard room



Source: PwC survey

Figure 5, above, shows the impressions of travellers with disability on the quality of an accessible room. It shows that a majority have found the quality reasonably comparable (with 74% of respondents rating the quality as the same or better).

2.3.2 Information quality

Information quality is an important prerequisite for aligning supply with demand. Buyers and sellers must both be clear on the products or services being offered and in the price to be paid. This holds true for the accommodation industry, particularly with respect to travellers with disability. Conceptually, as has been noted elsewhere in this report, and in previous literature,²² there is a great deal of variation with respect to what “accessible” means. For travellers with disability if the information provided is not accurate this often means that the accommodation is simply not useable, particularly when adjustments to the physical space are not possible.

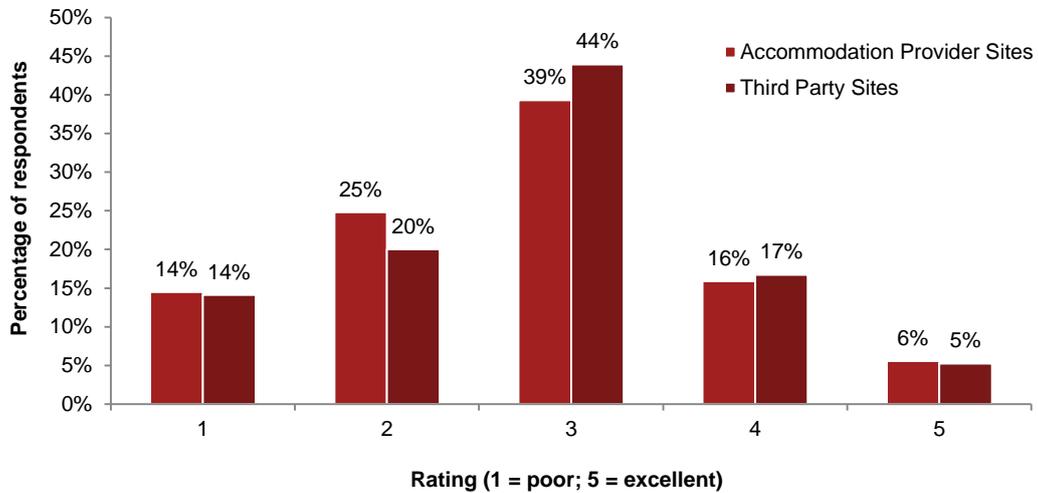
Overall, when asked about the quality of information available, the travellers with disability surveyed were split. For accommodation provider sites, the average satisfaction rating was rating it 2.73 out of five,²³ with only 21% of the respondents providing a score greater than three. In the case of third party information providers, the results were very similar with

²² For example in Simon Darcy and Shane Pegg’s 2010 paper “Towards Strategic Intent: Perceptions of disability service provision amongst hotel accommodation managers”, it was found that the understanding of what hotel managers regarded as accessible varied greatly.

²³ Where 1 = poor and 5 = excellent. Scores of 3 were taken as moderate.

these receiving a rating of 2.8 out of five, with 22% providing a score greater than three out of five.

Figure 6: Quality of information



Source: PwC survey

When looking at respondents' methods for locating information on accommodation, the internet ranks as the preferred channel. Sourcing information directly from accommodation providers ranks second while word of mouth ranks third. Importantly, respondents indicated that they rely on more than one channel to locate the required information. This finding is supported by qualitative comments that travellers with disability tend to verify primary information by following up with information from within the people with disability community (through word of mouth, social media or disability organisations) or by engaging directly with the provider to confirm the accuracy of the information on the website.

Table 8: Travellers preferred source of information

Channel	Rank
Internet websites	1
Direct from accommodation establishments (eg Websites, direct phone, brochures, etc.)	2
Word of mouth	3
Disability and information service organisations	4
Testimonial websites (eg TripAdvisor, etc.)	5
Travel guide books	6
Social media (eg Facebook, Twitter, etc.)	7
Others	8
Newsletters	9
Television or radio	10

Source: PwC survey

This is further reinforced by the fact that only a small fraction of respondents rated the quality of information given by accommodation providers as good or excellent, and concurs with a 2008 study which found that 45% of the time, accessibility information is found to be incorrect.²⁴

Within the qualitative survey responses, there was a recurring theme that the current accessibility information was generally unhelpful because the needs of travellers with disabilities are quite broad. For example, several respondents commented that ‘accessibility’ is often taken to mean few to no steps (leading to, or within, a property), which is suitable for some travellers with disability but a significant obstacle for others. Many respondents said they always must make additional enquiries to assess the accessibility according to their specific needs. Further, survey respondents indicated that there is a much more detailed level of information that is required when forming travel and accommodation plans. Small differences with respect to distance or the physical characteristics of an accommodation could mean the difference between making and not making the trip in the first place. This can be seen in this survey results but is also reflected in previous studies, recognising that travellers can have a “highly individualised discourse of access”.²⁵

From an accommodation provider perspective, recognising these different needs from different segments of the travellers with disability group could potentially allow for more effective provision of information and in turn a better alignment of supply to demand. As will be explored in more detail in the following section, not every disability necessarily requires the same set responses from accommodation providers.

Travellers with disability in other countries have also experienced problems in accessing accurate information on accommodation. This has been documented by international researchers, as outlined below.

²⁴ Packer, Tanya, Jennie Small and Simon Darcy (2008). “Tourist Experiences of Individuals with Vision Impairment” Web: <http://www.sustainabletourisonline.com/35/accessible-tourism/tourist-experiences-of-individuals-with-vision-impairment>. Last accessed 7 May 2013.

²⁵ Darcy, Simon (2010). “Inherent complexity: Disability, accessible tourism and accommodation information preferences” *Tourism Management* 31 (2010) 816-826.

A recent survey of travellers with disability by Tourism Flanders reports that the experience of Flemish people with disability is similar to Australians. The study showed a reliance on several channels of information, with almost one third of respondents using social media, as well as a tendency to spend longer planning than an average traveller, to check and confirm information regarding accessibility.²⁶ This was true despite the fact that Flanders has a standardised and independently audited accessibility label (albeit a fairly recently introduced one).

In a New Zealand Tourism Research Institute survey of New Zealand travellers with hearing loss, 70% respondents indicated that it was difficult for them to find information about tourism products that are accessible to people with hearing loss and 42% agreed with the statement that ‘information about services for the hearing impaired is often wrong or misleading’. Further, 83% of respondents said they would visit a website that was known to have reliable information on tourism businesses that cater for people with hearing loss.²⁷

A VisitEngland survey found that 94% of respondents rated being able to find information on accessibility as important, but only 39% of respondents found it easy to locate the information.²⁸ The VisitEngland survey also showed that websites were the main source of accessibility information but, like in Australia, the survey showed travellers tend to follow up with secondary research, particularly contacting the business by phone (44%) and email (60%).²⁹

England, because of their recent hosting of the Olympics and consequently the Paralympics, can be viewed as a ‘best practice’ case study in improving the quality of information and service. Initiatives that were put in place there include the below.

- “Accessible England” website which highlights information on where mobility equipment can be hired, accessible tourist attractions, accessible transport, handy hints and showcases a top ten of accessible destinations.³⁰
- National Accessible Scheme which has set up a system of independent assessment which results in accommodation being awarded an accessible logo. These logos are in three categories; mobility impaired and older people; visually impaired and blind people; and hearing impaired and deaf people. The logos also have different levels for the severity of needs.³¹ These logos can be displayed by the accommodation provider and all NAS logo holders are listed on the “Open Britain” website,³² and in the *Disability Rights UK Handbook*.
- Business support and best practice website with information for businesses on information provision and promotion, providing accessible facilities and services, customer service and staff awareness, specific access needs and developing accessible destinations.³³

26 Tourism Flanders (2013). “Tourism is becoming more accessible but traveller stays on the alert”. Web: http://www.toegankelijkreizen.be/fileadmin/bestanden/docs/Survey_travellers_with_disability_2013.pdf.

27 New Zealand Tourism Research Institute (2011). “The Tourism Needs of People with Hearing Loss”. Web: http://www.nztri.org/sites/default/files/Final_report_NFD_04OCT11_1.pdf.

28 VisitEngland (2012). “Access Information Research”. Web: http://www.visitengland.org/Images/Accessibility%20Information%20Report%202012_tcm30-33210.pdf.

29 VisitEngland (2012). “Access Information Research”. Web: http://www.visitengland.org/Images/Accessibility%20Information%20Report%202012_tcm30-33210.pdf.

30 VisitEngland. “Accessible England”. Web: <http://www.visitengland.com/en/Practical-Information/Accessible-England/>.

31 VisitEngland. “National Accessible Scheme”. Web: <http://www.visitengland.com/ee/Practical-Information/Accessible-England/National-Accessible-Scheme.htm>.

32 <http://www.openbritain.net/>.

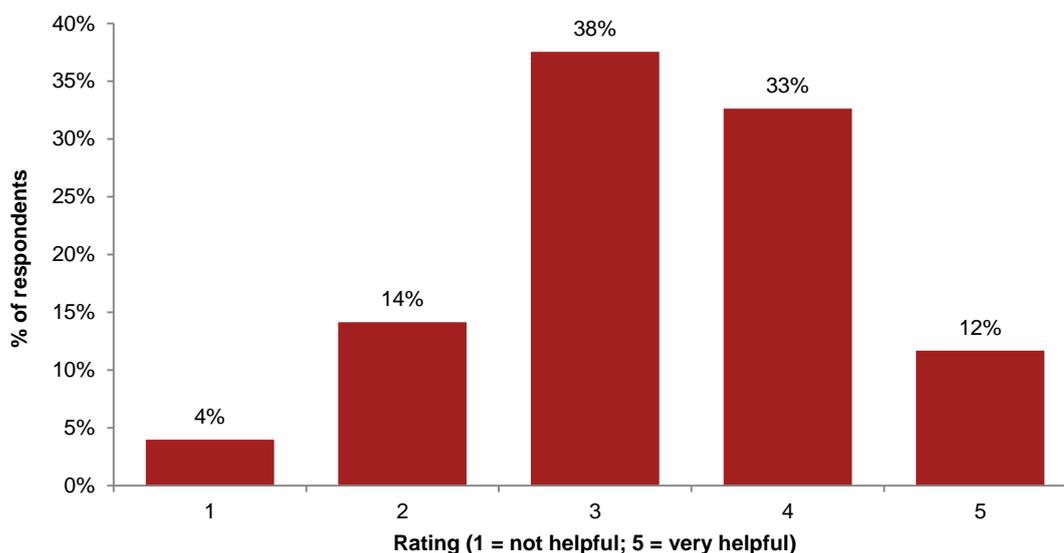
33 VisitEngland. “Accessible Tourism”. Web: <http://www.visitengland.org/busdev/bussupport/access/index.aspx>.

- VisitEngland Awards for Excellence includes an ‘Access for All’ category, to highlight best practice examples of accessible tourism, alongside a similar sustainable tourism award.³⁴
- VisitEngland offered 1,000 free online courses to tourism businesses in partnership with a peak disability organisation DisabledGo. Up to 5 participants were allowed from a single business in the course in delivering excellent customer service to customers with disability and legal obligations.³⁵
- A post Paralympics marketing campaign for the summer of 2013 to highlight accessible tourism experiences.³⁶

2.3.3 Service quality

While respondents found that the available information concerning accessible accommodation to be lacking, 45% of respondents thought that accommodation providers were generally ‘helpful’ or ‘very helpful’ at meeting their needs once issues were raised with accommodation staff or management.

Figure 7: Rating of helpfulness of accommodation providers



Source: PwC survey

In terms of the training provided to accommodation staff only 52% of respondents indicated that their staff receives formal training with respect to accessibility features. This is not surprising given that a 2010 study of accommodation managers,³⁷ found that a majority of them had not planned any disability awareness training. Of those respondents that provide training, the most common training methods used by accommodation providers were as below, in Table 9.

34 VisitEngland. “VisitEngland Awards for Excellence 2011”. Web: <http://www.visitengland.com/ee/England-Awards-for-Excellence-2012/>.

35 DisabledGo. “VisitEngland and DisabledGo Launch Online Disability Awareness Course”. Web: <http://www.disabledgo.com/blog/2012/03/visitengland-and-disabledgo/>.

36 VisitEngland. “VisitEngland announces new marketing campaign to develop and promote accessible tourism”. Web: <http://www.visitengland.org/media/pressreleases/VisitEngland-announces-campaign-to-promote-and-develop-accessible-tourism.aspx>.

37 Simon Darcy and Shane Pegg (2010). “Towards Strategic Intent: Perceptions of disability service provision amongst hotel accommodation managers.” *International Journal of Hospitality Management* 30 (2011) 468-476.

Table 9: Training given to accommodation staff

Method	Rank
Information provided to staff on features of an accessible room	1
Training on the features of an accessible room	2
Information provided to staff on requirements of travellers with disability	3
Training on the requirements of travellers with disability	4
Other	5

Source: PwC survey

As was highlighted in Table 6 and Table 7, the third most common problem encountered by travellers with disability, with respect to the common areas, was orientation or knowledge of accessibility features by accommodation staff. This ranking reflected all travellers with disability regardless of disability type, and ranked behind kerbs or ramps and paths of travel in or out of the accommodation including steps into or inside rooms (first and second respectively).

With respect to problems encountered within the rooms themselves, orientation or knowledge from staff regarding accessibility features ranked fourth, behind problems with doors and entry ways, shower facilities and access to balconies and outdoor areas (ranked first, second and third respectively).

Accommodation staff were generally viewed as helpful; however respondents felt that staff are largely uninformed about specific disability requirements. Staff who were willing to take extra time, whether to investigate specific enquires or help orientate visitors to their rooms, were praised by respondents. For example, one respondent, due to the nature of his disability, indicated that he often found doors too heavy to open; yet able bodied staff generally might not think to offer assistance unless asked. Accommodation is a service business, and as such, untrained or unaware staff can, even unknowingly, directly impact the service quality and reputation of the business.

Another possible issue brought about by untrained staff is the safety of guests with disability. This issue was also flagged as a major concern of hotel managers in Simon Darcy and Shane Pegg's 2010 paper.³⁸ Safety of guests with disabilities in emergencies brings with it three separate issues:

- the properties needs appropriate equipment (visual alarms, lifts or other means exiting that will operate in emergencies and appropriate lighting)
- staff need to know the appropriate policy (whether to wake guests up etc)
- staff need to know that they have a guest with disability staying with them.

As will be discussed in Section 4, during the site visits this last point was noted as a particular concern by both accommodation managers and travellers with disability.

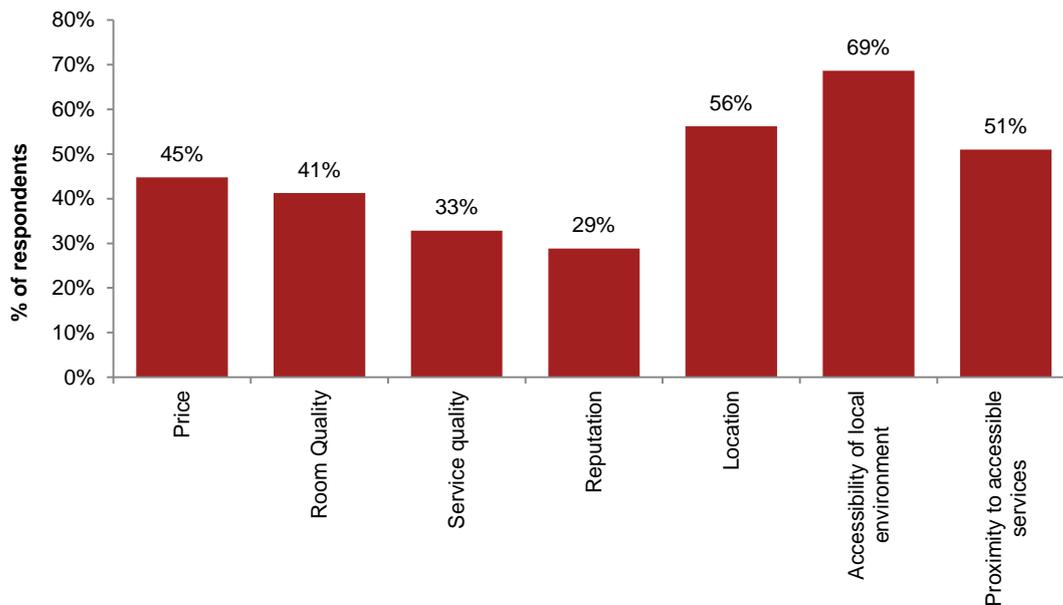
³⁸ Simon Darcy and Shane Pegg (2010). "Towards Strategic Intent: Perceptions of disability service provision amongst hotel accommodation managers." *International Journal of Hospitality Management* 30 (2011) 468-476.

2.3.4 Other barriers

Travel barriers

While there are many factors that go into a traveller's selection of accommodation, survey respondents indicated that location, accessibility and proximity to accessible services ranked as more important than other factors such as price or room quality (as seen in Figure 8 below).

Figure 8: Accommodation selection factors



Source: PwC survey

Firstly, as indicated in Figure 8, travellers with disability place a high importance on the accessibility of the local environment and the proximity to accessible services when selecting accommodation. In a 2008 CRC report,³⁹ such factors were described as “enablers”, things that will affect a person with disability's decision whether to travel to, or stay in, a particular place before they can evaluate the accessibility of the accommodation. This decision making process can be somewhat different to a traveller without disability, who will generally choose where to go, then assess amenities and accommodation. Enablers can include wayfinding,⁴⁰ accessible transport, accessibility of attractions and accessible toilets in local environment.

Secondly, even if the environment is accessible and a room can be found that meets a traveller's accessibility needs, rooms can fail to meet other needs in other respects. These can include adequate common facilities or consideration for people travelling with the person with disability, whether care giver, spouse, family or friends. For example, of the survey

³⁹ Darcy, Simon, Bruce Cameron, Larry Dwyer, Tracy Taylor, Emma Wong and Alana Thomson (2008). “Visitor Accessibility in Urban Centres”. CRC for Sustainable Tourism. Web: <http://www.sustainabletourismonline.com/137/universal-access/visitor-accessibility-in-urban-centres>. Last accessed 7 May 2013.

⁴⁰ The US Department of Education's National Institute on Disability and Rehabilitation Research (NIDRR) (2001) defines wayfinding as techniques used by people who are blind or visually impaired as they move from place to place independently and safely. Wayfinding is typically divided into two categories: orientation and mobility. Orientation concerns the ability for one to monitor his or her position in relationship to the environment; and mobility refers to one's ability to travel safely, detecting and avoiding obstacles and other potential hazards.

respondents who travelled with a care giver, 20% were not satisfied with the arrangements made for that companion.

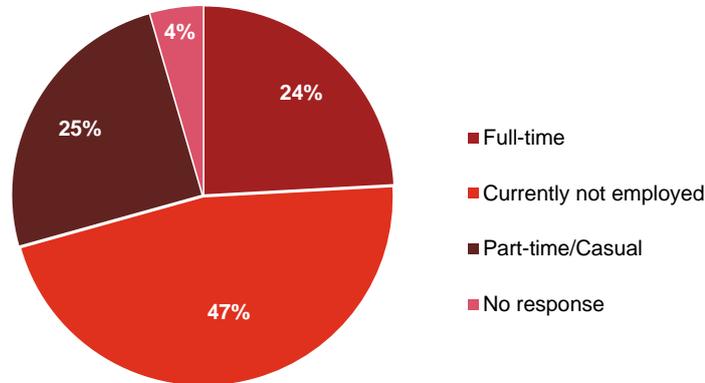
Qualitative responses indicated that a high percentage of those who were satisfied travelled with a spouse and therefore had no problems with sharing facilities or a bed. However, for those that travelled with a care giving companion who was not a spouse, the most common reason for finding the arrangements inadequate was the lack of privacy or the inappropriateness of sharing a bed. It was commented that this meant an additional room had to be hired at extra expense.

Another theme highlighted by travellers with disability (that it is often overlooked) is when they travel in a group, either as a family or with friends. Even if accommodation can be found that caters to individual accessibility needs, it can still be unsuitable if it could not cater to the needs of the group as a whole as short term demand surge places pressure on limited accessible rooms and facilities. In situations like this, individual rooms might require more space and/or an accommodation property would require a greater number of rooms. This was noted qualitatively within the case studies by one provider who noted their close proximity to both convention facilities and medical facilities.

Economic barriers

Economic factors could be one of the most significant barriers. Looking at employment status, survey respondents also showed that labour participation of people with disability is relatively low, with 24% of respondents being employed full-time, 25% of respondents being employed part-time (or casually) and 47% of respondents not currently employed. This compares reasonably closely with the results of the 2009 Survey of Disability, Ageing and Carers that of people with disability aged between 15 and 64, 29% were employed full time and 19% were employed part time.⁴¹

Figure 9: Employment status



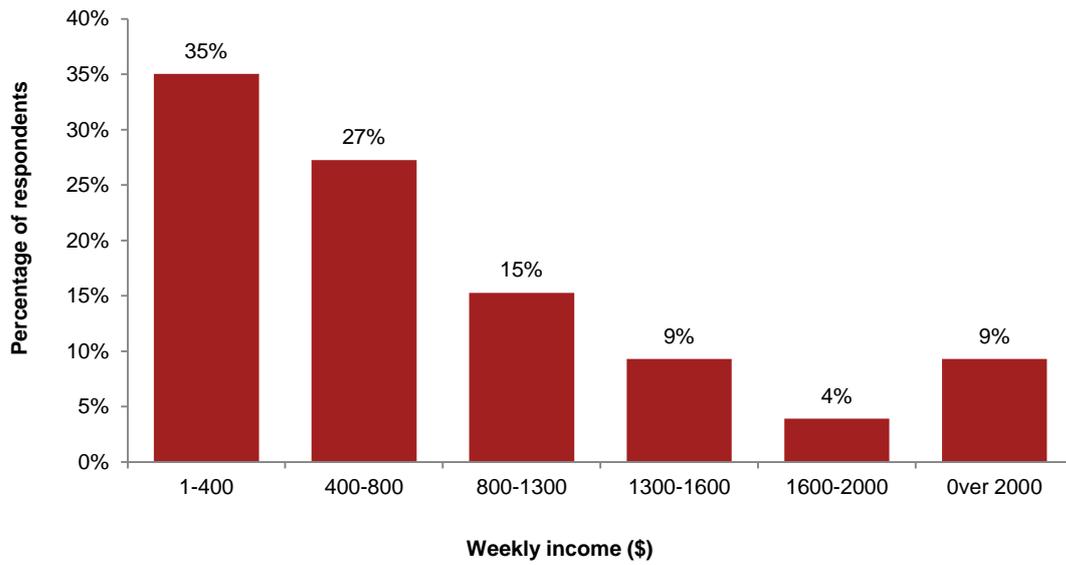
Source: PwC survey

Of note, the sample appears to tend towards a lower economic capacity with 62% of respondents indicating a pre-tax income of under \$800 per week which is comparatively low against the national average of \$1081.30 average weekly income.⁴²

⁴¹ ABS 4430.0, Survey of Disability, Ageing and Carers, 2009.

⁴² ABS 6302, Average weekly earnings, Australia, Nov 2012

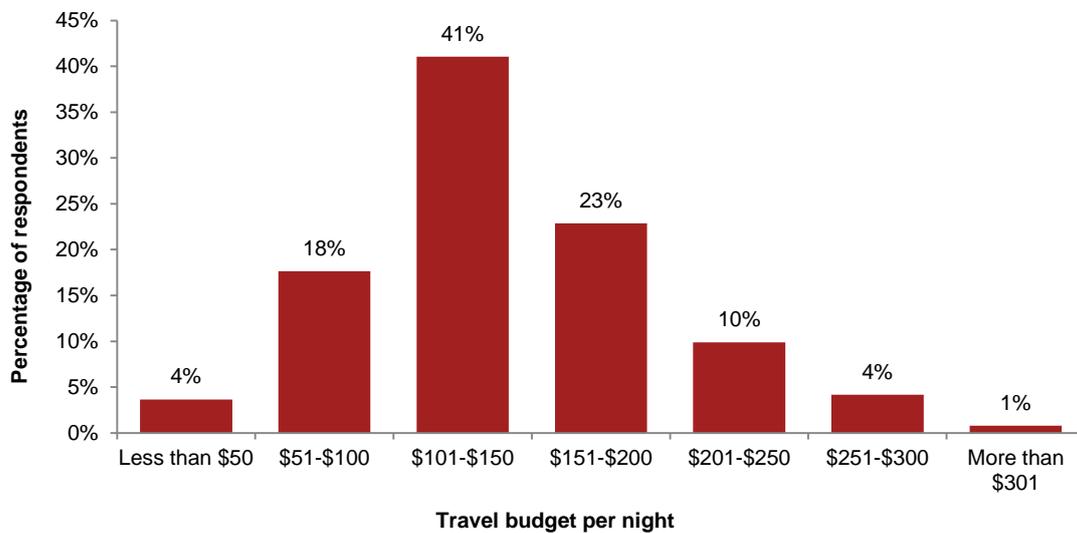
Figure 10: Weekly income



Source: PwC survey

In terms of budget, 41% of respondents indicated they budget between \$101 and \$150 per night when locating paid accommodation while another 23% indicated that their budget was between \$151 and \$200 per night.

Figure 11: Travel budget when in paid accommodation



Source: PwC survey

Accommodation choices

In terms of the proportion in time spent in paid accommodation, respondents indicated that of the nights they travel in a year, 80% of the time they stay in paid accommodation and 20% they stay in non-paid accommodation. This data point stands in contrast to the wider Australian travel population which uses paid accommodation for only 59% of nights spent away from home.⁴³ However, a number of explanations might account for this, including:

- private accommodation may be far less accessible than paid accommodation (eg staying with a friend or relative in accommodation that has stairs)
- paid accommodation may tend to be located in proximity to popular or essential services (eg medical appointments, proximity to accessible bus/train services, etc)
- travellers with high/complex needs may require more travel time to accommodate travel logistics (eg processing time at an airport or self-care needs) meaning day trips are less practical or short term trips take more time
- measurement error (eg sample size, survey method, etc).

Qualitative input supports the idea that staying with friends and family may be less of an option for travellers with disability, particularly for those individuals who have mobility support requirements. However, further study of this issue would be required for a more thorough analysis and explanation. It is clear from both the traveller survey and the research reviewed that people with disability face additional barriers to travel outside of whether a particular room is accessible (and what a room may need to be accessible for different people).

⁴³ National Visitors Survey September 2012, Table 11. This assumes that nights spent in a friend or relative's property or on own properties are unpaid accommodation whilst all other categories are paid accommodation.

3 *Assessing supply and demand*

3.1 *Approach overview*

This section provides an overview of the approach taken to assess the supply of and demand for accessible accommodation in Australia. The overall approach taken to the assessment is to:

- estimate the supply and demand of accommodation in total across Australia
- identify the accessible component of supply and demand for accommodation (ie the demand and supply of accessible accommodation as a sub-set of the total)
- disaggregate the supply and demand for accessible accommodation by the location of travel, different price points and accommodation type.

Overall, PwC's approach focused on the development of robust evidence-based estimates of accessible accommodation based on available information.

The key data sources used to inform estimates of supply and demand are Tourism Research Australia (TRA), the Australian Bureau of Statistics (ABS) and PwC's traveller and accommodation surveys. Estimates of visitor nights are based on historical and forecast estimates produced by TRA. Assumptions such as occupancy rates and other additional parameters are predominantly based on PwC's survey and ABS data. An explanation of the data used and how PwC has approached the analysis is outlined below. A more detailed discussion is also provided in Appendix C.

Estimating total demand and supply for accommodation

The demand for total accommodation is based on estimates produced by Tourism Research Australia for the number of visitor nights by domestic and international travellers staying overnight in Australia. The estimates used account for visitor nights in hotels, motels, guesthouses, serviced apartments, caravan parks and hostels.

In relation to the current supply of accommodation, most of the relevant data and information available refers to the number of rooms, or room nights, as opposed to visitor nights. To ensure that demand and supply are comparable, the demand for accommodation is therefore converted into room nights (this refers to rooms rather than visitors, guests or beds). This is calculated based on ABS data by dividing the visitor nights by the average number of visitors per room.

The future supply of total accommodation has been calculated as a function of projected demand and projected occupancy rates based on historical information. This methodology assumes that the total overall supply of accommodation will meet the estimated and forecasted demand over time at these occupancy rates.

Identifying the current accessible component

Current estimates of the supply of and demand for accessible accommodation are based on the results from the two surveys undertaken as part of the study, calibrated to the ABS and TRA data.

The demand for accessible room nights is then split between three groups of people who use accessible rooms comprising two main categories:

- those with accessibility needs:
 - people with disability⁴⁴
 - people without disability who request an accessible room⁴⁵
- those without accessibility needs:
 - people without disability who are given an accessible room by the accommodation provider (usually when other rooms are unavailable at the time of check-in).

Based on the survey of accommodation providers, it is assumed that:

- accessible rooms are rented out to people without disability 70% of the time
- 50% of people without disability who pay for an accessible room do so because they requested one.⁴⁶

Estimating future demand for accessible accommodation

Future demand for all accommodation is based on TRA forecasts of domestic and international visitor nights. This provides an overall baseline of demand across all relevant accommodation types for the next 10 years. These forecasts have also been used to generate a linear (or straight line) forecast for a further 10 years out to 2032.

Future demand for accessible accommodation is estimated by calculating demand separately for the three groups identified that use accessible accommodation. Growth in demand for accessible room nights by:

- people with disability is estimated based on population projections by age (ABS) and disability prevalence by age
- people without disability but requiring an accessible room is estimated to grow in line with demand by people with disability⁴⁷
- people without disability and not requiring an accessible room is calculated as the total number of room nights minus demand for standard rooms (based on occupancy rates for standard rooms) minus demand for accessible rooms by people requiring accessible rooms.

⁴⁴ A person has a disability if they report they have a limitation, restriction or impairment, which has lasted, or is likely to last, for at least six months and restricts everyday activities (ABS 4430.0 – Disability, Ageing and Carers, Australia).

⁴⁵ Accessible rooms are not required to be held for the sole use of guests with a disability, nor are providers required to determine the nature of the accessibility requirement of someone requesting a room. It is noted that accessible rooms requested by people without disability are as reported by accommodation providers, and they are not required to determine if there is a person with disability is using the room.

⁴⁶ The overall modelling results and conclusions are not sensitive to this assumption; however it has been included to account for a proportion of individuals requesting accessible accommodation who do not identify as disabled. For example, elderly guests, guests with temporary injuries or families with children who require the safety feature of an accessible room.

⁴⁷ We note that "there has been no statistically significant change in the overall age-standardised rates of severe or profound limitations over the two decades to 2003 (Table 1; Figure 2; AIHW 2005a). However, the ageing of the population and increased life expectancy are leading to more people with severe or profound core activity limitations, as well as more people with disability generally." See <http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=6442452829>

Given the ageing population in Australia, the demand for accessible accommodation by those with disability is expected to grow over time.⁴⁸ The prevalence of disability is higher in an older demographic, suggesting a higher overall prevalence rate of disability in line with an ageing population. The annual growth rate of demand is estimated based on ABS data on population projections and the distribution of disability prevalence across age groups.

To identify the likely occupancy rates implied by the estimated future demand, estimates were also made as to the expected rate of change in supply. This change is supply driven by the requirements of the Premises Standards which are triggered when a development is approved for any new or significant renovations or construction. As such, growth in supply of accessible rooms is calculated as function of any new building or significant renovations. This growth in supply then adds to the existing stock of accessible rooms until it reaches the required room ratios and this ratio is maintained in line with growth in the total supply of accommodation rooms.

Disaggregating supply and demand

The supply and demand for accessible accommodation has been disaggregated in two different ways: by the location of travel (regional versus capital city), and by different price points. The distribution of accessible accommodation is derived from PwC's survey of accommodation providers and survey of travellers with disability. A complete list of the reference material that was used to inform PwC's assessment is at Appendix B.

3.2 Current supply and demand of accessible accommodation

PwC has estimated that there are currently over 112.5 million room nights of accommodation provided in Australia over a single year (based on 2011-12). Of that stock, 4.0% or over 4.5 million are accessible room nights. These totals comprise accommodation providers with 15 rooms or more and small scale operators.⁴⁹ This proportion of accessible accommodation to total accommodation is derived from the survey of accommodation providers.

In the survey of accommodation providers it was found that the room occupancy rate of accessible rooms was at 49.9% and that of all rooms was 71.6%. These survey occupancy rates were then *calibrated in line with ABS figures* for room occupancy rates for all rooms (at 65.9%)⁵⁰ to calculate a room occupancy rate for accessible accommodation of 45.5%. For an explanation of this calibration, please see 'Identifying the current accessible component' in Appendix C.

Table 10: Supply and demand of accommodation, Australia, 2012

	Supply (million room nights)	Demand (million room nights)	Room occupancy (%)
All rooms	112.5	74.1	65.9
Accessible rooms	4.5	2.1	45.5

⁴⁸ Population ageing is projected to continue. The number of children is projected to increase by 45 per cent and the number of prime working age people is project to increase by 44 per cent between 2010 to 2050. This is expected to occur at the same time as the number of older people (65 to 84 years) more than doubles, and the number of very old (85 and over) more than quadruples (Australia to 2050: future challenges, the Australian Government's intergenerational report, 2010).

⁴⁹ Small scale refers to properties throughout Australia, covering hotels, motels and serviced apartments (up to 14 rooms), visitor hostels, and caravan parks (cabins and sites).

⁵⁰ Australian Bureau of Statistics, 'Tourist Accommodation, Australia', Catalogue 8635.0, December 2012.

PwC has further disaggregated the demand for accessible rooms by three main groups of guests, namely those:

- guests with disability
- guests without disability but requiring an accessible room
- people without disability and not requiring an accessible: accessible rooms may be used by any guest.

While establishments typically hold accessible rooms on a 'last to let' basis for guests with accessible room needs, accessible rooms are commonly used by guests without accessible needs when the establishment is otherwise full.⁵¹

Based on the survey of accommodation providers, on average, accessible rooms are rented to people *without* disability about 70% of the time. This indicates that only 30% of the total demand for accessible room nights is derived from individuals who have disability. Demand from those with disability is therefore estimated to currently be around 0.63 million room nights nationally. The room occupancy rate solely from people with accessibility needs is therefore estimated to be about 13.9%.

Based on the survey of accommodation providers, of those guests without disability that rent accessible rooms, 50% are estimated to request the accessible room. Assuming that many of these guests request the room because they need the accessible features, these guests are classed as guests that 'require' an accessible room. The split of demand by those with disability and those without is shown in the Table 11 below.

Table 11: Demand and occupancy rates for total accommodation and accessible rooms, 2012

	Supply (million room nights)	Demand (million room nights)	Room occupancy (%)
All rooms	112.5	74.1	65.9%
Accessible rooms	4.5	2.1	45.5%
People requiring accessible rooms		1.3	29.7%
People with disability		0.6	13.8%
People without disability who request an accessible room		0.7	15.8%
People without disability placed in accessible room		0.7	15.8%

In a similar survey undertaken by the TTF and the AHA, room occupancy rates for all rooms was found to be 71.4% with occupancy of accessible accommodation at 30.7%. A number of factors could account for the difference including:

- changing economic circumstances since the survey was undertaken

⁵¹ Appendix: Accessible rooms in short term accommodation, in the TTF submission to the Productivity on the Annual Review of Regulatory Burdens: Tourism Submission, Feb 2010.

- differences in how survey question were asked
- sampling error.

While the scope of this study is focused on Australian travellers and accommodation providers, international travel is also an important consideration. International travellers to Australia come from a variety of countries, with no one country representing a significant proportion of visitor nights. Based on TRA estimates of visitor nights in HMGSA for 2011-12, the top four source countries to Australia are New Zealand (13%), United States (12%), United Kingdom (11%) and China (10%).

Demand for rooms includes demand from both domestic travellers and international travellers coming to Australia. Of the 74.1 million room nights demanded in 2011-12, 50 million come from domestic travel and only 24.1 million from international travellers. This suggests about 67% of demand is derived from domestic travel within Australia. If this same percentage is applied to accessible rooms, it would suggest that 1.4 million rooms are demanded domestically and 0.7 million room nights are demanded by international travellers to Australia. However, applying this overall percentage to accessible rooms may not give an accurate reflection of the true split between domestic and international travel by guests with disability or people who request accessible rooms.

Data identifying the proportion of travellers with disability arriving in Australia from overseas is limited. As such attempting to quantify the exact proportion of international component is challenging and proxies may be the best source of data. In one study, the available data suggests that approximately 6.8% of outbound international travel from Australia was undertaken by people with disability.⁵² Similar research has also found that 7% of all Americans travelling overseas have a disability.⁵³ From the accommodation provider point of view, of the traveller's using their businesses accessible accommodation, respondents indicated that 7% of them had travelled from overseas.⁵⁴ Additional long term research would be required to more fully understand the international component of demand for accessible accommodation, particularly in a changing global economic context.

3.2.1 Comparison across capital cities versus regional areas

A breakdown of the estimated room nights supplied by regional versus capital cities is shown in Table 12. This break down is based on the distribution indicated by PwC's stakeholder surveys. When looking at all room nights, there are more room nights available in regional areas than in capital cities. However, a higher proportion of accessible rooms are found in the capital cities than in the regional areas.

Table 12: Room nights supplied, capital cities versus regional, 2012

	Regional	Capital City	Australia
All rooms	61,933,848	50,594,940	112,528,788
Accessible rooms	1,266,624	3,257,033	4,523,657
Accessible proportion of supply	2.0%	6.4%	4.0%

Source: PwC survey and ABS Cat No. 8635.0 and TRA Forecast 2013 Issue 1 and unpublished TRA estimates of visitor nights derived from the online database of NVS and IVS

⁵² Dwyer, L. and S. Darcy (2011). "Economic Contribution of Tourists with Disabilities: An Australian Approach and Methodology" Ch 14 of *Accessible Tourism: Conceptions and Issues*, edited by Dimitrios Buhalis and Simon Darcy.

⁵³ Dwyer, L. and S. Darcy (2011). "Economic Contribution of Tourists with Disabilities: An Australian Approach and Methodology" Ch 14 of *Accessible Tourism: Conceptions and Issues*, edited by Dimitrios Buhalis and Simon Darcy, cited Open Doors Organization 2005 paper.

⁵⁴ PwC forecasts are based on existing forecasts which would include travellers with disability arriving in Australia and requiring accommodation.

Total rooms nights demanded across Australia have been estimated based on occupancy rates presented in the ABS publication on tourist accommodation and visitor nights (estimated by the TRA based on their national and international visitor surveys). Room nights occupied for accessible rooms (split by region) are based on occupancy rates obtained from the PwC survey results. The table below shows that demand for accessible rooms is more commonly found in the capital cities as opposed to regional areas. However, this tendency towards capital cities is much less prominent than for the supply of accessible rooms shown above.

Table 13: Room nights demanded, capital cities versus regional, 2012

	Regional	Capital City	Australia
All rooms	34,146,094	39,982,245	74,128,339
Accessible rooms	843,600	1,213,962	2,057,562
Accessible proportion of demand	2.5%	3.0%	2.8%
Guest(s) with disability	0.7%	0.9%	0.8%
Guest(s) without disability requesting acc accomm	0.9%	1.1%	1.0%
Guest(s) placed in acc accomm	0.9%	1.1%	1.0%

Source: PwC survey and ABS Cat No. 8635.0 and TRA Forecast 2013 Issue 1 and unpublished TRA estimates of visitor nights derived from the online database of NVS and IVS.

Table 14: Room occupancy rates (%), capital cities versus regional, 2012

	Regional	Capital City	Australia
All rooms	55.1%	79.0%	65.9%
Accessible rooms	66.6%	37.3%	45.5%
Guest(s) with disability	20.1%	11.3%	13.7%
Guest(s) without disability requesting acc accomm	23.3%	13.0%	15.9%
Guest(s) placed in acc accomm	23.3%	13.0%	15.9%

Source: PwC survey and ABS Cat No. 8635.0 and TRA Forecast 2013 Issue 1 and unpublished TRA estimates of visitor nights derived from the online database of NVS and IVS.

Translated into occupancy rates (ie the intersection between supply and demand), the results in Table 14 show that while occupancy of standard rooms (overall) is higher in capital cities, the occupancy of accessible rooms in regional areas is estimated to be higher. This result suggests that location is a key component to understanding demand and supply for accessible accommodation. Reasons for this likely have to do with several factors such as:

- proximity (ie major population centres, public services tourist attractions, etc)
- age of the regional stock (accessible rooms have been constructed over a period time under different regulatory codes)

- nature of the accommodation product.⁵⁵

Given data quality, the data has not been disaggregated further to a state level; however this data does suggest that even within regional and capital cities, demand for accessible accommodation could also vary considerably by location. This could be particularly true for accommodation located near major tourist attractions or public services such as hospitals. Further research (such as geo-spatial analysis) would be required to more fully understand this in depth.

3.2.2 Comparison across different price points

The supply and demand of accessible accommodation can also be separated by different price points. The survey of accommodation providers indicates the average rate that accessible rooms are rented to customers. The survey of travellers with disability then provides the budget that they would generally set when travelling. Using these results, we can identify any mis-matches between the price rooms are made available at and the price that those with disability are willing to pay.

The distribution of demand and supply by price point is shown in the table below. The implied occupancy rate at each of these price points is then shown in Figure 12. The distributions show that the majority of supply and demand is for rooms priced in the \$101-\$150 price range. Occupancy in this price range is estimated to be about 55%, suggesting an appropriate matching of supply and demand for rooms at that rate. While still below the overall average of 66% across all accommodation, it is above the average for accessible accommodation of 45.5%.

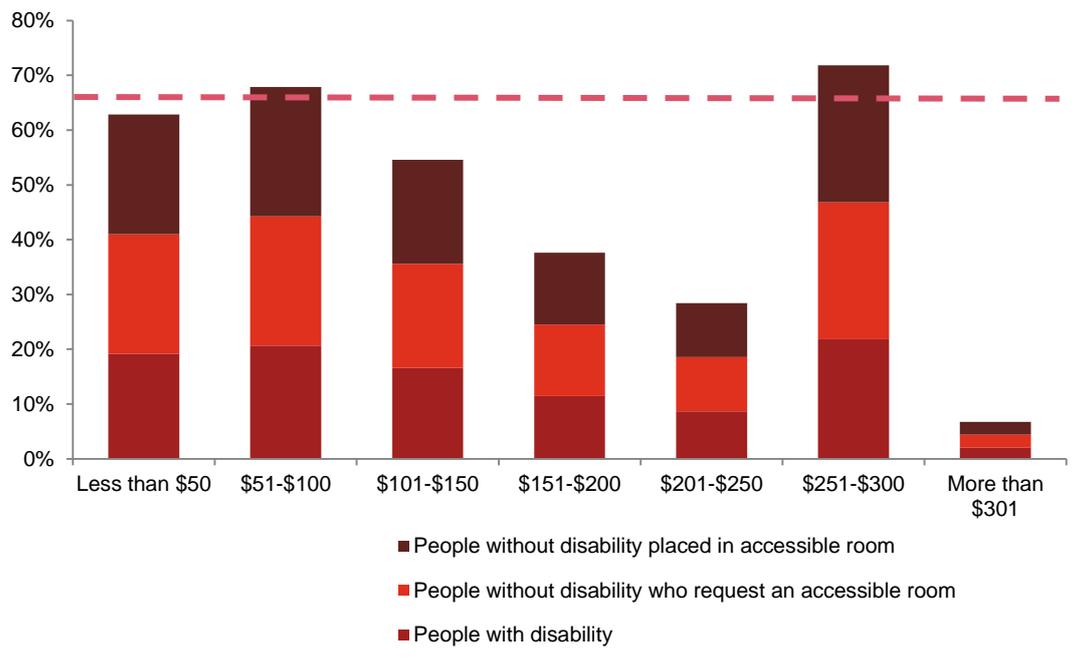
Table 15: Distribution of demand and supply across different price points

Room rate	Price budgeted by travellers with disability	Average rate accessible rooms are rented out for	Difference
Less than \$50	3.6%	2.6%	- 1.0%
\$51-\$100	17.7%	11.8%	- 5.8%
\$101-\$150	41.0%	34.2%	- 6.8%
\$151-\$200	22.9%	27.6%	+ 4.8%
\$201-\$250	9.9%	15.8%	+ 5.9%
\$251-\$300	4.2%	2.6%	- 1.5%
More than \$301	0.8%	5.3%	+ 4.5%

Source: PwC survey

⁵⁵ Accessible accommodation can reflect a much larger proportion of an accommodation property's stock depending on the nature of the accommodation. For example, hypothetically, a small scale accommodation provider operating four lodges with at least one accessible lodge would have 25% accessible stock.

Figure 12: Estimated room occupancy rates in 2011-12 for accessible accommodation in Australia: by room rate



Source: PwC modelling

When considering Figure 12, looking at total occupancy of accessible accommodation, it appears there is an under-supply of accommodation at both the low end (\$51-\$100) and the high end of the price ranges (\$251-\$300). While both of these results indicate a slight mismatch between the number of rooms nights supplied and those demanded, the quantum of this mismatch is much greater at the lower price point.

Demand for accessible accommodation priced \$51-100 represents almost 18% of travellers with disability, whereas only around 4% of travellers with disability would budget at the higher rate. Therefore, the slight under-supply at the lower price points could be seen as more prominent because the number of room nights and travellers concerned is much higher.

At the \$251-\$300 price range, the level of demand is quite low. The implied occupancy rate is still high however, because supply is even lower than demand. Other than the \$251-\$300 range, also indicates that demand is being met by excess supply at the higher price ranges of \$201-\$250 and over \$301.

The implication of this is that economics may be an important factor in the demand and supply of accessible accommodation. The Premises Standards are focused on the built environment not on the economic capacity of the travellers themselves. From a traveller's point of view, an accessible room out of their price range may as well not be part of supply. From an accommodation provider's point of view, should they (hypothetically) decide to expand into premium accommodation, the accessible room ratio may represent a hardship (and potentially lost repeat business) if travellers with disability are unable to afford a premium product. However, further modelling would need to be undertaken to better understand the economic impact of the room ratios as various cost/price points.

3.3 Forecast of supply of and demand for accessible accommodation

PwC has estimated rooms nights supplied for all accommodation and accessible accommodation based on the approach in Section 3.1. Accessible accommodation steadily grows to around 5.9% of the supply of total rooms⁵⁶ by around the year 2022, once the Premises Standards worked their way fully through the industry (see Table 16).

Table 16: Room nights supplied (mil), Australia, 2012-2032

	2012	2017	2022	2027	2032
All rooms	112.5	125.5	133.1	141.7	149.2
Accessible rooms	4.5	6.3	7.8	8.3	8.8
Accessible proportion of supply	4.0%	5.0%	5.9%	5.9%	5.9%

Source: PwC survey, ABS Cat No. 8635.0 and TRA Forecast 2013 Issue 1 and unpublished TRA estimates of visitor nights derived from the online database of NVS and IVS

Room nights demanded across Australia out to 2032 are calculated as a function of projected visitor nights as forecast by TRA. Accessible room nights demanded have been calculated based on underlying demographic drivers of guests with accessible needs and demand from guests without accessible needs as a function of demand for standard rooms.

As the population ages, the overall rate of accessibility needs is expected to grow.⁵⁷ ABS data shows that the prevalence of disability increases with age.⁵⁸ In Australia, this data is only readily available for disability defined quite broadly. However, a study produced in the United States finds that prevalence rates also increase with age for people that use a mobility device. This demographic trend is found to be relevant for those who use a wheelchair or scooter, as well as those who require a cane, crutches or a walker.⁵⁹ In addition, in a 2008 report produced by the Australian Institute of Health and Welfare (AIHW), the following finding was made:

“There has been no significant change in the underlying age-standardised rates of severe or profound core activity limitations over the past two decades. Improvements in diagnosis and data collection have increased reporting rates, especially for children. However, the ageing of the population and increased life expectancy are leading to more people with severe or profound core activity limitations, as well as more people with disability generally.”⁶⁰

To account for this, the demand for accessible rooms is assumed to grow faster than the general population by about 0.8% per annum.⁶¹ This accounts for the fact that the prevalence of accessibility needs increases with age. Over the forecast horizon, accessible room nights

⁵⁶ This includes all short term accommodation covered under the scope of this study, comprising hotels, motels, guest houses and serviced apartments. Our survey results of accommodation providers showed accessible accommodation was provided across all these accommodation types. We have assumed that all accommodation types will move to provide accessible rooms in line with the minimum requirements in the Premises Standards over the forecast horizon.

⁵⁷ Population ageing is projected to continue. The number of children is projected to increase by 45 per cent and the number of prime working age people is project to increase by 44 per cent between 2010 to 2050. This is expected to occur at the same time as the number of older people (65 to 84 years) more than doubles, and the number of very old (85 and over) more than quadruples. Source: Australia to 2050: future challenges, the Australian Government’s intergenerational report, 2010.

⁵⁸ See Australian Bureau of Statistics, ‘Disability, Australia, 2009’, Catalogue 4446.0, 2009, Table 1 – Prevalence.

⁵⁹ Kaye, H. S., Kang, T. and LaPlante, M.P. (2000), ‘Mobility Device Use in the United States’, Disability Statistics Report, (14), Washington, D.C.: U.S. Department of Education, National Institute on Disability and Rehabilitation Research.

⁶⁰ Australian Institute of Health and Welfare 2008. Disability in Australia: trends in prevalence, education, employment and community living. Bulletin no. 61. Cat. no. AUS 103. Canberra: AIHW.

⁶¹ For a detailed explanation of these assumptions and how they are derived, please see Appendix C.

demanded are expected to settle at around 4.6% of total accommodation demanded and at around 5.9% of total supply.

In addition to demographic factors, growth in demand for accessible rooms may also be affected by the introduction of the national disability insurance scheme (NDIS). While the impact of this has not been explored in detail, there is potential for the NDIS to boost demand for travel by those with disability. This impact has not been explored as part of this analysis and the growth in demand for accessible rooms does not account for this factor. Further research would need to be undertaken to incorporate this potential impact.

Table 17: Room nights demanded ('000), Australia, 2012-2032

	2012	2017	2022	2027	2032
All rooms	74,128	85,707	94,396	104,131	113,540
Accessible rooms	2,058	3,224	4,387	4,840	5,277
Accessible proportion of demand	2.8%	3.8%	4.6%	4.6%	4.6%
Guest(s) with disability	0.8%	0.9%	0.9%	0.9%	0.9%
Guest(s) without disability requesting acc accomm	1.0%	1.0%	1.0%	1.0%	1.0%
Guest(s) placed in acc accomm	1.0%	2.0%	2.8%	2.8%	2.8%

Source: PwC survey, ABS Cat No. 8635.0 and TRA Forecast 2013 Issue 1 and unpublished TRA estimates of visitor nights derived from the online database of NVS and IVS

Bringing together the projected growth in supply and the estimated growth in demand gives the implied occupancy rate for accessible rooms over time. This assessment finds that supply of accessible accommodation grows in balance with demand for accessible accommodation once all premises begin to meet the Premises Standards room ratio requirements. This sees occupancy rates of guests requiring accessible accommodation around 22-23% of accessible accommodation and is slowly, but steadily increasing through time.

Accessible rooms can be used by any guest, and are commonly used by guests without accessible needs when establishments are otherwise full. This analysis has found that as more of the accommodation supply becomes accessible, instances of guests without accessible needs using accessible rooms is likely to increase to cope with rising occupancy rates. Further, this analysis has estimated rising occupancy rates for all rooms based on relative growth rates of projected visitor nights demanded and projected supply.

Table 18: Room occupancy rates, Australia, 2012-2032

	2012	2017	2022	2027	2032
All rooms	65.9%	68.3%	70.9%	73.5%	76.1%
Accessible rooms	45.5%	51.5%	56.2%	58.2%	60.3%
Guest(s) with disability	13.8%	11.6%	10.2%	10.6%	11.0%
Guest(s) without disability requesting acc accomm	15.8%	13.2%	11.7%	12.1%	12.6%
Guest(s) placed in acc accomm	15.8%	26.7%	34.2%	35.5%	36.7%

Source: PwC survey, ABS Cat No. 8635.0 and TRA Forecast 2013 Issue 1 and unpublished TRA estimates of visitor nights derived from the online database of NVS and IVS

It is estimated that in the near term, growth in the supply of accessible rooms will increase faster than the growth in demand for guests requiring accessible rooms as the revised Premises Standards come into effect.⁶² Once the impact of the Premises Standards have worked their way fully through the accommodation stock, demand for accessible rooms starts to grow faster (albeit off a smaller base) than supply, as growth in supply slows in line with normal replacement and construction cycles of the accommodation industry.

Importantly, over the same period, it is estimated that the number of guests without accessibility requirements that are placed in accessible accommodation is likely to grow faster than the supply of accessible accommodation (and standard accommodation) over the entire projection period. That is, demand for room nights is estimated to grow faster than the supply of all room nights,⁶³ resulting in the continuing upward trend of room occupancy rates. It is likely that this will increase the number of instances that accessible rooms will be used by guests without accessible needs when an establishment is otherwise full.

The net effect of the above is that demand for accessible rooms is estimated to steadily grow and is reflected in increasing occupancy rates over the projection period. As an outcome of the Premises Standard, it is estimated that accessible rooms are likely to grow in importance to accommodation providers.

Additionally, the finding that accessible rooms will be occupied for the majority of the time by people without accessibility requirements provides valuable insight to the industry going forward. That is, it will be important that providers work to improve the quality of their accessible rooms so that they are designed in such a way that guests (with and without accessibility requirements) have the right hotel experience and return their business. This conclusion was further supported by the survey results, site visits and consultations. In conducting this study, PwC has found that there were good examples of high quality accessible rooms that appeal both to people with and without disability.

3.3.1 Scenario analysis

Results from our survey of travellers with disability points towards information asymmetry (ie poor quality information linking travellers with appropriate accommodation) as a one possible cause of lower occupancy rates for accessible rooms relative to standard rooms by travellers with disability.

This finding is also observed by researchers like Simon Darcy who notes “while access has a group context based on their dimension of access, there is an individual access discourse where people expressed their desire for detailed information, visual reinforcement, and an understanding of the spatial dimensions of the room are important elements on which to make an informed decision for their access needs.”⁶⁴

As a way of testing the sensitivity of changes in demand, PwC also undertook a scenario analysis that estimated the impact of increasing demand from guests requiring accessible rooms by 10% of current levels (simulating improvement of information quality and access going forward).

⁶² Assuming no changes to the room ratio requirements result from the scheduled review of the Premises Standards.

⁶³ It is well documented in the LEK report on the economic and financial drivers that impact on supply.

⁶⁴ Darcy, Simon. "Inherent complexity: Disability, accessible tourism and accommodation information preferences". *Tourism Management* 31 (2010) 816-826, 824

Table 19: Scenario analysis: room nights demanded ('000), Australia, 2012-2032

	2012	2017	2022	2027	2032
All rooms	74,128	85,707	94,396	104,131	113,540
Accessible rooms	2,058	3,380	4,558	5,029	5,483
Accessible proportion of demand	2.8%	3.9%	4.8%	4.8%	4.8%
Base case					
Accessible rooms	2,058	3,224	4,387	4,840	5,277
Accessible proportion of demand	2.8%	3.8%	4.6%	4.6%	4.6%

Source: PwC survey, ABS Cat No. 8635.0 and TRA Forecast 2013 Issue 1 and unpublished TRA estimates of visitor nights derived from the online database of NVS and IVS.

An increase in demand from guests with accessible requirements sees accessible rooms rise from 2.8% of all room nights demanded in 2012 to 4.8% of all room nights demand by 2032. This compares with 4.6% by 2032 in the base case. With supply unchanged, this sees occupancy rates rise for accessible rooms from 60.3% in 2032 to 62.6% as a result of demand increasing by 10%.

Table 20: Scenario analysis: room occupancy rates, Australia, 2012-2032

	2012	2017	2022	2027	2032
All rooms	65.9%	68.3%	70.9%	73.5%	76.1%
Accessible rooms	45.5%	53.9%	58.4%	60.5%	62.6%
Guest(s) requesting acc comm	29.7%	27.3%	24.1%	25.0%	25.9%
Guest(s) placed in acc comm	15.8%	26.7%	34.2%	35.5%	36.7%
Base case					
Accessible rooms	45.5%	51.5%	56.2%	58.2%	60.3%

Source: PwC survey, ABS Cat No. 8635.0 and TRA Forecast 2013 Issue 1 and unpublished TRA estimates of visitor nights derived from the online database of NVS and IVS.

It is noted that supply of or demand for accommodation and accessible accommodation could be influenced by many factors not tested as part of this assessment. For example, PwC has assumed a rising lift in occupancy rates over the forecast period reflecting demand growing faster than investment. This is not an unreasonable assumption given the recent findings on accommodation supply from the 2011 report on Tourism Investment and Regulation Review.

The report found that Australia's tourism industry suffers from a lack of investment in new short term tourist accommodation as well as limited refurbishment of existing accommodation stock. This has resulted in a shortage of quality accommodation stock, most obviously in inner metropolitan areas. It states that "the investment case for hotels is challenged because in metro areas land is scarce, which has resulted in high land values. Furthermore, residential and commercial property offer higher returns, are more easily financed and can compete better for this land than short term accommodation."

The impact of this is seen in limited investment in short term accommodation compared with other forms of property investment, despite improving core operating performance metrics for hotels. This is evident from increasing occupancy rates and revenue per available room, at

a rate much faster than the stock of hotel rooms.⁶⁵ While internationally, hotel room stock tends to rise with hotel occupancy rates, reflective of the underlying demand for the room, this has not always been the case for Australia. Nevertheless, it is possible that stronger investment in short-term accommodation than assumed in the PwC analysis may accompany the growth in demand estimated by TRA. This would not change the PwC estimates of demand, but would see lower occupancy rates than those reported here.

On the demand side, the introduction of the Australian Government's national disability insurance scheme, DisabilityCare, as mentioned earlier will result in increased resources made available to some people with disability. This may see a flow on impact with increase demand for accessible accommodation, which would see higher occupancy rates by people with disability for accessible accommodation. Again this has not been specifically modelled here as part of the assessment, but remains an area of possible further research.

⁶⁵ Tourism Investment and Regulation Review, Final Report, 3 August 2011, LEK Consulting for the National Long-Term Tourism Strategy.

4 Case studies

4.1 Observations

This study also included site visits to 10 different accommodation facilities. Specifically, PwC visited:

- two hotels in Canberra
- one hotel in Melbourne
- one serviced apartment in Melbourne
- one motel in regional Victoria
- three hotels in Sydney CBD
- one serviced apartment in Sydney CBD
- one motel in regional NSW.

The purpose of the site visits was to understand the difference between the standard and accessible room at each of the sites, gain an understanding of the accessible facilities available, and discuss the challenges in providing accessible accommodation. The following sections outline the findings of PwC's site visits.

4.1.1 Two hotels in central Canberra

Both hotels are four and half and five star located in central Canberra run by a private operator. PwC reviewed standard and accessible rooms in both properties. Both the accessible and standard rooms were large one bedroom suites with a king sized bed. Being higher end properties, each room is generally larger than a 3 or 4 star property. Accessible rooms in this property were approximately 1.3 to 1.5 times larger than the standard rooms.

In both properties the following was observed:

- The accessible room has been designed to allow for a minor degree of convertibility (where appropriate) and are compliant with the Premises Standards (ie from a standard configuration to an accessible configuration).
 - For example, the kitchenette has been installed in a small alcove opposite the wardrobe. Should a traveller with disability require the use of the room, the doors of the wardrobe can be easily removed to provide the required distance between the kitchenette and the wardrobe to allow for and adequate turning radius for a wheelchair.
- In the main living area the removal of a large coffee table (replacing with end tables) allows for adequate and distance between the wall and remaining furniture while maintaining the aesthetics of the room. This allows for sufficient space between furniture and walls to accommodate wheelchairs and other mobility aids.
- Aesthetically the quality of the bathroom facilities in the accessible room is very similar to the standard rooms, with some noticeable differences with respect to showers and sinks. Where standard rooms might incorporate creative design elements into the bathroom's design (ie fogged glass, decorative doors, decorative wash basin and stand, etc) the Premises Standards prescribe specific height, size, material and

construction requirements limiting aesthetic and design choices. Other design options (compliant with the Premises Standards) were generally viewed as cost prohibitive or not feasible given physical limitations of the building⁶⁶.

- The shower facilities are not as appealing as those in the standard room, but of very high quality with considerable thought in design and aesthetic appeal while meeting the Premises Standards. Each shower stall requires a vertical grab rail which draws the eye towards the shower upon entry into the bathroom. Further, the shower requires level entry and exists, limiting the options available with respect to shower walls and doors to a shower curtain.
- The grab rails are the most noticeable element, and most difficult element to disguise. Other potential design options would be to make many of these elements removable however there may be legal issues with respect to compliance with the Premises Standards.

Management comments

- Management conceded that they likely could do a better job of providing additional detail via their website and it would have to reassess within the larger context of its market and promotional efforts.
- Management and their architect both had the view that the Premises Standards were currently being expanded to captures the “smallest 1%” of profound disability without regard for the remaining 99% who do not have such high needs.
- One suggestion was to allow for some distinction between profound mobility requirements versus those with less profound mobility needs in the room ratio requirements.
 - For example, hypothetically, if a development required 5 accessible rooms, 1 room would be to accommodate severe mobility needs while the remaining 4 rooms might be a modular or adaptable configuration allowing for more creative design solutions, appropriate for a broader customer base.
- The owner and architects both indicated that they were limited in their exploration of alternate design due to the legal liability aspects. That is, accessible rooms need to be signed off as meeting the requirements, if a design feature is added for aesthetics but does not meet the requirements, there is a legal liability to the establishment if the guest has an accident because of the feature. An example of removable chairs in showers was one example given.
 - Currently, while from a design perspective there may be better solutions, due to the prescriptive nature of the Premises Standards these are not often explored.
 - Given that most accessible rooms are occupied by people without disability the majority of the time, there is a large financial incentive to ensure that these rooms are appealing to a wide audience.

⁶⁶ For example, one design option would be to reconfigure the location of the sink and mirrors. However, physical limitations preventing this design option might include the geometry of the available space, access to plumbing or electrical infrastructure, or engineering limitations of the physical structure (ie the location of support columns).

4.1.2 Five star hotel located in Melbourne CBD

This hotel is a five star hotel located in the central business district in Melbourne. It was built in 2000 and has 260+ rooms. Of the 260+ rooms, five are designed to accommodate travellers with disability. Four of these rooms are standard size (with two double beds) and one is a superior room with a king size bed. Within the accessible rooms, the following was noted:

- Each of the accessible rooms has an automatic door, where once the key is inserted the door opens automatically. The layout of the room allows for room to move and transfer from a wheelchair to a bed.
- In the bathroom the benches have been lowered, basins have lever taps and there are grab rails along the toilet. The shower has a double entry, with glass doors that have to be manually opened. The design of the accessible bathroom is very similar to the bathroom in the standard room, with all amenities and fit-out to a five star standard. The grab rails are aesthetically pleasing and blend into the design of the bathroom.
- The room also features a phone which has a flashing light, and all light switches have been lowered for easy access.
- There is a slight lip to get out to the balcony on the accessible rooms which do have a balcony attached to them.
- The hotel also offers a number of common area facilities including a bar, restaurant and meeting rooms. All of these can be accessed via a lift and do not include any steps.
- Training for the staff is provided to understand and be able to provide services to those who are travelling with disability.

4.1.3 Serviced apartments located on edge of Melbourne CBD

These apartments are rated 4.5 stars and are located on the edge of Melbourne's central business district. There are 120+ serviced apartments available for short term rental, the building and facilities are also shared with residential accommodation. Of the 120+ serviced apartments, five are set up as accessible accommodation. These are all single room apartments, where the accommodation also provides standard apartments in double and deluxe rooms. Within the accessible rooms, the following was noted:

- The accessible rooms are easily accessed from the lift. The door to the accessible room must be manually opened. The accessible room has a larger living area, lower benches allowing for use of the cooking facilities and power points and light switches located lower to the ground.
- There is a slight ramp into the bathroom that eases the lip between the tiles and the carpet. The bathroom in the accessible room has grab rails, lower benches, lever taps, a fold down seat and a shower curtain. The bathroom in the accessible apartment is not as aesthetically pleasing as that of the standard room, with standard rooms having a shower over a bath with glass partition. The apartments also offer laundry facilities within the room.
- Where required the apartments can be fitted with portable equipment (eg speciality wheelchairs or lifting equipment). The staff noted that when this is requested the hotel will often store the equipment from the rental company and install it when required.
- There are gymnasium and pool facilities. The gymnasium is all on one level, however, is not specifically designed for wheelchair access. The pool has a number of steps which lead to the pool deck, sauna and outdoor area. The serviced apartments also have a restaurant and bar, and number of meeting facilities. All facilities are accessible by lift, and there is an accessible toilet in the common areas. The car park has spaces

set aside for people with disability. From the car park the reception area and rooms are easily accessible by lift.

- There is staff training around the needs of travellers with disability. Where notified staff at reception keep a log of any impairments of their guests. This log is used in the case of an emergency to assist guests who may need special assistance (eg those who would not have heard an alarm, may be unable to take stairs etc).

4.1.4 Motel in regional Victoria

This motel in regional Victoria is attached to a tourist museum and therefore aims to cater for visitors to the museum. The accommodation offers 40+ rooms, with a further 150 beds can be made available in an alternate style accommodation. Some notable features include:

- While the motel has had travellers with disability stay in their accommodation (including travellers who are blind, deaf or in a wheelchair), the accommodation does not currently provide specific rooms catering to these travellers. The motel offers accommodation that can be used for travellers in a wheelchair; however, the accommodation is part of the barracks style and was not shown as part of the visit. The current accommodation provides wide entrances and adequate space in rooms; however, there are notable absences of accessible bathrooms even in common areas.
- The motel has received partly matched funding from the Federal Government to refurbish six of their rooms. The motel has seized the opportunity to use this funding to cater for travellers with disability. While the motel is still in the scoping phase, it is working with local disability groups and the local council to design the rooms. It is expected that each of the rooms will be appointed differently. So, for example, one or two rooms may be set up for travellers in a wheelchair, one or two for those with short stature and others for travellers who are have sight or hearing disabilities. It is expected that the rooms will have a small kitchenette, and the motel is also considering purchasing their own hoists and associated equipment. One of the rooms also has a separate room that could be used for travellers travelling with a carer.
- The attached museum prides itself on being able to cater for tourists with disability. It therefore sees that there is a gap to fill in the market to be able to provide accommodation to these tourists visiting the museum. The current car park and building structure will make it easy to convert the existing rooms. Further work will also be undertaken to allow for function rooms (a breakfast room and conference room) with an accessible bathroom in the common areas. The aim is for renovations to start later this year, with the hope of finishing prior to the end of 2013.

4.1.5 Large hotel at the edge of Sydney CBD

This hotel was built in the early 1990s; however, it underwent a refurbishment when it was taken over by the current owners in 2000. The hotel has 600+ rooms, and is currently going through a room refurbishment project. Ten of the 600+ rooms are accessible rooms. A number of notable features include:

- The difference between a standard room and an accessible room is primarily an open shower, a higher desk (to accommodate a wheelchair) and amenities placed at a lower height. The refurbished accessible rooms also have flashing lights installed in the ceiling of the rooms. An orange light is used for a warning and a red light for evacuation. Interconnecting rooms are available also so that people travelling with a carer can be in close proximity.
- PwC was shown a refurbished standard room. All refurbished rooms have less furniture, there are wide showers with an open access (walk in with just one glass screen) and all of the amenities are able to be used at a lower level.

- The accessible rooms are closer to the lifts on each level. PwC was also shown a suite room which is accessible. This room has a sofa bed in the lounge room which can accommodate a carer. For safety reasons, the room is equipped with large red and orange lights in case of an emergency. The bathroom had all of the expected requirements including grab bars, open spaces, a seat in shower, lower basin and lever tap.
- The accessible rooms are rarely used with only one or two typically booked out at any one time. It was also noted that often some people with disability do not want a wheelchair accessible room.
- This hotel has a system where travellers with disability are registered at check-in. This assists with the development of a Personal Emergency Evacuation Plan (PEEP) in the case of an emergency. Staff are trained in the PEEP process, understanding where accessible facilities are, and how to operate special features such as stair lifts.
- The hotel has a gym which is all on one level; however, the gym does not provide an accessible toilet. The hotel also has a number of common areas including meeting rooms and a ballroom. All rooms are accessible, and there are accessible bathrooms in all of the common areas.
- The hotel does not have a car park. There is easy access to the hotel via the bus bay; however, those arriving by car use a private car park across the road.

4.1.6 Large hotel in central Sydney CBD

This hotel has three accessible rooms out of 500+ total rooms. It was built in the early 1990s, and refurbished in 1996. It was noted that all of the rooms are used regularly, at the time of PwC's visit we had to wait until a guest checked out before we were able to see a room. The hotel's entrance is easily accessible with ramps and slide open doors. Notable features include:

- In the standard room furniture has been built against walls (facing outward towards the room) and integrated into the design of the room allowing for a very "open" feel. Some of the power points are located in easy reach positions. Bathroom facilities offer a bath and a walk in shower with glass door.
- In the accessible room the furniture is very similar to the standard room. The wardrobe offers lower hanging space. The bathroom has a single walk in shower with a seat and grab bars. The lighting in the bathroom and the positioning of the shower means that the focus is on the basin which is similar to the standard room.
- The health club is able to be accessed from one level, however, there are steps up to the swimming pool and the toilets are not accessible.
- The hotel offers a business area with computers, printers etc available for guests on the ground floor. An executive club lounge is also available, and while the entrance to this is accessible, it may be difficult for a wheelchair to manoeuvre around furniture (without assistance from staff to clear a path) and there is no accessible bathroom.

4.1.7 Hotel located in central Sydney

This hotel was built in the late 1990's within a heritage building. It has 400+ rooms, of which four are accessible. None of the accessible rooms are located in the heritage wing of the hotel. Notable features include:

- In the accessible room the furniture is flexible and easily moved around. The bathroom offers lower basin, lever taps and grab bars. There is also an interconnecting door that allows access to a totally separate room. The standard room is very similar, and is the same size as the accessible room.

- The meeting rooms have been fitted with a small lift to allow access to all levels for mobility impaired guests. And a hearing loop is currently being installed in the ballroom. All meeting rooms have access to an accessible toilet.
- The gym space provided is privately run. There are two steps up to the cardio equipment, and a number of steps up to the group fitness room and pool.

4.1.8 Serviced apartments in Sydney CBD

These serviced apartments were built in the late 1990's. There are 100+ rooms of which two are set up for accessible accommodation. The property is a four star accommodation. The accessible rooms are used on a last to sell basis. Notable features of the property include:

- Being a serviced apartment there are cooking and clothes washing facilities within each room. These facilities are the same in both the standard and the accessible apartments. The counter tops and cook tops are not lowered and it may prove challenging for a guest in a wheelchair.
- The bedroom areas are also very similar with only a small space between the bed and the wall. The bed area incorporated sliding privacy doors which could be opened to increase available space somewhat. The doorway to the balcony is obstructed by the raised door frame. This would have obstructed access to the balcony for guests in wheelchairs, and may prove difficult to navigate for guests with limited mobility or vision impairment.
- The key difference between the apartments is the bathroom. The standard room has a shower over a bath, whereas the accessible room has an open shower with curtain. There are also grab bars and a seat in the accessible shower area. With the exception of the grab rails and noticeably larger bathroom space, the look and feel was generally the same between both the accessible room and the standard room, perhaps indicating that quality may be driven more by other factors such as overall price/star rating of the property.
- Interestingly, the shower and toilet facilities were generally larger to accommodate laundry equipment. Given that the accessible room was somewhat larger to accommodate an accessible shower, it was somewhat better suited to accommodate laundry facilities than the standard room.
- The apartments do have a restaurant which can be accessed via a lift. The meeting rooms are on one level, but appear to have narrow doorways. There is also a breakout area which can be accessed via steps.

4.1.9 Historic motel in regional NSW

This regional historic motel in the NSW was established at the turn of the century. In keeping with the heritage architecture, 25+ accommodation rooms are decorated in the colonial style to complement the original building. The motel caters for both business and leisure. All accommodation rooms open directly to the outdoors. The building is single storey. Notable features include:

- The accessible room is in the row of rooms closest to the car park and close to reception for ease of access. The accessible room is identical in size to their standard queen size rooms, but is priced at a lower flag rate (approximately \$150 per night). To access the room, a ramp has been made to cross the threshold.
- The room is large enough to move a wheelchair freely around the room, through to the kitchenette and to the bathroom. The kitchenette has a lower bench top and sink. The bathroom has a lower sink; there is no lip in the shower to allow easy access in and out. There are grab rails for the shower and toilet.

- The room has two single beds joined to make a queen size. It is often also used as a standard room for guests without accessibility requirements who request two single beds. The quality and feel of the room was exactly the same as the standard rooms. The motel is based around its historical origins and common areas have recently been updated to allow accessibility, with ramps and accessible toilets in common areas.
- The owner recently had a guest book standard accommodation there and on arrival one guest was in a wheelchair. The guests hadn't asked for an accessible room when they booked. The owner offered the accessible room which was gratefully accepted. The owner was very accommodating and said they were always happy to do what was necessary to accommodate travellers with disabilities, for example rearranging furniture etc.

4.2 Key themes

As set out above, PwC viewed a range of properties in both metropolitan and regional areas. In general it was found:

- The major difference between standard and accessible rooms was the bathroom facilities; however, some accommodation providers were able to provide these facilities in a more aesthetically pleasing manner than others. Some features, such as new requirements for toilets, cannot be easily hidden without exploring more unconventional design approaches.
- Accommodation providers who continued to use high quality furnishings and draw the attention away from the open shower and grab bars through use of lights and layout appeared successful in minimising the difference between standard and accessible rooms.
- Function and meeting room facilities were generally accessible, with an accessible toilet being provided in these common areas. However, where a gym or a pool was provided these were generally not set up for travellers with disability and toilets were standard.
- In general most sites visited only catered for people using a wheelchair, there were only a couple of sites who had catered for hearing impaired through flashing lights, and we do not recall the use of tactile surfaces etc to assist the vision impaired, beyond what is legally required.
- There may be further problems with constructing and/or retrofitting accommodation in regional areas given the prevalence of small to medium properties and historic properties, as well as potentially lower overall investment in regional accommodation (particularly further away from tourist destinations).

5 Opportunities for further exploration

Opportunity 1 – Explore the option of revising room ratios to account for various levels of support need

Both stakeholders and qualitative survey feedback cited the need to recognise the wide range of accessibility requirements. People with cognitive, hearing or visual disabilities have completely different requirements compared to those with mobility disabilities. However, the current regulatory framework is focussed on mobility requirements, and therefore the focus of design of accessible accommodation is on mobility requirements. Even when solely considering people with mobility needs, the severity of their impairment will impact on the extent of the design requirements of the built environment.

It may be worth exploring developing a variation to the room ratio requirements that accounts for different levels of support requirement. The ABS collects data on people with disability by severity of core activity limitation. The room ratio could be aligned to actual prevalence of disability requirements as measured by the ABS. This would not necessarily mean more rooms would be classed as accessible, but rather allowing rooms within that number to meet various requirements. By restricting the most severe requirements to only some accessible rooms, the aesthetics of lower requirement rooms can be improved and increase the hotel experience for patrons, with and without disability, staying in them.

Opportunity 2 – Explore various models to develop and implement an information sharing arrangement for accessible accommodation

A key challenge faced by this study is the lack of detailed data in the area of accessibility, disability and tourism, on either side of supply or demand.

From a demand side perspective, there is little in the way of tracking disability in travel, tourism and accommodation over the long term. Key surveys such as ABS accommodation survey, the NVS and the IVS, simply do not include questions with respect to disability.

On the supply side, specific information with respect to accessibility and accessible accommodation already exists, but is difficult to find and is located in isolated pockets. That makes it difficult for studies such as this to assess supply, but has the most impact on the travellers, as they do not know where they can stay. On the demand side, it requires considerable time and effort for travellers with disability to locate and confirm accommodation details. Filling this information gap represents a practical means to potentially boost uptake of accessible accommodation through the elimination (or at least reduction) of information asymmetry.

Survey respondents were very clear with respect to the type of information they are looking for when making travel plans – specific detail. For many travellers with disability, small details, such as the width of a door, can be the difference between a room being accessible or not. Travellers need detail to be able to assess the accessibility of a room, *according to their own needs*, a symbol or a single label of “accessible” cannot do this. Operationally, accommodation managers already have a considerable amount of detail concerning their property. This means it may simply be a matter of providing a facility to capture and communicate this information, not collecting it from scratch.

This opportunity is further supported by a 2006 CRC report⁶⁷ which recommended that information on accessibility be piloted on an Australian Tourism Data Warehouse. This may allow the government to leverage existing synergies to improve overall data quality at reduced cost. This information could then be available to all interested stakeholders, including government, industry and travellers.

Opportunity 3 – Explore options to increase support for, and awareness of, innovative accessible design

It is clear from the case studies and qualitative survey feedback that there is more than one way to meet the diverse needs of travellers with disability. It is also obvious that accessible rooms are more often than not rented by someone without disability. Increased satisfaction of the hotel experience could be achieved from both categories of traveller with successful innovative design.

However, based on the analysis of supply and demand in Section 3.1, the level of lower demand for accessible accommodation may not create sufficient market incentive for such an investment in design when compared to other market opportunities (for example, further investment targeting luxury accommodation and high income travellers). As such, incorporating innovative designs may prove to be more costly to accommodation providers, particularly when factoring in the liability risks associated with “trying new things”.

There are two opportunities to help this; increase awareness of the types of innovations available, and support those who take them up.

It was found in the case studies that some accommodation providers are open to considering options to provide for more aesthetically pleasing rooms, and therefore making them more appealing to a wider population, especially those who may not identify as disabled but still have access needs (such as elderly travellers or those with young children). However, the survey results show that general awareness of universal design is low. An opportunity to increase this awareness would be to explore endorsing such innovation by actively promoting universal design at trade shows and other industry events. Providing tangible examples, based on input from architects, designers and travellers with disability may help raise awareness and/or lower the cost of adoption, particularly as the concept becomes more recognised.

Encouragement and recognition can also help foster good design. A 2008 CRC report recommended that an identified accessible tourism section (much like the current recognition for outstanding sustainable tourism) be established in the Australian Tourism Awards to honour and showcase best practice in design and service delivery.⁶⁸ Such a category has been included in the English tourism awards following a push there to promote accessible tourism, giving it status as a social agenda alongside sustainable tourism.

Once awareness is increased, providing assistance to designers and architects who use the design of accessible rooms to maximise their appeal would be another option to explore. This could be in the form of consideration of more performance based regulations which would allow for temporary or semi-permanent structures that would still meet requirements when installed. Support could also include financial assistance in providing grants or sponsorship for innovative design.

There also may be further multi-stakeholder opportunities both through national and state level education and innovation initiatives. Given the existing government education and

67 Darcy, Simon (2006). “Setting a Research Agenda for Accessible Tourism”. CRC for Sustainable Tourism. Web: http://www.crctourism.com.au/wms/upload/images/disc%20of%20images%20and%20pdfs/for%20bookshop/documents/darcy_accessibletourism.pdf. Last accessed 7 May 2013.

68 Darcy, Simon (2006). “Setting a Research Agenda for Accessible Tourism”. CRC for Sustainable Tourism. Web: http://www.crctourism.com.au/wms/upload/images/disc%20of%20images%20and%20pdfs/for%20bookshop/documents/darcy_accessibletourism.pdf. Last accessed 7 May 2013.

innovation systems that already exist, and given the direct linkages to other policy areas such as productivity, a co-investment in this area represents a good opportunity to develop synergies across different policy files.

Opportunity 4 – Explore the development of an accessibility customer service tool kit

Many improvements to accessibility do not necessarily need to be permanent features of the built environment. Accessibility can often be increased by improving service quality. Some stakeholders have indicated that making improvements to service quality in the hospitality sector is often challenging in its own right. However, qualitative survey results indicate that the service improvements are often subtle, yet have considerable benefit to customers.

These sorts of service improvements can be simple, but represent significant improvements to their overall accommodation and travel experiences of travellers with disability. Some simple examples that emerged from the qualitative survey results include:

- offering to rearrange or remove furniture before or during check-in can assist with making a room more accessible to a person with a large mobility aid
- provision or sourcing of additional storage space for accessibility equipment
- provision or sourcing accessibility equipment ahead of arrival (if a mobility need is raised during booking of accommodation)
- providing clear information about emergency situations
- offering to tour guests with disability through their room to orientate them to the main features such as light switches, power points and the storage of extra pillows, blankets or towels.

One option might be to explore the development of an accessibility customer service tool kit, drawing insights from travellers with disability (such as those above drawn from survey results). Inclusions in this tool kit could range from simple customer service training materials, Braille or audio hotel information, instructions on enabling TV captioning, portable visual alarms or additional lighting, all the way to the provision of specialised equipment or services.

Opportunity 5 – Explore the option to further survey or study specific areas of supply of and demand for accessible accommodation to develop a deeper understanding and provide additional information for policy formation

Time series data on accessible accommodation is difficult to locate. The surveys of accommodation providers and travellers with disabilities that were undertaken as part of this study provide a good starting point for gathering valuable data.

Going forward, particularly in anticipation of the upcoming review of the Premises Standards in 2015, it may be beneficial to supplement existing data with a greater level of resolution. Additional information that might add to the debate includes:

- supplementing the NVS and IVS (or other similar surveys currently undertaken by the government) to better calibrate the travel patterns of travellers with disabilities
- undertaking geo-spatial analysis to better understand supply and demand from a location perspective
- undertaking specific economic impact modelling of changes to the room ratio and/or factoring in price and star rating.

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Appendix A Engagement overview

Project governance

The federal Department of Resources, Energy and Tourism (the Department) commissioned this study into the supply and demand for accessible accommodation in Australia, to be used as a source of independent evidence to inform the formal four year review of the Standards in May 2015. From the outset, the Department supported independence and impartiality as a core principle underpinning this engagement. As such, the Department formed a Project Steering Committee (PSC) to oversee and guide this study. The PSC was composed as a multi-stakeholder group representing a variety of government and non-government organisations. Specifically the PSC was comprised of representatives from the following organisations:

- Department of Resources, Energy and Tourism (as Chair)
- Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education
- Tourism Research Australia
- Tourism Victoria
- Nican
- Tourism and Transport Forum.

The PSC were responsible for selecting a consultant to lead the study. PwC was selected to undertake the required analysis in close consultation with the PSC. As well as their role in governance and quality review, members of the PSC were involved in stakeholder engagement and communications. Leveraging their own extensive knowledge, as well as their contacts within disability organisations and industry, the PSC was involved in developing the approach for the study and actively participated in design of the survey questions and provision of research material. The PSC also assisted on the task of survey promotion and its communication strategy, together with PwC. Further information on survey promotion and a list of organisations involved can be found in Appendix D.

To undertake the required analysis, PwC employed four streams of work:

- a data and literature review
- two surveys
- supply and demand modelling
- qualitative site visits (resulting in case studies).

Each of these streams of work is described in further detail in the following Appendices.

Appendix B Data and literature reviewed

To inform our assessment of the supply of and demand for accessible accommodation, PwC's research covered four broad categories:

- accessible accommodation and accessible tourism
- tourism, population, and real estate data
- tourism supply and demand models and methods
- PwC's own research and forecasting.

A consolidated summary of the resources reviewed are presented in the following tables. Following on is a summary of a selection of key sources considered as part of this study.

Table 21: Accessible tourism literature reviewed

Title	Author
A survey and report on the barriers confronted by people with disability when they travel on holidays and visit tourist venues	Access for All Alliance Inc
Anxiety to access: Tourism patterns and experiences of New South Wales people with a physical disability	Simon Darcy for Tourism New South Wales
Inherent complexity: Disability, accessible tourism and accommodation information preferences	Simon Darcy
Setting a Research Agenda for Accessible Tourism	Simon Darcy for CRC
Visitor Accessibility in Urban Centres	Simon Darcy et al for CRC
Developing Business Case Studies for Accessible Tourism	Simon Darcy et al for CRC
Towards Strategic Intent: Perceptions of disability service provisions amongst hotel accommodation managers	Simon Darcy and Shane Pegg
Economic Contribution of Tourists with Disabilities: An Australian Approach and Methodology	L Dwyer and S Darcy
An economic model of disability: Changing the demand drivers for the provision of products and services in inclusive tourism	Bill Forrester and Deborah Davis
Tourism Investment and Regulation Review	LEK Consulting
Tourist Experiences of Individuals with Vision Impairment	Tanya Packer et al

Core data was obtained from the Australian Bureau of Statistics (ABS) and Tourism Research Australia (TRA). This was supplemented with data collected from additional sources (see Table 22).

Table 22: Data sources

Data source	Provider
ABS Disability, Ageing and Carers, Australian: Summary of Findings, 2009	ABS Cat No. 4430.0
ABS Survey of Tourist Accommodation	ABS Cat No. 8635.0
ABS Australian Demographic Statistics	ABS Cat No. 3101.0
ABS 2011 Census	ABS
ABS Overseas Arrivals and Departures	ABS 3401
National Visitor Survey	Tourism Research Australia
International Visitor Survey	Tourism Research Australia
Accessible accommodation website	Australia for All.com
Nican website	Nican.com.au

Finally, a number of studies and journal articles on accommodation supply and demand forecasting were also reviewed (see Table 23).

Table 23: Tourism supply and demand models and methods reviewed

Title	Author
Investigating other leading indicators influencing Australian domestic tourism demand	David Allen and Ghialy Yap
Forecasting the Tourism Demand of North Cyprus	Bicak, Altinay and Jenkins
The Australian hotel industry – Econometric demand forecasting	Cushman Wakefield Hospitality
Modelling domestic holiday tourism demand in Australia: problems and solutions	Krishna Hamal
An econometric study of tourism demand: the AIDS model of US and European tourism in Mediterranean countries	Syriopoulos and Sinclair
An econometric analysis of Australian domestic tourism demand	Ghilay Yap and Choy Lee
Modelling the supply and demand for tourism: a fully identified VECM approach	Ting Zhou, Carl Bonham and Byron Gangnes
The determinants of the travel demand on international tourist arrivals to Thailand	Zhang, Qu and Tavitiyaman

Accessible Accommodation and Accessible Tourism Literature

Access for All Alliance Inc (2006). “A survey and report on the barriers confronted by people with disability when they travel on holidays and visit tourist venues.” Web: <http://www.australiaforall.com/Holiday%20Survey.html>. Last accessed: 4 April 2013.

This study, undertaken in 2006 by Access for All Alliance Inc, aimed to highlight to government and the tourism industry the need for appropriate and reliable information on accessible tourism. People with disability need to be able to easily and effectively locate this information so that they can choose destinations that suit their needs and preferences. The survey of 98 questions, which gained 1307 responses, looked in to issues of:

- reasons the respondent did not go on holidays
- barriers encountered when the respondent did go on holiday (in respect of accommodation/travel)
- how the motel/hotel did or did not cater for their specific needs as a person with disability
- barriers encountered when the respondent did go on holiday in respect of access to tourist venues
- how the local environment and tourist venues did or did not cater for your requirements
- where and what changes the respondent thought needed to be addressed by the tourist industry.

The study found that many participants with a variety of disabilities (including those with cross disabilities) did not go on holidays. A variety of reasons were given but the main reason was the cost. The majority of those surveyed who had taken a holiday stated that they felt neither the accommodation providers nor the tourist venue operators had a basic knowledge or understanding of the requirements of tourists with disabilities. Many felt that tourist operators and their staff should be trained to be aware of these requirements.

Australian Human Rights Commission. “The good, the bad and the ugly: design and construction for access”. Web: <http://www.humanrights.gov.au/publications/good-bad-and-ugly-design-and-construction-access>. Last accessed 10 May 2013.

This paper goes through the common accessibility requirements, including signage, accessible toilets and entry ways, giving examples and photos of both good and bad practice. It gives helpful, practical advice, especially to those who may not understand why certain requirements may be in place.

Darcy, Simon (1998). “Anxiety to access: Tourism Patterns and Experiences of New South Wales People with a Physical Disability”. *Tourism New South Wales*

This study aimed to investigate tourism patterns and experiences of New South Wales people with a physical disability. A survey over six months received 3200 responses about domestic, international, day and overnight travel experiences. Key issues raised were the provision of information about accessible features, links between industry, government, organisations and people with disability, general access requirement for transport and accommodation, awareness and education, and development of information systems. This study suggested

planning to improve access for the future should include accessibility related information services, use of best practice examples, accessibility forums and awareness training.

Darcy, Simon (2009). "Inherent complexity: Disability, accessible tourism and accommodation information preferences." *Tourism Management* 31 (2010) 816-826.

This paper presents the results of a survey (n = 566) to determine the relative importance of room selection criteria through the development of a 55-item Hotel Accessibility Scale. Four information formats were then presented to ascertain the preferences of the respondents. The results suggest that while socio-demographic variables offered some insight into criteria selection, the most significant explanation for criteria selection and information preferences were the dimensions of disability and level of support needs. The preferred format of accessible accommodation information provision was based on a combination of textual, floor plan and digital photography. The management implications suggest that detailed information provision using this format has benefits for accommodation stock yield and social sustainability.

Darcy, Simon (2006). "Setting a Research Agenda for Accessible Tourism". CRC for Sustainable Tourism. Web: http://www.crctourism.com.au/wms/upload/images/disc%20of%20images%20and%20pdfs/for%20bookshop/documents/darcy_accessibletourism.pdf. Last accessed 7 May 2013.

This report is the first outcome of a Sustainable Tourism Cooperative Research Centre Research Workshop held in July 2005 and outlines the process of that workshop and the research agenda which was a consequence. The report examines the existing research in to demand (including information provision and marketing) and supply across tourism sector. The identified priority areas for future accessible tourism research were; information provision, marketing and promotion, dimensions of disability, market dynamics and segmentation, total product development, industry engagement, education and training, and access to all sectors of the tourism industry.

Darcy, Simon, Bruce Cameron, Larry Dwyer, Tracy Taylor, Emma Wong and Alana Thomson (2008). "Visitor Accessibility in Urban Centres". CRC for Sustainable Tourism. Web: <http://www.sustainabletourisonline.com/137/universal-access/visitor-accessibility-in-urban-centres>. Last accessed 7 May 2013.

This study looked at the economic contribution of tourists with disability and the accessible destination experience, specifically tourist attractions in urban centres. The estimation of economic contribution was at a basic gross level, and drew on existing ABS and NVS data. The examination of destination experiences was focussed on 'sense of place' and experiences that were quintessentially Sydney. The study reviewed the information available of these experiences, as well as the suitability of the experience itself. The research did not seek to 'certify' experiences as being accessible but rather identify information that can assist PWD in decision making. The study also looked at 'enablers', things that need to be present to make a destination appropriate, including accessible transport, accessible parking, accessible toilets, accessible way finding information. A suggested next step was the development of a Web portal to display the information collected by this study.

Darcy, Simon, Bruce Cameron, Shane Pegg and Tanya Packer (2008). "Developing Business Case Studies for Accessible Tourism". CRC for Sustainable Tourism. Web: <http://www.sustainabletourisonline.com/86/growing-niche-markets/developing-business-case-studies-for-accessible-tourism>. Last accessed 7 May 2013.

This study aimed to produce qualitative assessments of businesses delivering best practice accessible tourism products in transport, accommodation, attractions, and hospitality. The

case studies used a triple bottom line analysis of financial, environmental and social report cards. The aim of producing examples of good practice was to inform future planning and actions. Five business were involved in the review and key features of these businesses were that they were all mature (over 10 years of operation), they all go beyond minimum requirements, not just in access but also in environmental awareness and safety and they all had strong community relationships. Key findings with regard to accessibility included that two businesses independently reported the unexpected outcome of increased patronage by families with small children and elderly travellers when their accessibility was improved. It was also noted that best practice accessibility goes beyond basic standards requirements to develop inclusive experiences.

Darcy, Simon and Shane Pegg (2010). “Towards Strategic Intent: Perceptions of disability service provision amongst hotel accommodation managers.” *International Journal of Hospitality Management* 30 (2011) 468-476.

This study sought to ascertain the perceptions of accommodation sector managers towards disability service provision. This was done with a view to identifying any current service gaps or failings. The study findings revealed five key themes that had not been previously discussed in the literature. They were inclusive attitudinal approach; safety; the responsibility of people with disability to communicate their needs to the hotel; perceptions of accessible rooms by the general public; and operational processes. Related themes that emerged from the data analysis that had previously been aligned with the literature included: legislative responsibility, policy and building codes; disability as a market segment; staff awareness/training; and language, marketing, and promotion information. This study that separate from legislation and policy, the managers involved did desire to provide a high quality experience for PWD. However, the study highlighted the gaps in their knowledge, or willingness, about how to do this.

Dwyer, L. and S. Darcy (2011). “Economic Contribution of Tourists with Disabilities: An Australian Approach and Methodology” Ch 14 of *Accessible Tourism: Conceptions and Issues*, edited by Dimitrios Buhalis and Simon Darcy.

This study draws on ABS data, Tourism Satellite Accounts and National Visitor Survey to estimate the economic contribution of tourists with disability, including day trips and consideration of inbound and outbound tourism. Contributions considered with to tourism gross value added, tourism GDP and direct tourism employment based on spending patterns.

Forrester, Bill and Deborah Davis. “An economic model of disability: Changing the demand drivers for the provision of products and services in inclusive tourism.” *Travelability. Occasional paper number 4*. Web: http://travability.travel/papers/occasional_4.html. Last accessed 13 March 2013.

The author argues that conventional definitions have their foundations based on the physical term of “access”. The consequence of this is that more often than not those expressions also have a narrow interpretation, as people think of them applying only to travellers with a mobility related disability. The author argues for a broader definition of tourism “the application of the seven principles of Universal Design to the products, services, and policies of the tourism industry at all stages of their lifecycle from conception to retirement and introduction of a replacement”. Further, the author argues that an economic model (ie one that engrains a more comprehensive definition of accessibility in the social consciousness) can change the focus by changing how access is looked upon. Once any industry appreciates that the disabled and their friends are a large market they will start to research their interests and change behaviours with respect to products and services offered.

LEK Consulting. “Tourism Investment and Regulation Review: Final Report.” 3 August 2011. Web: <http://www.ret.gov.au/tourism/documents/nlts/tourisminvestmentreportfinal.pdf>. Last accessed: 7 May 2013.

L.E.K. Consulting was engaged by the Investment and Regulatory Reform Working Group of the Tourism Ministers Council to review the relationship between regulation and investment in the tourism sector. The main objectives of this study were to:

- Identify the key regulatory barriers to tourism investment
- Formulate reform recommendations to lower these barriers, with the aim of increasing investment in an efficient manner.

L.E.K. highlighted that when the industry structure is overlaid with a disproportionate regulatory burden, negatively impacting investment, the case for regulatory reform is very strong. The scope of LEK's report did not include a thorough modelling of supply and demand for accessible accommodation. Further, LEK acknowledged the need for a thorough review of the impact of the room requirement as a matter of priority. Within the scope of its work, LEK's report concluded that:

“The requirement for accessible rooms adds significant construction costs and reduces operating margins for hotels. L.E.K.'s analysis suggest that in a “build and operate scenario” over a period of 15 years, the NPV impact (from an operational, but excluding the build cost impact) is \$300,000 lower for every additional 0.5% in accessible room requirements, for a five star, 350 bed hotel in Sydney. A reduction in accessible room requirements would, therefore, strongly improve the investment case for new hotel accommodation”.

New Zealand Tourism Research Institute (2011). “The Tourism Needs of People with Hearing Loss”. Web:
http://www.nztri.org/sites/default/files/Final_report_NFD_04OCT11_1.pdf

A New Zealand online survey (with 198 international responses and 167 domestic responses) ran for 5 months in 2011. The surveys were aimed at travellers with hearing loss, to investigate their preferences in tourism products and services. Key findings included that the travellers surveyed took twice as many overnight trips as the general domestic population and a majority travelled with at least one other person. More than half of respondents agreed that they would take more trips if the level of service for people with hearing loss was improved and over two-thirds of domestic respondents found it difficult to find information about tourism products accessible to people with hearing loss.

NICAN “Inclusive Recreation Fact Sheets”

These fact sheets were based on a literature review done by Nican and summarise important data and research on participation of people with disability in sport, recreation, arts, and travel.

Packer, Tanya, Jennie Small and Simon Darcy (2008). “Tourist Experiences of Individuals with Vision Impairment” Web:
<http://www.sustainabletourisonline.com/35/accessible-tourism/tourist-experiences-of-individuals-with-vision-impairment>. Last accessed 7 May 2013.

This was an exploratory study in to the experiences of tourists with vision impairments. It included a review of previous research, of which findings included that travellers with disability are more likely to travel with others or in a group and are more likely to stay away from home for more nights, that 45% of physical access information provided to PWD is inaccurate and that barriers faced by travellers with disability include intrinsic (travellers own level of cognitive/physical/psychological function), economic, environment (inaccessible buildings, transport and services), interactive (availability and accuracy of information, communication difficulties, negative attitudes from people encountered). The study also involved interviews and focus groups with 40 people with vision impairment, though these were mostly about general experiences, not quantitative or even specifically about accommodation. The study included the development of three fact sheets, for

providers of transport, accommodation and attractions (and their employees) about how to appropriately prepare for and assist guests with vision impairments.

Rains, Scott. “Rolling Rains Report: Precipitating Dialogue on Travel, Disability and Universal Design” (various articles and blog entries). Web: <http://www.rollingrains.com/blog/>. Last accessed: 4 April 2013.

Sustainable Tourism Cooperative Research Centre (2008) “Accessible Tourism: Challenges and Opportunities”. Web: <http://www.tourism.wa.gov.au/Publications%20Library/Access%20all%20Areas/CRC%208017%20Accessible%20TourismFINAL.pdf>. Last accessed 7 May 2013.

Tourism and Transport Forum. “Productivity Commission Annual Review of Regulatory Burdens: Tourism Submission.” Submitted February 2010. Web: http://www.pc.gov.au/__data/assets/pdf_file/0009/95607/sub005.pdf. Last accessed 7 May 2013.

This document outlines the regulatory issues which affect the productivity of businesses within the tourism industry and those regulatory issues which are recommended to be reviewed by the Productivity Commission in its Annual Review of Regulatory Burdens on Business. Its submission highlights that the Building Code of Australia (BCA) is unnecessarily burdensome on tourism businesses due to the excessively high requirements placed on tourism developments and is also believed to be poorly designed in its application across the industry.

The TTF and the Australian Hotels Association completed a national survey of accommodation properties regarding the supply and demand of disabled access rooms. The survey sample represented 115 General Managers representing 24,991 rooms of which 404 were accessible. The survey showed that:

- Average demand for accessible rooms is 0.47% per establishment.
- Occupancy for accessible rooms was 30.7%, compared to 71.4% for other rooms.
- Supply of accessible accommodation represented 1.6% of total supply.

Tourism Flanders (2013). “Tourism is becoming more accessible but traveller stays on the alert”. Web: http://www.toegankelijkreizen.be/fileadmin/bestanden/docs/Survey_travellers_with_disability_2013.pdf

A survey of over 200 Flemish people with disability was run for two months in 2013. The key finding from the responses was that the main difference between these travellers and those without disability is the preparation before travel. In general people with disability spend longer planning for travel and access more forms of information during that planning process.

VisitEngland (2012). “Access Information Research”. Web: http://www.visitengland.org/Images/Accessibility%20Information%20Report%202012_tcm30-33210.pdf

An online survey (n=70) was run in England in March 2012 for people with a health condition or impairment or carers of a person with impairment. The aim of the survey was to investigate how these people got their travel and tourism information and how useful that information was. Key findings included whilst almost all rated accessibility information as important, they could not find it easily and that lack of information had a large effect of the choice to visit a particular destination.

Tourism, population, and real estate data

- Australian Bureau of Statistics. “3401.0 – Overseas Arrivals and Departures, Australia, Jan 2013” Web:
<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3401.0Jan%202013?OpenDocument>. Last accessed 4 April 2013.
- Australian Bureau of Statistics. “8635.0 – Tourist Accommodation, Australia, Dec 2012.” Web:
<http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/8635.0Main+Features1Sep%202012?OpenDocument>. Last accessed 13 March 2013.
- Access for All Alliance Inc. Australiaforall.com: The international one stop shop for accessible tourism around the world. Accessible tourism, accommodation and venues. Web: http://www.australiaforall.com/Welcome_1.html. Last accessed: 8 April 2013.
- Tourism Research Australia. “International Visitors in Australia: December 2012 Quarterly Results of the International Visitor Survey.” Web:
<http://www.ret.gov.au/tourism/research/tra/Pages/default.aspx>. Last accessed 13 March 2013.
- Tourism Research Australia. “Tourism Forecasting Committee 2012 Issue 2”. Web:
<http://www.ret.gov.au/tourism/Documents/tra/Forecasts/2012/Forecast2012Issue2.pdf>. Last accessed: 4 April 2013.
- Tourism Research Australia. “Travel by Australians: September 2012 Quarterly Results of the National Visitor Survey.” Web:
<http://www.ret.gov.au/tourism/research/tra/Pages/default.aspx>. Last accessed: 13 March 2013.

Tourism supply and demand models and methods

Allen, David E. and Ghialy Yap. “Investigating other leading indicators influencing Australian domestic tourism demand.” School of Accounting, Finance and Economics and FEMARC Working Paper Series. Edith Cowan University. Working Paper 0909. Web:
http://www.ecu.edu.au/__data/assets/pdf_file/0011/40430/wp0909da.pdf.
Last accessed: 4 April 2013/

In the tourism demand literature, much of the research focuses on income and price variables as demand determinants for travel. The literature tends to neglect other possible indicators such as consumers’ perceptions of the future course of the economy, household debt and the number of hours worked in paid jobs. The authors explore other indicators that can influence future Australian domestic tourism demand. For the dependent variables, the disaggregated data for domestic visitor nights is used, namely the visitor nights by holiday-makers (HOL), business travellers (BUS) and visitors who visited friends and relatives (VFR). In terms of the independent variables, the authors employ the following proxy variables for this research: (1) the consumer sentiment index; (2) business confidence index; (3) interest repayments for household debt; and (4) average actual worked hours in paid jobs. The empirical results reveal several points. First, it is found that the consumer sentiment index has significant impacts on VFR but not on holiday tourism. Furthermore, the business confidence index has no influence on business tourism demand. The study also finds that an increase in household debt could encourage more Australians to travel domestically, indicating that Australians may consider increasing debt as their confidence to spend increases. Lastly, working hours have a statistically significant effect in the case of holiday tourism data.

Bicak, Altinay, Jenkins (2005). “Forecasting the Tourism Demand of North Cyprus.” Web:

http://www.tandfonline.com/doi/abs/10.1300/J150v12n03_06#preview. Last accessed: 4 April 2013.

The authors identified the most important factors affecting the number of tourists staying at the tourist accommodations were real income of the tourist-generating country and relative prices. Trend analysis is undertaken based on data from the leading three countries that send tourists to North Cyprus.

Cushman Wakefield Hospitality. “The Australian hotel industry – Econometric demand forecasting.” Web: http://ehotelier.com/hospitality-news/item.php?id=16267_0_11_0_C. Last accessed: 13 March 2013.

Measures change in absolute number of rooms occupied through the construction of an economic index. This takes into account weighted change in economic demand, retail spend, employment, international arrivals and change in the supply of hotel rooms.

Economics of leisure and non-leisure tourist demand: a study of domestic demand for Australian tourism
<http://www.ingentaconnect.com/content/ip/tec/2010/00000016/00000001/art00008?token=00511c71601abb2ad71639412f415d7670347045557b6d5f386a6f2530482972715a614f6d4e227aa>

Hamal, Krishna (1996), Modelling domestic holiday tourism demand in Australia: problems and solutions
<http://www2.ret.gov.au/tourism/Documents/tra/Snapshots%20and%20Fact sheets/96.11%20Modelling%20Domestic%20Holiday%20Tourism%20Demand%20in%20Australia%20Problem%20and%20Solutions.pdf>

Analysis undertaken to determine per capita holiday visitor nights based on per capita real household disposable income, the real price of holiday travel and accommodation in Australia and the real price of holiday travel and accommodation overseas.

Theodore C. Syriopoulos, M. Thea Sinclair (1993) “An econometric study of tourism demand: the AIDS model of US and European tourism in Mediterranean countries.” Web: <http://www.tandfonline.com/doi/abs/10.1080/00036849300000158>. Last accessed: 4 April 2013.

This article was based on the assumption that the consumer allocates expenditure between total tourism expenditure and consumption of other goods and services. Tourism expenditure is then allocated between the analysed destination and other alternatives. The independent variables used included the prices in the destination country using CPI as a proxy, and the exchange rates. The paper notes that transportation costs were excluded for the following reasons:

- Cost of transportation should ideally not only take into account the financial cost of the fare paid by the consumer but also the value which the tourist attributes to the duration of the journey.
- Transport costs include the average of all modes of transport. It is not possible to calculate all options (price of different routes, airline seats vary in price etc.).
- Air fares vary depending on the type of airport (capital city or regional).

Yap, Ghialy Choy Lee (2010), An Econometric Analysis of Australian Domestic Tourism Demand
<http://ro.ecu.edu.au/cgi/viewcontent.cgi?article=1124&context=theses>

Analysis based on a model by Lim (1997) – a log-linear regression model of international tourism demand including variables of income, relative prices between prices of origin and destination, exchange rates, relative prices between a destination and its competing destinations, cost of transportation, marketing expenditures, consumers' preferences, the effect of special events and other factors such as the effects of word of mouth.

Zhou, Ting, Carl Bonham and Byron Gangnes, “Modelling the supply and demand for tourism: a fully identified VECM approach.” Working paper 07-17. University of Hawaii. Web: http://www.economics.hawaii.edu/research/workingpapers/WP_07-17.pdf. Last accessed: 4 April 2013.

System-based cointegration methods have become popular tools for economic analysis and forecasting. However, identification of structural relationships is often problematic. The authors estimate a vector error correction model of the supply and demand for Hawaii tourism using a theory-directed sequential reduction method suggested by Hall et al. (2002). The authors identify reasonable long-run equilibrium relationships, and Diebold and Mariano (1995) tests for forecast accuracy demonstrate satisfactory forecasting performance.

Zhang, Qu, Tavitiyaman (2009) The Determinants of the Travel Demand on International Tourist Arrivals to Thailand
<http://www.tandfonline.com/virtual.anu.edu.au/doi/pdf/10.1080/10941660902728080>

The number of tourist arrivals is estimated based on the exchange rate, promotional budget, dummy variables for each crisis incident and special promotion campaign. The Durbin-Watson (d-statistics) and variance inflation factor were conducted to evaluate the multi-collinearity and autocorrelation effects in the model.

PwC research and forecasting

Pricewaterhouse Coopers. UK hotels forecast 2011 and 2012: How big a party for hotels in 2012. Web: http://www.pwc.co.uk/en_UK/uk/assets/pdf/uk-hotels-forecast-2011-2012.pdf. Last accessed: 8 April 2013.

The econometric model used was based on a Vector Autoregression (VAR) framework, which allowed for interaction between occupancy and average room rates (the dependent variables). Explanatory variables used include 1 quarter of lagged occupancy rate growth and lagged ARR growth, quarterly dummies to control for the strong seasonality of the data, terrorism dummies to account for any catastrophes, GDP growth, investment, unemployment and the exchange rate.

Pricewaterhouse Coopers. Best placed to grow: European cities hotel forecast 2011 & 2012. Web: http://www.pwc.com/en_GX/gx/hospitality-leisure/pdf/pwceuropeancitiesforecast.pdf. Last accessed: 8 April 2012.

The Vector Autoregression (VAR) framework was used, and the methodology was adapted from the UK hotels forecast. The dependent variables were occupancy rate growth and real average daily rate growth. Independent variables included GDP, exchange rates, unemployment, investment, consumer expenditure, domestic interest rate and hotel room supply.

Appendix C Supply and demand model methodology

Methodology and assumptions

This section outlines how demand for, and supply of, accessible accommodation has been modelled and the key assumptions and data sources that are used.

Estimating the baseline for total demand for accommodation in Australia

Demand is initially estimated based on historical and forecast estimates for the number of domestic and international visitor nights in Australia in hotels, motels, guest houses and serviced apartments (HMGSA). These estimates are produced by Tourism Research Australia (TRA). Current demand (ie 2011-12) is based on TRA historical data and future demand up until 2021-22 is based on TRA forecasts of visitor nights. To estimate demand beyond

2021-22, the TRA forecasts have also been used to generate a linear (or straight line) forecast for a further 10 years out to 2031-32.

These estimates for HMGSA have then been adjusted to estimate total demand for all accommodation types that would be subject to the construction requirement. For 2011-12, the estimated number of visitor nights has been supplemented by unpublished TRA data on other accommodation types. To account for other accommodation types, the proportion of other accommodation to HMGSA is used to adjust the TRA estimates. Actual estimates cannot be used beyond 2011-12, as the forecasts are only estimated for HMGSA. To proxy the forecast number of visitor nights across all relevant accommodation types, TRA's forecast estimates and the linear trend estimates have been calculated based on the ratio of HMGSA to other accommodation types in 2011-12.

In relation to the supply of accommodation, most of the relevant data and information available refers to the number of rooms or room nights as opposed to visitor nights. To ensure that demand and supply are comparable, the demand for accommodation is therefore converted into room nights (this refers to rooms rather than visitors, guests or beds). The average number of visitors per room is calculated based on ABS. The number of visitor nights is then divided by the average number of visitors per room.

The table below shows the data and assumptions used to estimate the baseline of total demand.

Table 24: Assumptions used to estimate demand for accommodation in visitor nights

Assumption	Unit	Domestic value	International value	Source
Number of visitor nights in HMGSA				
2011-12	Number of visitor nights (millions)	75.475	24.469	Tourism Research Australia (2013), Forecast: 2013 Issue 1. Available from http://www.ret.gov.au/tourism/research/tra/publications/2013/Pages/2013.aspx#forecast , accessed 14 May 2013.
2012-13		77.681	25.525	
2013-14		79.339	27.563	
2014-15		80.869	29.028	
2015-16		82.182	29.880	

Assumption	Unit	Domestic value	International value	Source
2016-17		83.474	30.840	
2017-18		84.727	31.724	
2018-19		85.984	32.630	
2019-20		87.244	33.515	
2020-21		88.440	34.490	
2021-22		89.755	35.434	
2022-23	Number of visitor nights (millions)	91.200	36.704	These values are the result of a linear trend estimate based on the forecast results shown above from 2012-13 to 2022-23.
2023-24		92.514	37.730	
2024-25		93.829	38.756	
2025-26		95.144	39.781	
2026-27		96.458	40.807	
2027-28		97.773	41.833	
2028-29		99.087	42.858	
2029-30		100.402	43.884	
2030-31		101.716	44.910	
2031-32		103.031	45.935	
Estimating visitor nights for other relevant accommodation types				
Ratio of HMGSA to other relevant accommodation types	Proportion of HMGSA visitor nights (%)	13%	68%	Ratio in 2011-12. Tourism Research Australia, Online database of National Visitors Survey and International Visitors Survey. Estimate includes 'backpacker/hostel', 'caravan park or commercial camping ground' and 'caravan park – cabin'.
Average number of visitors per room (No distinction made between domestic and international)				
2011-12	Number of visitors per room	1.71		Australian Bureau of Statistics, 'Tourist Accommodation, Australia', Catalogue 8635.0, December 2012. Based on data for 'Hotels Motels and Serviced Apartments with 15 or more rooms'. Calculated by dividing the number of 'guest nights' by the number of 'room nights occupied'. No distinction is made between domestic and international visitors.
2012-13 and beyond	Number of visitors per room	1.71		Based on most recent year: 2011-12. Australian Bureau of Statistics, 'Tourist Accommodation, Australia', Catalogue 8635.0, December 2012. Based on data for 'Hotels Motels and Serviced Apartments with 15 or more rooms'. Calculated by dividing the number of 'guest nights' by the number of 'room nights occupied'.

Estimating the baseline for the total supply of accommodation in Australia

The supply of total accommodation has been calculated based on demand and occupancy rates (historical and projected). That is, supply is estimated by dividing the estimated demand by the occupancy rate. This gives the supply of room nights that would have been required to meet that level of demand at that occupancy rate.

In 2011-12, the occupancy rate is derived from ABS data on tourist accommodation. For 2012-13 and beyond, occupancy rates have been estimated based on a liner trend derived from the last 10 years of historical occupancy rates.

Table 25: Occupancy rates used to estimate the overall supply of accommodation

Assumption	Unit	Value	Source
Historical room occupancy rates for total accommodation			
2002-03	Room occupancy rate (%)	58.9%	Calculated as the average of the quarterly results across each financial year. Australian Bureau of Statistics, 'Tourist Accommodation, Australia', Catalogue 8635.0, December 2012. Based on data for 'Hotels Motels and Serviced Apartments with 15 or more rooms'.
2003-04		61.5%	
2004-05		62.8%	
2005-06		63.5%	
2006-07		65.2%	
2007-08		65.3%	
2008-09		63.0%	
2009-10		63.0%	
2010-11		64.8%	
2011-12		65.9%	
Projected room occupancy rates for total accommodation			
2012-13	Room occupancy rate (%)	66.2%	Trend occupancy rates are the result of a linear trend estimate based on the historical results shown above from 2002-03 to 2011-12.
2013-14		66.8%	
2014-15		67.3%	
2015-16		67.8%	
2016-17		68.3%	
2017-18		68.8%	
2018-19		69.3%	
2019-20		69.9%	
2020-21		70.4%	
2021-22		70.9%	
2022-23		71.4%	
2023-24		71.9%	
2024-25		72.5%	
2025-26		73.0%	
2026-27		73.5%	
2027-28		74.0%	
2028-29		74.5%	
2029-30		75.0%	
2030-31		75.6%	
2031-32		76.1%	

Identifying the current accessible component

The current supply of accessible accommodation is estimated by taking a proportion of the total supply for accommodation more generally. These proportions have been derived based on the survey of accommodation providers.

On the supply side, the survey asked accommodation providers how many accessible rooms and how many rooms in total their property has. This data is used to identify the proportion of rooms that are currently accessible, which is about 4%. This includes all respondents to the survey, including those who had no accessible rooms. This proportion of rooms is used as a proxy to estimate the proportion of room *nights* that are accessible.

These results were checked against information on accessible rooms on the 'Australia for all' website. The Australia for all site focuses on accommodation providers that currently have accessible rooms and provides a good cross-check of room ratios by accommodation type and location.

The demand for accessible accommodation was estimated based on the occupancy of accessible rooms derived from PwC's survey of accommodation providers and the supply of accessible rooms. Before estimating demand however, the occupancy of accessible rooms was adjusted to reflect the relativity between PwC's survey occupancy and the occupancy rates reported by the ABS for accommodation more broadly. This relativity is 91.1%. That is, the ABS occupancy rates are approximately 91.1% of the PwC survey occupancy. Therefore, the weighted average occupancy from PwC's survey (49.9%) is reduced to 45.5%. This occupancy is then multiplied by the supply of accessible accommodation to estimate current demand for accessible accommodation in 2011-12.

Accommodation providers were also asked what proportion of time their accessible rooms were rented out to travellers without disability. The average of these responses was 70%. Therefore, 30% of demand for accessible accommodation is assumed to represent demand derived from those with disability. In addition, providers were asked 'Has the business ever had customers without disability request an accessible room'. The proportion of businesses that responded 'yes' to (50%) is used as a proxy for the proportion of accessible rooms that are requested by guests.

Each of these assumptions and their sources are shown in the table below.

Table 26: Assumptions used to identify the accessible component of supply and demand

Assumption	Unit	Value	Source
Assumptions to assess the accessible component of supply and demand			
Proportion of overall supply that is of accessible rooms	% of total room nights available	4.0%	Based on responses to the survey of accommodation providers. Calculated as the number of total rooms reported by respondents divided by the number of accessible rooms reported.
Proportion of PwC survey occupancy rate that is reflected in ABS data	% of occupancy rate	91.1%	Based on overall occupancy rates in PwC's survey of accommodation providers and Australian Bureau of Statistics, 'Tourist Accommodation, Australia', Catalogue 8635.0, December 2012.
Occupancy of accessible rooms in 2011-12	% room occupancy	45.5%	Calculated as the weighted average occupancy of accessible rooms from PwC's survey of accommodation providers multiplied by 91.1%
Proportion of demand for accessible rooms that is from those with disability	% of accessible rooms nights demanded	30%	Based on responses to the survey of accommodation providers. Calculated as one minus the average percentage of time that businesses reported they rent accessible rooms to customers without disability.
Proportion of people without disability who request an accessible room	% of people without disability	50%	Based on responses to the survey of accommodation providers. Based on the number of respondents that responded yes to the question: "Has the business ever had customers without disability request an accessible room".

Estimating future demand for accessible accommodation

Future demand for accommodation beyond 2011-12 is based on TRA forecasts of domestic and international visitor nights, as well as linear trend estimates. This is outlined above under 'Estimating the baseline for total demand for accommodation in Australia'. While this provides the baseline of total accommodation, when considering demand for *accessible* accommodation, a growth rate has also been applied.

Given the ageing population in Australia, the demand for accessible accommodation is expected to grow over time. The prevalence of disability is higher under an older demographic, suggesting a higher overall prevalence rate under an ageing population. While those who demand accessible accommodation is a small subset of all people with disability, the prevalence of accessibility needs is expected to grow in a similar fashion to disability more broadly.

The growth rate assumed in the analysis is an annual growth in the 'Proportion of overall demand that is for accessible rooms'. That is, it assumes that the prevalence of accessibility needs grows over time.

The annual growth rate of demand for accessible accommodation is estimated based on ABS data on population projections by age and the distribution of disability prevalence across age groups. This gives an average growth rate in the prevalence of accessibility needs of 0.83%

per annum. This is an average of the annual growth rates in the prevalence of disability estimated for 2013 to 2032.

This growth rate is applied to the component of demand for accessible rooms that is demanded by those with disability to grow demand over the forecast horizon. This ensures that this growth in demand is being attributed to those with disability.

The data and assumptions used to estimate the annual growth rate are shown in the table below.

Table 27: Assumptions and data used to estimate the growth in demand

Assumption	Unit	Value	Source
Disability prevalence rates by age group			
0-4	Prevalence rate (% of population)	2.3%	This distribution is used as a proxy for the distribution of prevalence by those with accessibility needs. While we acknowledge that the prevalence rates are much higher than the estimated prevalence of accessibility needs, the relative distribution across age groups is assumed to be a close proxy for that of accessibility needs.
5-14		6.5%	
15-24		4.0%	
25-34		5.2%	
35-44		8.2%	
45-54		12.9%	
55-59		21.3%	
60-64		28.4%	
65-69		32.4%	
70-74		41.8%	
75-79		49.0%	
80-84		62.1%	
85-89		76.0%	
90 +	87.9%	Australian Bureau of Statistics, 'Disability, Australia, 2009', Catalogue 4446.0, 2009, Table 1 – Prevalence.	
Population projections used to estimate growth rate			
Number of projected persons in Australia	Number of persons	Various (see source)	<p>Australian Bureau of Statistics, 'Population projections, Australia' Catalogue 3222.0, 2006 to 2101, Table B9: population projections, by age and sex, Australia – Series B.</p> <p>For each year from 2014 to 2033, we took the sum of the projected population for each of the age groups shown in the distribution above. This gives a 20 x 14 matrix of population projections.</p> <p>The prevalence rates for each age group above are then applied to the projections in each year to estimate the age weighted average prevalence of disability each year. The growth in these overall weighted prevalence rates is then used to proxy the growth in accessibility prevalence.</p>

It is noted that "there has been no statistically significant change in the overall age-standardised rates of severe or profound limitations over the two decades to 2003⁶⁹. However, the ageing of the population and increased life expectancy are leading to more people with severe or profound core activity limitations, as well as more people with disability generally."

Given the ageing population in Australia, the demand for accessible accommodation by those with disability is expected to grow over time. The prevalence of disability is higher in an older demographic, suggesting a higher overall prevalence rate of disability in line with an ageing population. The annual growth rate of demand is estimated based on ABS data on population projections and the distribution of disability prevalence across age groups.

As such growth in demand for accessible rooms by people without disability, but requiring accessibility is estimated to grow in line with demand by people with disability.

Growth in demand for accessible rooms by people without disability and not requiring an accessible room is calculated as the total number of room night minus demand for standard rooms (based on occupancy rates for standard rooms) minus demand for accessible rooms by people requiring accessible rooms.

Estimating future construction of accessible rooms

To identify the likely occupancy rates implied by the estimated future demand, estimates were also made as to the expected change in supply over time. The average growth in supply over time is estimated based on the current construction standard for accessible accommodation in the building code.

This building code requirement was used to estimate the average percentage of new or significantly renovated rooms that must be built to meet accessibility standards. This average percentage is calculated as a weighted average of the following two factors:

- The percentage of rooms that must be accessible in each dwelling range. This is calculated as the number of accessible rooms required as a percentage of the mid-point of the range of dwelling units. For example, between 4 and 10 dwellings the mid-point is 7 and the requirements is for the construction of one accessible room. This means the percentage is 1/7 or 14%.
- Based on the survey of accommodation providers, the distribution of accommodation properties by the number of rooms.

This results in a weighted average of 5.87%.

The survey of accommodation providers also identified that on an annualised basis, 5% of businesses are planning to construct new accommodation or undergo extensive renovations each year. This has been used as a proxy to estimate the increase or change in the supply of rooms available each year.

A key assumption in estimating the supply of accessible accommodation over time is that accommodation providers are not expected to construct more accessible accommodation than the amount required by the standard. As such, the 5% increase or change in supply is only applied until the proportion of supply that is accessible reaches the required rate (ie reaches 5.87%).

⁶⁹ See <http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=6442452829>.

The table below shows each of the assumptions used to estimate future supply and their associated data sources.

Table 28: Assumptions used to estimate future supply of accessible accommodation

Assumption	Unit	Value	Source
Distribution of accommodation by the number of rooms			
0-3 rooms	% of properties	7%	Based on the survey of accommodation providers.
4-10 rooms		7%	
11-40 rooms		12%	This distribution of properties is used as a proxy for the distribution of the number of rooms built when constructing new accommodation or completing renovation work that is subject to the accessible accommodation standard in the Premises Standards.
41-60 rooms		14%	
61-80 rooms		1%	
81-100 rooms		36%	
101 + rooms		23%	
Mid-point of dwelling unit ranges and the implied percentage of rooms that must be accessible			
0-3 rooms	% of rooms	0%	No requirement to have accessible rooms.
4-10 rooms	that must be accessible	14%	Mid-point of 7 and a requirement to make 1 room accessible (1/7).
11-40 rooms		8%	Mid-point of 25.5 and a requirement to make 2 rooms accessible (2/25.5).
41-60 rooms		6%	Mid-point of 50.5 and a requirement to make 3 rooms accessible (3/50.5).
61-80 rooms		6%	Mid-point of 70.5 and a requirement to make 4 rooms accessible (4/70.5).
81-100 rooms		6%	Mid-point of 90.5 and a requirement to make 5 rooms accessible (5/90.5).
101 + rooms		4%	The upper limit is assumed to be 131, meaning a mid-point of 116. Therefore $5/116 = 4\%$
Expected increase in supply			
Proportion of supply that will construct or renovate per annum	% of supply per annum	5%	Based on the survey of accommodation providers. An average of five per cent of accommodation providers indicated that they were planning to construct new accommodation or renovate. This is used as a proxy for the proportionate increase in supply of rooms being constructed or renovated.
Proportion of new or renovated accommodation that must be accessible	% of rooms	5.87%	Weighted average of the two distributions shown above in this table. Calculating the weighted average based on the exact figures shown in this table will not give the exact value shown due to rounding.

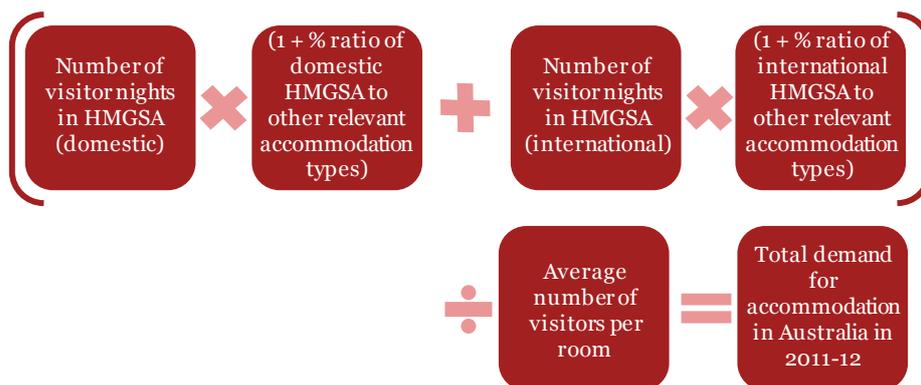
Equations showing how the assumptions are used

The equations below demonstrate the methodology outlined above and draw on the assumptions discussed. The equations show how the different elements are brought together to estimate supply and demand of accessible accommodation.

Total supply and demand for accessible accommodation

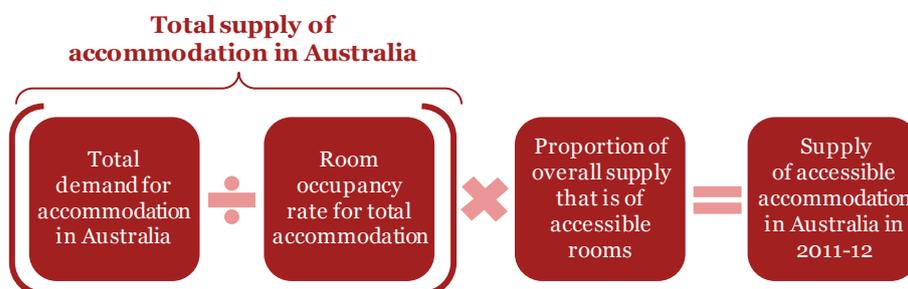
The equation for calculating the current demand for total accommodation is shown below.

Figure 13: Equation for estimating the current level of demand for accommodation



The equation below shows how the current supply of total accommodation and accessible accommodation in 2011-12 is then estimated.

Figure 14: Equation for estimating current level of supply for accessible accommodation



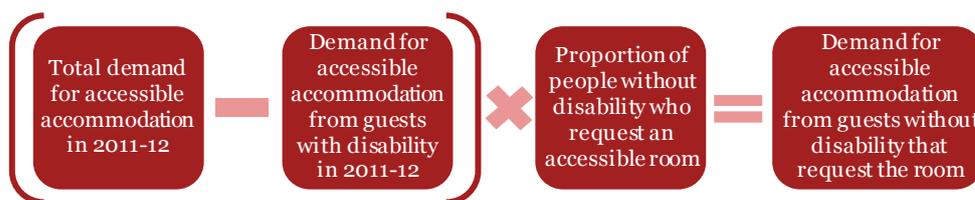
The demand for accessible accommodation (including guests with disability) is then calculated as per the equation shown below.

Figure 15: Equation for estimating the current level of demand for accessible accommodation



The demand from guests without disability that request an accessible room is shown in the calculation below.

Figure 16: Equation for estimating demand from guests without disability that request an accessible room



Forecast supply and demand for accessible accommodation

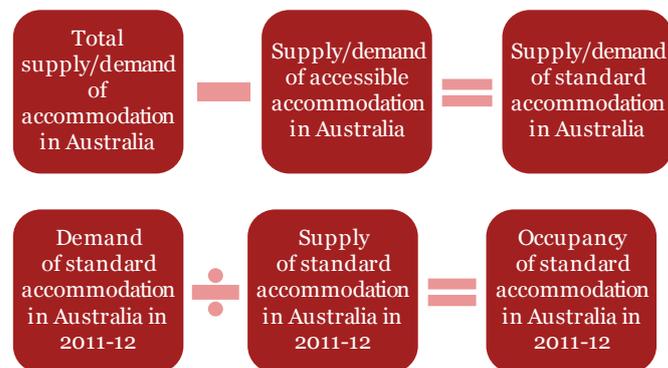
The expected future level of supply is calculated based on the construction standard in the building code. The equation below shows how the expected supply of accessible accommodation is calculated in any one year from 2012-13 to 2021-22. After this point, the proportion of supply that is accessible is estimated to reach the required rate. Therefore, from 2022-23 onwards, supply is calculated as ‘Total supply of accommodation in Australia’ multiplied by 5.87%.

Figure 17: Equation for estimating forecast supply of accessibility accommodation



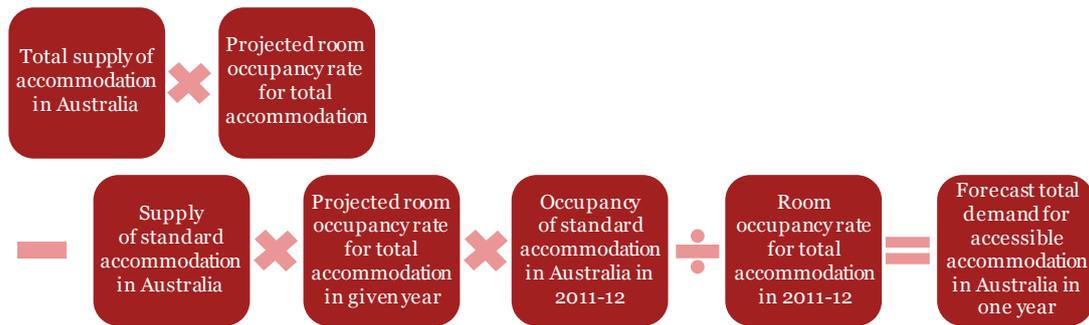
To forecast demand, estimates of the supply and demand of standard rooms, including the occupancy of standard rooms, are used. The equations for calculating these are shown below.

Figure 18: Equations for estimating supply, demand and occupancy rates for standard rooms



The equation for calculating future demand for accessible accommodation is shown below.

Figure 19: Equation for estimating future demand for accessible accommodation



For those with a disability, future demand is calculated as shown below.

Figure 20: Equation for estimating future demand for accessible accommodation by guests with disability



Disaggregating supply and demand of accessible accommodation

The supply and demand for accessible accommodation has been disaggregated in two different ways: by the location of travel (regional versus capital cities) and different price points. This disaggregation is done by estimating the distribution of supply and demand across each of these factors.

The distribution of supply and demand by location and price points are derived from the stakeholder surveys. The table below shows the distributions for demand and supply and an explanation of the data sources that were used. The unit for each of these distributions is percentage of room nights.

The level of demand and supply under each category is calculated as the demand/supply of accessible accommodation multiplied by the percentage shown in the table below.

Table 29: Demand supply summary (by location and price)

Assumption	Demand	Supply	Source
Distribution of room nights by location			
All Accommodation			
Regional	46.1%	55%	Demand: Australian Bureau of Statistics, 'Tourist Accommodation, Small Area Data, Australia', Catalogue 8635.0.55.002, December 2012. Based on data for Hotels Motels and Serviced Apartments with 15 or more rooms. The distribution was calculated based on the number of rooms and occupancy rates in December Quarter 2012.
Metro	53.9%	45%	
Supply: Australian Bureau of Statistics, 'Tourist Accommodation, Small Area Data, Australia', Catalogue 8635.0.55.002, December 2012. Based on data for Hotels Motels and Serviced Apartments with 15 or more rooms. The distribution was calculated based on the number of rooms in December Quarter 2012.			
Accessible accommodation			
Regional	41%	28%	Demand: Based on PwC's survey of travellers with disability. Travellers were asked how many nights they spend in each location. The distribution of those nights was used to derive the distribution of travel by location.
Metro	59%	72%	
Supply: Based on PwC's survey of accommodation providers. Calculated as the number of accessible rooms in regional areas/capital cities divided by the total number of accessible rooms reported.			
Distribution of accessible room nights by price point			
Less than \$50	3.6%	2.6%	Demand: Based on PwC's survey of travellers with disability. Travellers were asked what they would usually budget for accommodation when travelling. The distribution of their responses was used to derive the distribution across the ranges shown.
\$51-\$100	17.7%	11.8%	
\$101-\$150	41.0%	34.2%	
\$151-\$200	22.9%	27.6%	Supply: Based on PwC's survey of accommodation providers. Providers were asked the average rate that their accessible rooms are rented out at. The distribution of their responses was used to derive the distribution across the ranges shown.
\$201-\$250	9.9%	15.8%	
\$251-\$300	4.2%	2.6%	
More than \$301	0.8%	5.3%	

Appendix D Survey methodology

Survey methodology

To inform this study, two public surveys were conducted: one survey focusing on the accommodation industry and one survey focusing on travellers with disability.

The survey of tourism accommodation operations was to assess:

- current demand for existing accessible rooms
- current industry practices in product distribution and consumer information in promoting and selling accessible rooms.

The survey of people with disability was to determine:

- availability of accessible accommodation in capital city and regional areas based on actual booking experiences
- amenity of accessible accommodation (including room design and location) and shared guest facilities based on actual experiences
- level and quality of available information when making travel planning decisions and purchasing accessible accommodation (eg realistic, accurate and detailed access information about the property to make an informed choice based on particular access needs) based on actual experiences
- service quality when using accessible accommodation based on actual experiences
- barriers to booking and utilising accessible accommodation.

In close consultation with the Project Steering Committee (PSC), PwC prepared and managed two online surveys using PwC's in-house survey tool.

Whilst the questions were initially drafted by PwC, the PSC was responsible for reviewing, vetting and validating the survey questionnaire, and played a key role acting as a quality review point. The accommodation provider's survey required clearance by Australian Bureau of Statistics (ABS) Statistical Clearance House (SCH). The SCH reviews surveys with a focus on ensuring each survey minimises provider load, is fit for purpose and uses sound statistical principles. This survey of accommodation operators was found to be so and has an Australian Government Statistical Clearing House Approval Number (no. 02309—01). This approval number was clearly displayed on the first page of the survey, as per requirements⁷⁰.

Following final clearance from the PSC, both surveys went live on Tuesday 5 March 2013. The surveys were officially live for a period of 6 weeks and officially closed on 12 April 2013. To accommodate respondents that were in the process of submitting responses, PwC allowed

⁷⁰ National Statistical Service. *The Statistical Clearing House Clearance Process*. Web: <http://www.nss.gov.au/nss/home.NSF/pages/SCH+Clearance+Process+Overview?OpenDocument>. Last accessed: 27 March 2013.

the survey tool to continue to collect late responses until the end of April. All results are included in this final report.

During the time the surveys were live, PwC was responsible for administering the surveys, including collecting and monitoring responses, trouble shooting, and managing information in accordance with Commonwealth requirements in regards to privacy law. The PSC was involved in promoting the survey to both industry and disability organisations.

To thank participants for their time, a gift voucher of \$100 was given to a randomly selected respondent from each survey.

Survey promotion

To ensure as large as possible response rate, both PwC and the PSC undertook efforts to distribute and promote the surveys. Disability and industry representative associations were contacted and encouraged to promote and distribute the surveys to their members via their website, newsletters, contact lists and social media. The PSC was especially involved in this promotion, and their efforts meant that 147 disability associations, accommodation industry groups and government bodies were contacted about the survey, listed below. Along with many distributions to contact lists, notable places where the survey was promoted include PWDA twitter (4400 followers), Tourism Australia's *Essentials* newsletter (16000 subscribers), Tourism 2020 newsletter (406 individual and organisation subscribers), Disability Discrimination Commissioner Graeme Innes's twitter (3000 followers) and *Don't DIS my ABILITY* Facebook (18000 fans).

To boost numbers in the industry survey, PwC contacted some accommodation providers directly (at the opening of the survey and also a reminder email was sent when the survey had one week to go). In addition to this, in an effort to increase numbers towards the end of the survey, representatives from the Department of Business and Innovation contacted a variety of Victorian accommodation suppliers directly to facilitate the survey over the phone.

A number of accommodation providers were contracted in relation to this engagement. This was to do with gathering their views on accessible accommodation and arranging site visits. The names have been omitted for confidentiality reasons.

The disability organisations contacted or involved in the distribution of the travellers with disability survey were:

- Ability Works Australia
- Able Australia Services
- Access Industries for the Disabled Ltd
- Activ Foundation Inc
- ACL Disability Services
- Advance Personnel (Canberra) Inc
- Aged and Community Services Australia
- Anglicare NT
- Anowad Community Living Inc
- A.Q.A. Victoria Ltd
- Arts Access Victoria
- Australian Blindness Forum
- Australian Federation of Disability Organisations
- Australian Foundation for Disability
- Australia For All
- Australian and New Zealand Association of Neurologists
- Australian Parent Advocacy
- Aware Industries Ltd
- Barkuma Inc
- Bedford Group
- Behha Enterprises
- Better Hearing Australia (Sydney) Inc
- Brightwater Care Group
- Canberra Blind Society
- Castle Personnel Service Ltd
- Centacare Community Services
- Cerebral Palsy Alliance
- Cerebral Palsy Australia
- Cerebral Palsy League of Queensland
- Challenge Disability Services
- Chinese Parents Association – Children with Disabilities Inc
- Civic Disability Services Limited
- Community Connections Australia
- Community Development Network (CDNet)
- Community Resource Unit Inc
- ConnectAbility Australia Inc
- Cootharinga North Queensland
- Cosmos Inc
- Deaf Children Australia
- Deafness Forum
- Disability Exchange
- Disability Information and Resource Centre
- Disability Services Australia
- Disabled Motorists Australia
- Down Syndrome Association of Victoria Inc
- Emmanuel
- Endeavour Foundation
- Epilepsy Association of SA & NT Inc
- Epilepsy Association of the ACT Inc
- Epilepsy Queensland Inc
- Essential Personnel Association Inc
- Eurella Community Services Inc
- Every Australian Counts
- Forrest Personnel Inc
- Fairhaven Future Care Ltd
- Geraldton Personnel Inc
- Gold Coast Recreation & Sport Inc

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- Good Samaritan Industries
- Great Southern Personnel
- Hands On SA
- Hartley Lifecare
- Help Enterprises
- House with No Steps
- HPA Disability Services
- Inala
- Independence Australia
- Independent Living Centre WA
- International Day of People with a Disability
- Job Placement Ltd
- Jobsupport
- Karingal
- Kirini Community Services Ltd
- Koomarri
- Latrobe Valley Enterprises
- Macarthur Accommodation System
- Marillac
- Mercy Disability Services
- Minda Incorporated
- MOIRA
- MontroseAccess
- Motor Neurone Disease Association of Victoria Inc
- Mount Isa Skills Association Inc
- Multicap Tasmania
- Multicap Queensland
- Murray Human Services Inc
- Muscular Dystrophy Association (MDA Inc)
- Muscular Dystrophy NSW (MDNSW)
- Muscular Dystrophy QLD (MDQLD)
- Nadrasca Ltd
- Nambucca Valley Phoenix Ltd
- National Brain Injury Foundation Inc
- National Disability Services
- National Ethnic Disability Alliance
- Northcott
- Novita Children's Services
- Oak Tasmania
- Open Minds
- Optia Incorporated
- Orana Incorporated
- OzAdvocacy
- Paraplegic and Quadriplegic Association of NSW
- Paraquad
- People with a Disability
- PEP Community Services
- Phoenix Society Inc
- Physical Disability Australia
- Polio NSW Inc
- Prahan Mission
- Project Employment
- RichmondPRA
- Rocky Bay Inc
- Royal Institute for Deaf & Blind Children
- Royal Society for the Blind of South Australia Inc
- RPH Australia Cooperative Ltd
- SA Group Enterprises Inc
- SANE Australia
- SCOPE (Vic) Ltd
- Scosa
- Senses Foundation Inc
- Spina Bifida & Hydrocephalus Association of South Australia Inc
- Spinal Cord Injuries Australia
- Spinal Injuries Association
- St Giles Society Inc
- Sunnyfield

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> • Sydney University • Tandem Respite Inc • Technical Aid to the Disabled (ACT) Inc • Technical Aid to the Disabled (Queensland) Inc • The Flagstaff Group • The Oakleigh Centre • The Personnel Group Ltd • Tulgeen Group • UnitingCare Disability Services Central Coast • Valley Industries Ltd • VATMI Industries Limited • Veranto • Victorian Deaf Society • Villa Maria Society • VincentCare Victoria • Vision Australia • Warrah • Waverly Helpmates Inc • Western Australian Deaf Society Inc • Westhaven Association Ltd • Wheeling and Able • Work Connection Ltd • Work Venture (Qld) Ltd | <ul style="list-style-type: none"> • Xavier Children’s Support Network • Yooralla. <p>The following industry organisations were also contacted about helping to promote the accommodation operators survey:</p> <ul style="list-style-type: none"> • Accommodation Association of Australia • Australian Hotels Association, ACT Branch • Australian Hotels Association, WA Branch • Canberra Accommodation Association • Canberra Business Council • Caravan and RV Association • National Tourism Alliance • Property Council of Australia • Property Council Western Australia • South Australian Tourism Industry Council • Tourism Accommodation Australia • Tourism and Transport Forum • Tourism Council Western Australia | <ul style="list-style-type: none"> • Urban Development Institute Western Australia • Victorian Tourism Council. <p>The following government organisations were also involved in the distribution of both surveys:</p> <ul style="list-style-type: none"> • Australian Capital Tourism • Australian Human Rights Commission • Attorney-General’s Department (Cth) • Building Codes Queensland, Department of Housing and Public Works • City of Perth • Department of Infrastructure and Transport (Cth) • Destination NSW • Disability Advocacy and Access, Department of Families, Housing, Community Services and Indigenous Affairs • Disability Advisory Councils, Department of Communities (Qld) • Disability Discrimination Commissioner • Disability SA, Department of Communities and Social Inclusion (SA) • Disability Services Commission WA |
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- Don't DIS my ABILITY, Department of Family & Community Services (NSW)
- Northern Territory Tourism
- Office of Disability, Department of Human Services (Vic)
- Queensland Tourism Industry Council
- Tourism Australia
- Tourism and Events Queensland
- Tourism Western Australia
- All state and territory building regulators.

A number of accommodation providers were contracted in relation to this engagement. This was to do with gathering their views on accessible accommodation and arranging site visits. The names have been omitted for confidentiality reasons.

Survey trouble shooting

While all reasonable steps were taken to anticipate and mitigate issues and risks, several problems were encountered during the survey process.

The survey tool presented a challenge for some respondents with a visual disability who required screen readers⁷¹. To address this, PwC provided a helpline number and email address, which were both monitored throughout the survey period. In cases where respondents were unable to use the survey tool, assistance was offered to complete the survey verbally over the phone or alternate format (via post or email was offered). This help was taken up on four occasions.

Response rates were monitored through the survey period. PwC provided regular updates on response rates to the PSC members. This information, in turn, provided PSC members with valuable information to help redouble promotional efforts and ensure the best possible response rate by the close of the survey period.

Overall, PwC received 38 communications over phone or email about the survey.

- Five complaints or comments about the survey not being vision accessible. If this prevented completion, an alternative format was offered, as above.
- Eight needing fresh links to ensure unique identification.
- Two queries as to when the report would be published.
- Four complaints about the scope or questions in survey.
- Four wanted to add comments that they had not remembered to include or thought there was not space for in the survey.
- Two complaints about the survey format that did not relate to vision access; that it did not cater to older people who are uncomfortable with computers and or people with low communication skills.
- Three general queries regarding the study and PwC or Government roles in it.
- Two confirmations of the details by stakeholders who were passing survey on.
- One complaint about not being consulted during the survey development.
- One question clarification.
- One offer of additional help.
- One request for an excel form.
- One technical difficulty with entering % answers.

Three unknown requests that did not leave adequate details for PwC to follow-up (ie voice mail messaged were inaudible and/or lacked adequate detail).

⁷¹ PwC's "off-the shelf" tool may not comply with WCAG 2.0 standards as published by the W3C. Given project scope and budget, full compliance testing of the tool was not possible. The WCAG 2.0 standards have been adopted by the Department of Finance and Regulation as policy for the Commonwealth, and are being implemented across the Government over the 2012 to 2013 time frame. Please refer to the following website for more detail: <http://www.finance.gov.au/publications/wcag-2-implementation/>.

Survey response rate

A high response of 1000 responses for each survey was the initial target. This estimate was based on an assessment of the total ‘population’ size of each group being surveyed. For the survey of travellers with disability, the estimated population is 4 million Australians with disability. For the survey of accommodation providers, the population was defined as total accommodation establishments in Australia, as this is the focus of the Premises Standards requirements. There are approximately 4200 hotels and resorts, motels and serviced apartments of over 15 rooms in Australia⁷². When including holiday houses, flats, hostels, caravan parks and camping grounds, the total population increases to include approximately 30,000 additional establishments⁷³.

However, as was identified and discussed with the PSC throughout the engagement, “survey fatigue” combined with limited promotional resources meant achieving this level of survey response rates could be very difficult, despite efforts to recruit participants. In consultation with both the Department and the PSC, it was agreed that the survey results, even with a response sample lower than the target level, remain useful for the purposes of this study (and given the clear limitations on budget and project time frames). Throughout the survey period, PwC made all reasonable and necessary efforts to achieve the required sample size within the scope and budget. As at 1 May 2013, when the survey closed fully, 224 responses had been obtained from accommodation providers and 402 responses from travellers with disabilities. At a 95% confidence level, this yields approximate margins of error of 5% for the accommodation survey and 5% for the traveller’s survey.

Traveller profile

The survey of travellers with disability received responses from 402 individuals. The gender split of this sample was 63% women and 45% men, which somewhat over-represents women compared to men compared to the Australian population as a whole⁷⁴. The age group of the sample tended to be skewed somewhat towards older respondents as compared to the wider Australian population⁷⁵. Figure 21 highlights the age distribution of the sample⁷⁶.

72 ABS. 8635 Tourist Accommodation, Australia. December 2012.

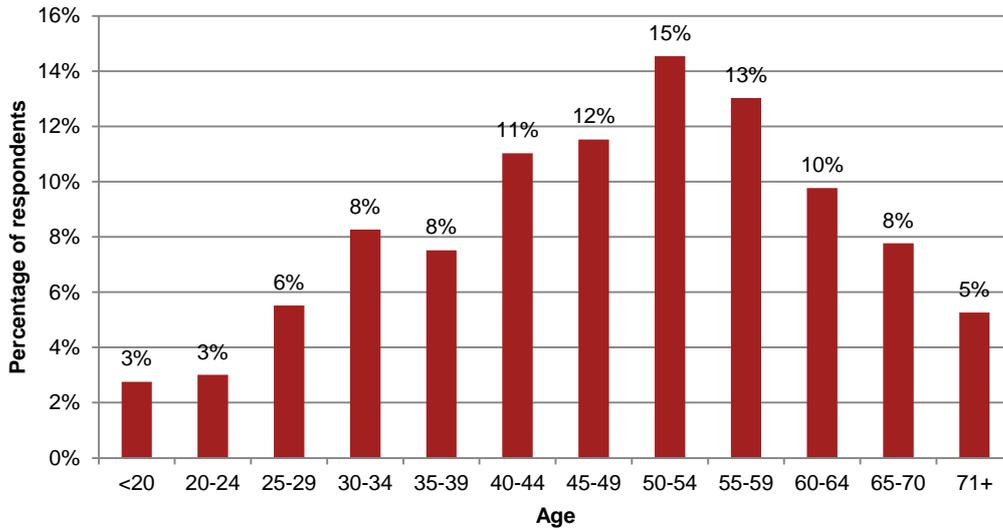
73 IBIS World Industry Reports H4403 and H4405.

74 This is contrasted against a national average of 50.3% female (as at 30 June 2011, ABS Publication 3235, Population by Age and Sex).

75 As comparing to ABS 3101. Estimated Resident Population Single Year of Age, Australia, Table 9.

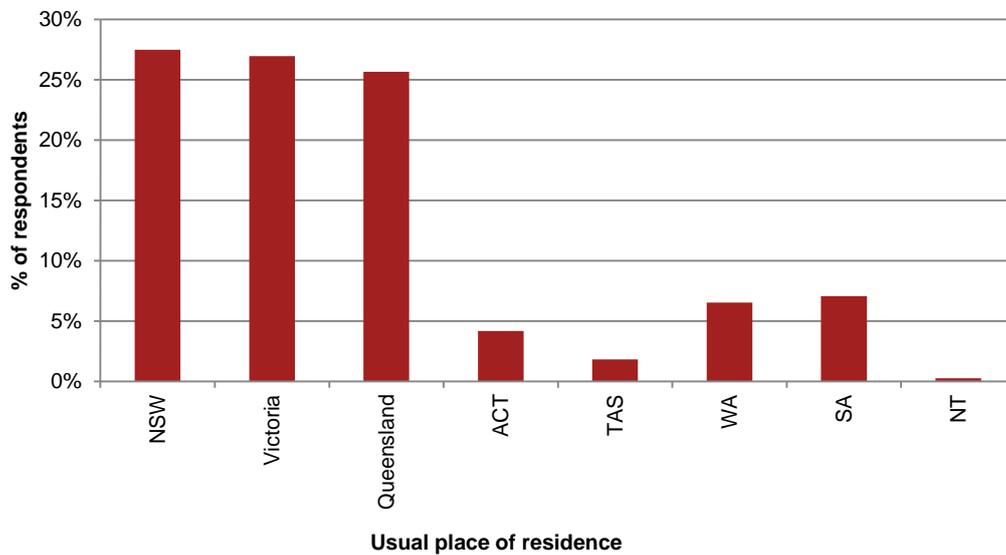
76 Given the relative lower sample size, the under 20 and over 70 age groups have been aggregated and presented together.

Figure 21: Age profile



In term of the usual place of residence of survey respondents, the sample is distributed across all states and territories; however it is largely represented by respondents from New South Wales, Victoria, and Queensland which represents 80% of the sample, although it should be noted that this does not greatly over represent these states in a comparison to the total population.

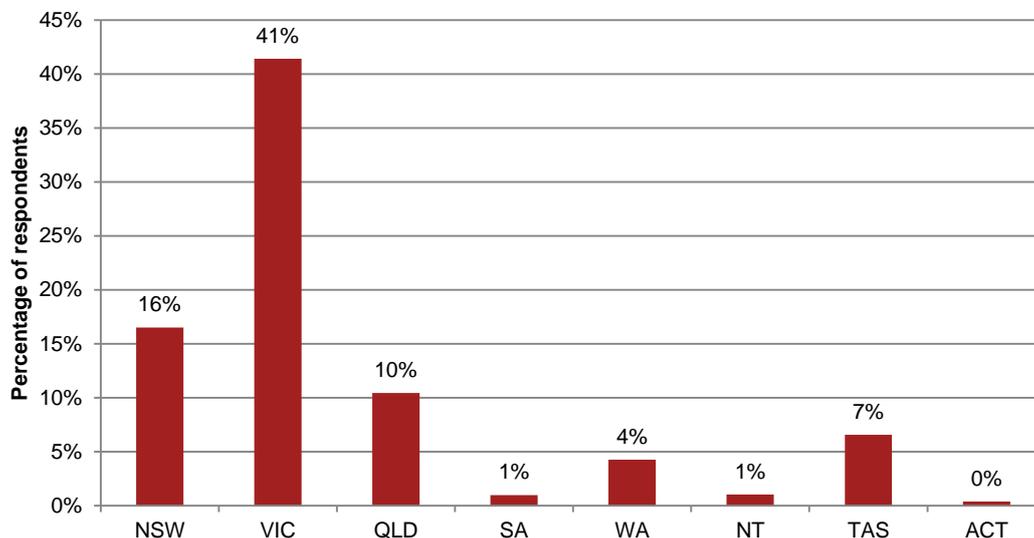
Figure 22: Usual place of residence (by State)



Accommodation provider profile

The respondents of the accommodation provider survey can from all states and territories with New South Wales, Victoria and Queensland being the most represented.

Figure 23: Location of accommodation providers surveyed



Source: PwC survey

Hotels were the most represented type of accommodation as 37% of responses, but responses also included motels, bed and breakfasts, serviced apartments as well as others.

Table 30: Types of accommodation

Type	Percentage of respondents
Motels, including private hotels and guest houses	15%
Bed and breakfast	13%
Hotels, including resorts	45%
Serviced apartments	10%
Other, including holiday flats, student residences and caravan parks	17%

The average age of the properties surveyed was 27.6 years. Within regional areas the average property age of the sample is approximately 28.6 years, while the average property age within capital cities is 26.2 years. 9.4% of respondents plan to construct new buildings or significantly renovate existing building(s) within the next 12 months. In terms of the asset lifecycle, 16% of respondents have plans to construct, or significantly renovate existing, building(s) within the next 36 months. On a per year basis, this implies an approximate 20 year investment cycle in to accommodation assets⁷⁷.

⁷⁷ 16% of respondents indicated that they had plans to invest over the next 36 months. Averaged over a per year basis, approximately 5% of businesses will be looking to make a significant investment, either in new or existing assets, each year. Taking this inverse, this implies that the asset investment cycle is roughly 20 years. Where survey respondents provided data, the average property age of the sample nationally was 27.57 years (see Question 33).

Appendix E Consultations and site visits

Site visits

PwC undertook a selection of site visits across Australia to compare accessible rooms with standard rooms of the same premises visited. The purpose of undertaking the site visits was to assist with the interpretation of key data as well as inform the development of tangible and actionable recommendations.

The general approach for the case studies was an escorted tour of common areas and a sample of accessible and standard rooms for comparison. To select the sites, PwC contacted accommodation providers inviting them to participate in the study. Ten providers were selected, comprising a mix of regional and metropolitan centres. Site visits were undertaken at ten locations within Melbourne, Sydney and Canberra, as well as regional areas in New South Wales and Victoria.

To structure the case studies and ensure consistency of questions and documentation, PwC developed a site visit assessment guide. The guide was developed to help inform the conversation between PwC and accommodation providers. It was not meant as an audit, assessment or checklist. The guide was developed and reviewed by the PSC with the special assistance from the persons with disabilities representative.

Findings from the case studies were documented as written field notes; however, the specifics of each site visits are not cited in this report. The qualitative assessments of the site visits occurred only after the surveys were closed to ensure that both activities occur independently.

Stakeholder consultations

Additionally, industry and disability groups were also consulted throughout the engagements. The purpose of this was to ensure that such groups were offered an opportunity to submit any relevant studies or data which they felt was important to the project, as well as capture key thoughts and views that should factor into this analysis. Specifically the groups consulted included:

- Australia for All
- Travelability
- Tourism Accommodation Australia
- National Tourism Alliance
- Australian Tourism Council, Western Australia Branch.

Appendix F Survey questionnaires

Accommodation providers survey questions

- 1 Does this business currently have accessible rooms in any of its properties? If the answer is 'No', go to Question 15
- 2 In 2012, what was the number of nights that all accessible guest rooms were booked out? (whole number – out of 365 days)
- 3 In 2012, what was the number of nights that all guest rooms were booked out? (whole number – out of 365 days)
- 4 In general, please estimate the percentage (%) of time this business rents accessible rooms to customers without disability.
- 5 Based on the response in Question 4, in general, please estimate the percentage (%) of time that this business receives complaints from customers because they've been allocated an accessible room.
- 6 How does this business promote and sell accessible rooms? (select all of the following that apply):
 - a Provide information of accessibility features of the room
 - b Rate the room on a scale
 - c Provide photos of the room
 - d Displayed the international symbol for access
 - e Advertise my property through accessible tourism organisations
 - f Advertising in newsletters or websites of disability organisation
 - g Other.
- 7 Has the business ever had customers without disability request an accessible room? (Yes/No/Unsure)
- 8 If you have answered 'Yes' to Question 7, please select the most common reason for their request:
 - a Better accommodate children (eg lower sink)
 - b Better accommodate elderly
 - c More room space
 - d More space in the bathrooms
 - e Room features (eg slip proof surfaces, grab rails)
 - f Other.

Survey questionnaires

- 9 Have customers without disability ever requested that they be moved from an accessible room to another room?
- 10 If you have answered 'Yes' to Question 9, please select the most common reason for their request:
- a Location of the room within the building (eg too close to elevator or exits, ground floor)
 - b Aesthetic reasons (eg look/feel)
 - c Value for money
 - d Specific features of the room
 - e Other.
- 11 Do persons working for this business receive training with respect to accessibility features? (Yes/No/Unsure) If No or unsure, go to Q13.
- 12 If you have answered 'Yes' to Question 11, please indicate the type of training provided (select all that apply):
- a Information provided to staff on features of an accessible room
 - b Information provided to staff on requirements of travellers with disability
 - c Training on the features of an accessible room
 - d Training on the requirements of travellers with disability
 - e Other.
- 13 Of the guests using this business' accessible accommodation, in 2012 what proportion was for (whole number):
- a Domestic leisure (%)
 - b Domestic business (%)
 - c Domestic other (%)
 - d International (%)
 - e Unsure (%).
- 14 Of the guests using this business' accessible accommodation, in 2012 what proportion have travelled from: (whole number)
- a Within the state or territory (%)
 - b Another state or territory (%)
 - c Another country (%)
 - d Unsure (%).

Survey questionnaires

- 15 Have the common areas within this business' properties been built or modified to accommodate travellers with disability? (Yes/No/Unsure) If the answer is 'Unsure' or 'No', go to Question 17.
- 16 If you have answered 'Yes' to Question 15, please identify the modifications you have made (select all that apply):
- a Alterations to doors
 - b Modifications to handles and/or grab rails
 - c Alterations or modifications to entryways and landings
 - d Alterations or modifications to kerbs
 - e Removing obstructions from pathways
 - f Braille and/or tactile signage
 - g Braille and/or tactile information on amenities and services (eg menus, guide books)
 - h Addition of, or alterations to, slip proof surfaces
 - i Addition of, or alterations to, seating or other surfaces (eg tables, counters)
 - j Addition of, or alterations to, hearing assistance equipment
 - k Addition of, or alterations to, visual assistance equipment
 - l Addition of, or alterations to, accessible toilet facilities
 - m Other.
- 17 Does this business offer additional accessibility services?
- 18 If you have answered 'Yes' to Question 17, please identify the services you offer? (select all that apply)
- a Access to TDD systems
 - b Access to assistive listening systems
 - c Orientation to accessibility tools and features
 - d Audio displays or closed captioning of hotel information
 - e Captioning on TVs
 - f Visual alarms for emergency egress in hotels/motels or tourist venues
 - g Visual information to complement their public address announcement
 - h Other.

Survey questionnaires

- 19 Please identify the construction features or modifications that have been made to accessible guest rooms of this business (select all that apply):
- a Modifications to doors
 - b Modifications to handles and/or grab rails
 - c Addition of, or alterations to, modifications to entryways
 - d Alterations to the height of electrical plugs, fixtures, faucets, handles, locks, or peep holes
 - e Removing obstructions from pathways
 - f Braille and/or tactile signage
 - g Addition of, or alterations to, slip proof surfaces
 - h Addition of, or alterations to, seating or other surfaces (eg height of tables, counters, seating)
 - i Addition of, or alterations to, hearing assistance equipment
 - j Addition of, or alterations to, visual assistance equipment
 - k Addition of, or alterations to, accessible toilet facilities
 - l Not applicable (no accessible rooms)
 - m Other.
- 20 Based on the previous responses in this survey, what aspects of making common areas and guest rooms more accessible were the most challenging and why?
- 21 Does this business have plans to construct new building(s) or significantly renovate existing ones within the next 36 months?
- 22 If you have answered 'Yes' to Question 21, approximately when will the work begin?
- 23a Is this business familiar with universal design principles used in building construction? Universal design – refers to the idea of designing all products and structures to be aesthetically pleasing and usable to the greatest extent possible, regardless of their age, ability, or status in life.
- 23b If you have answered 'Yes' to Question 23a, has this business explored incorporating universal design principles into the design of future accommodation properties?
- 23c If you have answered 'Yes' to Question 23b, please describe the experience of incorporating the universal design principles?
- 23d If you have answered 'No' to Question 23b, does this business think accessible rooms can be designed to have a wider application or appeal, for example to elderly travellers, travellers with young families, or guests without disability?
- 24 On a scale of 1 to 5, please rate the quality of information currently available that explains Premises Standards for accessible accommodation? (1 = Poor; 5= Excellent)
- 25 Based on the information this business has reviewed in meeting accessibility requirements, how it can be improved?

Survey questionnaires

- 26 Has this business ever experienced difficulties receiving the required regulatory approvals with respect to meeting accessibility requirements?
- 27 If you have answered 'Yes' to Question 26, please describe the experience and indicate the primary reason (select one):
- a Interpretation of requirements
 - b Paper work or administrative requirements
 - c Delays in decisions or approvals
 - d Availability of inspectors
 - e Other.
- 28 Please provide the business name(s) and address of the business headquarters:
- 29 Is this business responding to this survey in relation to more than one property (eg a chain of hotels)?
- 30 If you have answered 'Yes' to Question 29, please describe the nature of the properties that you are representing (eg entire chain of properties, portion of chain of properties, individual property related to a chain, individual property, other)
- 31 Location (State/Territory):
- 32 Type of accommodation:
- 33 Characteristics of the business and its accommodation properties (best estimate). For each of the following, give answer for capital city and regional:
- a Number of properties (whole number)
 - b Number of rooms (whole number)
 - c Average star rating (to one decimal place – simple average of all properties in the state of this type)
 - d Average property age (whole number in years – simple average of all properties in the state of this type)
 - e Average occupancy (% – simple average during 2012)
 - f Average room rate (\$/night – simple average during 2012)
 - g Low price point
 - h Mid price point
 - i High price point
 - j Number of accessible rooms (whole number)
 - k Proportion built after 1 May 2011 (% – new buildings or new building work was approved on or after 1 May 2011 by the relevant State/Territory)
 - l Average occupancy rate of accessible rooms (% – simple average during 2012)

Survey questionnaires

- m Average room rate of accessible rooms (\$/night – simple average during 2012)
- n Low price point
- o Mid price point
- p High price point
- q Average rate of return of an accessible room compared to other guest rooms (% during 2012 – use brackets to indicate a loss)
- r Low price point
- s Mid price point
- t High price point.

Travellers with disability Survey Questions

Please provide the following information about yourself.

- 1 Age
- 2 Sex
- 3 Gross weekly income (before tax):
- 4 Usual place of residence (town/city and state)
- 5 Indigenous identification. Do you identify as: Aboriginal, Torres Strait Islander or either
- 6 Are you employee: Full-time, Part-time/Casual, or currently not employed?
- 7 On average, when you do stay in paid accommodation, how much would you budget per night?
- 8 When selecting accommodation, what factors are important in your decision? (Please rate 1-5 with 1 = not important; 5 = very important).
 - a Price
 - b Room quality
 - c Service quality
 - d Reputation
 - e Location
 - f Accessibility of local environment (eg ramps, grab rails, direct entry)
 - g Proximity to accessible services.
- 9 How many nights per year in total do you travel from home: for example to visit friends/family, holidays, for business, education, medical appointments or conferences/conventions?

Survey questionnaires

- 10 When you travel, what is your main purpose of travelling? (whole number): The sum of the numbers entered must equal 100.
- a Leisure (%)
 - b Business (%)
 - c Other (%)
- 11 Of the nights you are away, what proportion (%) is spent in paid accommodation and what proportion (%) is spent in non-paid accommodation eg staying with friends or family? (whole number) The sum of the numbers entered must equal 100.
- a Proportion of nights in paid accommodation (%)
 - b Proportion of nights in non-paid accommodation (%)
- 12 How many nights per year do you stay in paid accommodation in: CBD, metro, regional areas in each state (best estimate)
- NSW
- Capital City
 - Regional.
- ACT
- Capital City
 - Regional.
- VIC
- Capital City
 - Regional.
- QLD
- Capital City
 - Regional.
- SA
- Capital City
 - Regional.
- WA
- Capital City
 - Regional.
- TAS
- Capital City
 - Regional.

Survey questionnaires

NT

– Capital City

– Regional.

- 13 Are there times of the year that you travel more than others? (Yes/No) If so, why?
- 14 How would you describe your disability support needs (tick all that apply):
- a I use equipment and/or need assistance with mobility but I am independent with my self-care needs
 - b I use equipment and/or need assistance with mobility and I need assistance with my self-care needs
 - c I have a vision impairment, low vision or am a blind person
 - d I have a hearing impairment or am Deaf
 - e I often need help with understanding information
 - f Other, please specify
- 15 Do you generally travel with the assistance of a care giver or companion? (Yes/No)
- 16 If you have answered 'Yes' to Question 15, were you satisfied with the arrangements made for your companion?(Yes/No) Why/why not?
- 17 In general, where do you go for information with respect to accessible accommodation in Australia? (select all that apply)
- a Internet websites
 - b Social media (eg Facebook, Twitter, etc.)
 - c Testimonial websites (eg TripAdvisor, etc.)
 - d Direct from accommodation establishments (eg Websites, direct phone, brochures, etc.)
 - e Newsletters
 - f Travel guide books
 - g Television or radio
 - h Word of mouth
 - i Disability and information service organisations
 - j Other, please specify
- 18 Thinking about your past experiences with accommodation providers, how would you rate the quality of information provided to you by these accommodation providers with respect to accessibility features of their properties? (Please rate 1-5 with 1 = Poor; 5 = Excellent)
- 19 Thinking about your answers to the above question, what features and functions have proven to be the most or least helpful when seeking information, and why?

Survey questionnaires

- 20 Thinking about your past experiences with third party providers and other associations (eg Trip Advisor, Lonely Planet, Nican, Easy Access Australia, etc.). How would you rate the quality of information? (1 = Poor; 5 = Excellent)
- 21 Thinking about your answers to the above question, what features and functions have proven to be the most or least helpful when seeking information, and why?
- 22 Does your use of accessible accommodation typically vary from year to year? (Yes/No) If yes, why?
- 23 On a scale from 1 to 5, how would you rate accommodation staff in meeting your needs? (1 = not helpful; 5 = very helpful)
- 24 Have you ever been turned away because no accessible rooms were available (either during your enquiries or upon arrival)? Yes/No. If the answer is 'No', go to Question 27. If yes, as a percentage (%) how often does this occur? (per year)
- 25 Thinking of situations where this did occur, were you made aware of the reason(s) for accessible rooms being unavailable? Yes/No – if the answer is 'No', go to Question 27
- 26 If you have answered 'Yes' to Question 25, what was the most common reason(s)? (select all that apply)
- a Room out of service (eg maintenance, renovation, etc.)
 - b Other guests unwilling to relocate
 - c Insufficient number of accessible rooms
 - d Peak travel season or major public event (ie accommodation booked out)
 - e Large private function
 - f Other, please specify.
- 27 Thinking about the common areas of accommodation properties you visit regularly, on a scale from 1 to 5, (1 = never; 5 = frequently), have you encountered problems with the following.
- a Doors and entry ways
 - b Handles and/or grab rails
 - c Kerbs or ramps
 - d Suitable car parks
 - e Paths of travel in or out of the accommodation including steps into or inside rooms
 - f Tactile signage
 - g The height of electrical plugs, fixtures, faucets, handles, locks, or peep holes
 - h Obstructions on pathways
 - i Signage

Survey questionnaires

- j Suitable flooring, seating or other surfaces (eg height of tables, counters, seating)
 - k Toilet facilities
 - l Access to restaurants and amenities within your accommodation
 - m Enough space to turn
 - n Enough space to use my equipment
 - o Access to TDD systems
 - p Orientation or knowledge of accessibility features by accommodation staff
 - q Audio displays or closed captioning of hotel information
 - r Plain English
 - s Elevators – including button heights, size and tactile signage
 - t Captioning on TVs
 - u Visual alarms for emergency egress in hotels/motels or tourist venues
 - v Visual information to complement their public address announcement
 - w Heating/cooling
 - x Lighting
 - y Other?
- 28 Thinking about an accessible room in accommodation properties you visit regularly, on a scale from 1 to 5, (1 = never; 5 = frequently), have you encountered problems with the following.
- a Orientation or knowledge from staff regarding accessibility features
 - b Knowledge of staff of disability awareness issues
 - c Doors and entry ways
 - d Toilet
 - e Shower facilities
 - f Access to a wardrobe, hangers or cupboards
 - g Beds and bed heights
 - h Placement, location and access to TV's, ironing
 - i Boards and other larger items with a room
 - j Location and access of spare pillows, blankets, toilet rolls, sanitary packs, towels and other general comfort amenities
 - k Handles and/or grab rails in shower, bathroom or bedding areas

Survey questionnaires

- l Placement and/or design of electrical plugs, fixtures, faucets, handles, locks, or peep holes
 - m Sufficient space to turn or manoeuvre in the room
 - n Accessible kitchen area to be able to prepare a meal and wash up
 - o Access to glasses/cups/bar fridge or a kettle to be able to make a drink
 - p Seating or other surfaces (eg height of tables, counters, seating)
 - q Obstructions in hallways
 - r Suitable flooring, seating or other surfaces (eg height of tables, counters, seating, bed)
 - s Signage
 - t Heating/cooling
 - u Lighting
 - v Access to TDD systems
 - w Captioning or descriptive audio on TVs
 - x Access to balconies and outdoor areas
 - y Visual alarms for emergency exit
 - z Visual information to complement their public address announcement
 - aa Quality of an accessible room compared to other rooms
 - bb Cost of an accessible room compared to other rooms
 - cc Other?
- 29 How would you rate the overall quality of accessible rooms compared to non-accessible rooms? (1 = Poor; 5 = Excellent)
- 30 Please provide any comments or suggestion you have to improve accessible accommodation in Australia.

