BANKWEST CURTIN ECONOMICS CENTRE

# THE IMPACT OF AIRBNB

## on WA's Tourism Industry

**BCEC Research Report No. 6/17**
October 2017

# About the Centre

The Bankwest Curtin Economics Centre is an independent economic and social research organisation located within the Curtin Business School at Curtin University. The centre was established in 2012 through the generous support from Bankwest (a division of the Commonwealth Bank of Australia), with a core mission to examine the key economic and social policy issues that contribute to the sustainability of Western Australia and the wellbeing of WA households.

The Bankwest Curtin Economics Centre is the first research organisation of its kind in Western Australia, and draws great strength and credibility from its partnership with Bankwest, Curtin University and the Western Australian government.

The centre brings a unique philosophy to research on the major economic issues facing the state. By bringing together experts from the research, policy and business communities at all stages of the process – from framing and conceptualising research questions, through the conduct of research, to the communication and implementation of research findings – we ensure that our research is relevant, fit for purpose, and makes a genuine difference to the lives of Australians, both in WA and nationally.

The centre is able to capitalise on Curtin University's reputation for excellence in economic modelling, forecasting, public policy research, trade and industrial economics and spatial sciences. Centre researchers have specific expertise in economic forecasting, quantitative modelling, micro-data analysis and economic and social policy evaluation. The centre also derives great value from its close association with experts from the corporate, business, public and not-for-profit sectors.

Supported by:

eurac research

Government of Western Australia
Department of the Premier and Cabinet

Inside Airbnb

Tourism Western Australia

# Contents

# List of figures

# List of tables

# Foreword

The phenomenon of Airbnb has well and truly landed in Western Australia. This BCEC-funded report details that the online accommodation site now boasts around 25% of WA's room capacity, with supply increasing by around 4% each month.

While the platform continues to grow, the Western Australian tourism industry is undergoing rapid transformation, with a softening of the business travel market and a substantial increase in hotel room supply. However, tourism remains a strong economic contributor to WA, particularly in the context of the State's slowing resource sector.

The findings delivered in this report reveal the extent to which Airbnb has permeated the WA tourism industry. Airbnb hosts in WA are earning in excess of $4.5 million per month, and currently capture 10% of the State's international holidaymakers.

Perhaps not surprisingly, users of the online platform don't appear to be representative of the WA tourism market in general. This report shows Airbnb users are younger, less likely to be travelling alone, and have a tendency to visit wine regions such as Margaret River and the Swan Valley.

Of particular note is the country of origin, with almost half of all Airbnb holidaymakers in WA coming from Singapore or Malaysia.

However, the Airbnb disruption has seen mixed response from tourism stakeholders in Western Australia. While many see potential for innovation and new opportunities, others are apprehensive about the changing accommodation sector and call for government intervention and regulation.

The findings delivered in this report promote possible policy responses, based on international case studies from popular tourist destinations including London, New York and Hong Kong. However, it is essential that any policies or regulations are made in light of WA's local context and are adaptive, given Airbnb's quick development and continual evolution.

I'd like to thank the many stakeholders from the government, policy and tourism communities who helped this research, and our authors from the Tourism Research Cluster within the School of Marketing at Curtin University.

**Professor Alan Duncan**
Director, Bankwest Curtin Economics Centre
Curtin Business School, Curtin University

# Executive Summary

The rapid growth of the sharing economy in recent years has challenged traditional economies in many countries around the globe. A very prominent example in tourism is the online platform Airbnb that enables people to list, find and book accommodations worldwide with more than 3 million listings in more than 190 countries. Many consider Airbnb as one of the most disruptive developments in tourism over the past decade.

Although Airbnb has also become a reality in Western Australia (WA) information on its extent and impact on the state's tourism sector was scant.

This study has significantly contributed to closing the existing knowledge gap on the Airbnb phenomenon in WA by addressing the following key research questions:

- What are key stakeholders' perceptions of the sharing economy and Airbnb in WA?
- What is the extent of Airbnb supply and demand in WA and what are its main attributes?
- To what degree does Airbnb demand differ from conventional demand?
- What policy responses have been employed in other tourism destinations worldwide in response to Airbnb?

The report's analysis draws on a range of data sources, including the International and National Visitor Surveys conducted by Tourism Research Australia, online data provided by Inside Airbnb and semi-structured interviews with 12 industry and government stakeholders. Furthermore, destination responses in 9 international case studies were reviewed and a brief snapshot of selected cases from Australia also included in this report.

The study's findings offer new empirical insights, which will be of interest to government agencies and the tourism sector and will be a valuable source of data to inform (current) policy debate.

# Key Findings

## Background & Context

- Tourism is increasingly seen as an alternative development perspective in the context of WA's slowing, resource dependent economy.
- The Perth hotel market currently faces a more competitive environment due to a softening of business travel and a substantial increase in new hotel rooms.
- At the same time, non-traditional accommodation bookings (e.g. via Airbnb) are on the rise.
- Airbnb is a web-based platform, which brings together guests and private hosts for the purpose of providing temporary accommodation.

## Stakeholder Perceptions

- WA stakeholders have concerns over, but also see opportunities in Airbnb.
- Perceived benefits include additional income and competition, distribution advantages for regional areas, global reach of the platform and flexibility in supply.
- Perceived concerns include neighbourhood amenity issues, the need for monitoring and information, safety and liability, tax avoidance and impacts on investment models.
- Stakeholders demand more robust and accessible data and call for decisive leadership in governing the sharing economy.

## Airbnb Supply in WA

- Airbnb is an increasingly noticeable reality in WA tourism.
- WA's Airbnb supply consists of more than 8,000 listings (March 2017).
- About 25% of WA's room capacity is supplied by Airbnb.
- Airbnb supply is growing at about 4% per month (2016).
- Indicators suggest that WA's Airbnb supply remains mainly in the "private" (occasional) realm.
- Monthly earnings of WA's Airbnb hosts in total exceed AUD 4.5 Million.

## Airbnb Demand in WA

- About 6% of WA's international overnight stays are generated by Airbnb (2016).
- About 10% of WA's international holidaymakers are Airbnb users (2016).
- Airbnb demand is growing at a rate of more than 100% per year (2015-2016).
- Airbnb guests appear to differ from other guests, as do Airbnb holidaymakers.
- 67% of all international Airbnb users in WA are holidaymakers (2015).
- Airbnb users differ in their distribution regarding source markets: Visitors from Singapore and Malaysia account for 47% of all WA's Airbnb users in WA (2015).
- International Airbnb users have an above average tendency to visit wine regions such as Margaret River and the Swan Valley.
- Airbnb users often travel as couples, families or together with friends and relatives.

## Policy Responses to Airbnb

- Review of nine international case studies: London, New York, San Francisco, Barcelona, Rome, Berlin, Hong Kong, Amsterdam and Singapore.
- Policy responses range from proactive approaches in Amsterdam or London to restrictive approaches in Berlin or New York.
- Jurisdictions try to manage potentially adverse effects by defining a clear line between private and commercial realms of operation.
- Some cities signed agreements with Airbnb.
- Development of a Policy Matrix, which provides a toolbox of potential policy instruments to respond to Airbnb.

# Introduction

The rapid growth of the sharing economy in recent years has challenged traditional economies in many countries around the globe in various ways. One of the most prominent peer-to-peer companies has been Airbnb, a platform which facilitates accommodation bookings online. With world wide more than 3 million listings in more than 190 countries (Airbnb 2017), Airbnb has been amongst the most disruptive developments in tourism over the past decade. Although Airbnb has also become a reality in Western Australia (WA), there was a lack of reliable information to assess its extent and impact on WA's tourism sector.

In response, a number of research questions guided this study, which aimed to address the existing knowledge gap on the Airbnb phenomenon:

- What are key stakeholders' perceptions of the sharing economy and Airbnb in WA?
- What is the extent of Airbnb supply and demand in WA and what are its main attributes?
- To what degree does Airbnb demand differ from conventional demand?
- What policy responses have been employed in other tourism destinations worldwide in response to Airbnb?

The research was undertaken in various stages:

1. To better understand some of the challenges and opportunities for WA's tourism sector, views of key industry and government stakeholders on the sharing economy and Airbnb were collated via 12 semi-structured, open-ended interviews. A diverse range of and sometimes controversial opinions were voiced by the interviewees reflecting different expectations, perceived benefits and concerns.

2. To capture Airbnb's size and main attributes as well as its dynamics and development pattern, online data provided by Inside Airbnb were analysed. During the period May 2016 to March 2017 a number of indicators were extracted or estimated, such as the number, types and distribution of Airbnb properties in WA, as well as their occupancy rate, price per night and the estimated income for hosts.

3. For the analysis of Airbnb demand in WA, data for 2015 and 2016 were extracted from the 'International Visitor Survey' (IVS) and the 'National Visitors Survey' (NVS) conducted by Tourism Research Australia (TRA). The aim of the analysis was to explore the characteristics of Airbnb users in WA compared to Airbnb non-users among WA visitors, and to understand whether and how these groups differ from each other.

4. To capture destination governance and tourism policy responses in destinations around the world, nine international case studies were reviewed with the aim to not only contribute to a better understanding of different response strategies but also with the intend to assist decision makers to find a suitable approach to deal with the Airbnb phenomenon in a specific destination context.

Based on the above research design the study's findings offer new empirical insights, which will be of interest to government agencies and the tourism sector and will be a valuable source of data to inform (current) policy debate.

In this report the findings of the study are presented in five chapters: Chapter 1 provides information on the broader WA context, a snapshot of the state's visitor economy as well as an overview of the debates surrounding the sharing economy and a brief history of the Airbnb phenomenon. Chapter 2 presents the findings of the stakeholder interviews and thus captures main concerns and perceived benefits of Airbnb in Western Australia. In the next two chapters, an overview of Airbnb supply (Chapter 3) and demand (Chapter 4) is provided. In Chapter 5, destination responses in nine international case studies are reviewed and synthesized to provide a tool kit of possible policy instruments to respond to the Airbnb phenomenon. The report concludes with a brief summary, which highlights the key findings of the study.

# Background

information and context

## Western Australia's visitor economy

Western Australia's (WA) rich natural resources have always provided a solid foundation for the State's economic development. Mining and agriculture have thus traditionally been key planks of its economy with exports of primary commodities dominating, complemented only in more recent times by the tourism industry (Table 1).

**Table 1** Tourism & WA Industry Structure

| Industry | Share of Total GVA |
|---|---|
| Mining | 26.6% |
| Construction | 13.8% |
| Health care and social assistance | 5.3% |
| Manufacturing | 5.2% |
| Professional, scientific and technical services | 5.0% |
| Tourism (direct and indirect) | 3.8% |

Source: TWA 2015.

However, being anchored on such a rather narrow and vulnerable economic footing, the resource-oriented nature of Western Australia's economy has also created many challenges for the socio-economic development of Australia's largest and forth most populous state (Brueckner & Pforr, 2011; Brueckner et al., 2014). One recent considerable challenge for WA's resources dependent economy has been the waning of its 'once in a century' mining boom, which started in the early 2000s and saw, for a decade, an unprecedented expansion of the mining and petroleum sectors, with iron ore, petroleum and gold as key exports. The mining boom has however eased since, resulting in a weaker economic performance of the state.

It is argued that in the context of a declining mining sector a more sustainable economic structure for WA, based on a diversification of its economy, is required. In this mix, tourism is placed to play a more prominent role, providing an alternative development perspective in particular for regional areas. In times when many regions experience a decline in traditional industries (e.g. mining, agriculture, forestry, fishing) and find it difficult to adjust to the resulting economic and social restructuring pressures, tourism is seen as a suitable vehicle to drive regional economies (Pforr, 2007). Often portrayed as one of only few development options for regional areas in WA, and as an effective means to respond to their socio-economic transformation, the tourism sector has become a major concern for WA's governments. Its economic impact and its strategic importance as a future growth sector for Western Australia, with the potential to not only contribute to the state's economic growth but also to the generation of future employment opportunities, has been acknowledged (WA Government, 2016; Tourism Council Western Australia [TCWA], 2016a; TCWA, 2016c). As Deloitte Access Economics, in their recent report (2016) on the tourism and hotel market comment, "What is remarkable about the tourism growth currently being observed is that it is being achieved against a backdrop of relatively subdued economic growth both domestically and internationally".

Currently tourism already plays a major economic role in WA, contributing $10.4 billion in visitor spending which equates to a 4 per cent Gross State Product (GSP) share of the Western Australian economy. In 2014/15 the sector also generated more than 94,000 jobs, 7.1 per cent of the State's employment. Transportation, accommodation, cafes and restaurants, bars and clubs were the largest contributors to the State's tourism industry in 2014/15, followed by the retail sector (Tourism Western Australia [TWA], 2015). Western Australia's 356 traditional tourist accommodations, which include hotels (with more than 15 rooms) and motels as well as serviced apartments (with more than 15 rooms) that offer all together 23,100 rooms, recorded almost 73 Mio overnight stays (approx. 60 per cent domestic visitor nights and 40 per cent international visitor nights) in 2015/16 (TCWA, 2016b). With 16 per cent of tourism employment and a contribution of 15 per cent of Gross Value Added (GVA) to the WA visitor economy, the accommodation sector is one of the tourism industry's largest sub-sectors (TWA, 2015).

In 2016, according to Tourism Research Australia's International Visitor Survey, the State lead the record growth of international tourists to Australia, with 954,000 people visiting WA from overseas, up by 12 per cent over the previous year. They spent $2.4 billion, which constituted an annual increase of 6.5 per cent (Tourism Research Australia, 2017) (Table 2).

**Table 2** Tourism Snapshot (2015-16)

| Industry | Western Australia | City of Perth |
|---|---|---|
| International visitors | 0.95 Mio | 0.4 Mio |
| International visitor nights | 28.8 Mio | 6.8 Mio |
| Domestic visitors | 9.6 Mio | 1.2 Mio |
| Domestic visitor nights | 44 Mio | 3.7 Mio |
| Contribution to GVA | 3.8% | 1.6% |
| Direct employment | 64,000 | 5,834 |
| Hotels, motels and serviced apartments | 358 | 53 |
| Rooms | 23,097 | 6,494 |
| Occupancy | 61% | 82.8% |
| Average price per night | $112 | $186 |

**Source:** Data from a range of sources including: TAA 2016, TCWA 2016b, TWA 2016a, TWA 2016b, TWA 2015, City of Perth 2017.

However, despite the strong performance of WA's tourism sector with international and domestic visitors growing at a record level, the accommodation sector has experienced weaker demand compared to the height of the mining boom, which saw peak occupancies and rising room rates. A softening of business travel but also a substantial increase in new hotel rooms to inventories in recent years have triggered a more competitive environment. For example, according to Tourism Accommodation Australia figures (see Table 3), 891 new hotel rooms have come online in 2016/17 with a further 1,934 rooms under construction and 1,008 rooms being already approved (TAA 2017).

**Table 3** Perth Hotel Development 'Pipeline' (2017 to 2022)

| | ? |
|---|---|
| Rooms completed 2016-17 | 891 |
| Rooms under construction | 1,934 |
| Rooms approved | 1,008 |
| Rooms planned | 4,225 |
| Pipeline projects - Hotels | 50 |
| Total pipeline | 7,167 |

**Source:** TAA 2017.

These developments are, for instance, reflected in lower room rates and also lower occupancy rates for the hotel sector in Perth, which accounted for a total of 53 accommodation establishments and about 7,000 rooms (TCWA, 2016*b*). In 2016 occupancy was at 82.8 per cent slightly down from 2015 figures, and the average room rate per night of $186.13 was down by 7 per cent over the previous year (TWA, 2016).

Against the backdrop of such a challenging and dynamic environment, the Perth accommodation sector in particular is alarmed that more and more leisure travellers visiting WA and Perth increasingly look beyond traditional options for their holiday accommodation as growth in the use of non-traditional accommodation offerings, such as Airbnb, has been noticed. According to Tourism Accommodation Australia (TAA) (2016) this trend is confirmed Australia wide, with data from 2015/16 underpinning the growth in the so called 'unregulated accommodation sector', which includes rented houses, apartments, flats, units and other private accommodation, and thus also capturing Airbnb offerings. TAA (2016) reports that with 115 million international visitor nights (which almost doubled since 2007) the "unregulated accommodation accounts for four times the number of international visitor nights as regulated hotel, motel and serviced apartment accommodation". Tourism Research Australia (TRA) (2017) confirmed this trend, highlighting for the whole of Australia that "the most common website used to book private accommodation was Airbnb, with 426,000 visitors booking through the site. Other common websites used to make bookings were Stayz (12,000), Vacation Rentals by Owner (VRBO) (12,000) and Couchsurfing (10,000)".

## Sharing economy and Airbnb

Although in recent years the use of the term 'sharing economy' has grown rapidly in academic literature, no succinct and uniform definition has ascendancy. One reason for this might be that the phenomenon shows many facets and dimensions in theory and practice and is characterised by intense disciplinary discourse (e.g. Cheng, 2016; Belk, 2014; Daunoriene et al., 2015; Heo, 2016; Martin, 2016; Oskam & Boswijk, 2016).

A review of the various interpretations of the sharing economy (or collaborative, or peer to peer economy) goes beyond the scope of this report. But for the purpose of this study the sharing economy refers to individuals who intend to share temporarily with tourists unused or underutilized resources they own (e.g. house or car) or activities they undertake (cooking meals or undertaking an excursions). This type of sharing or exchange of goods and/or services is generally facilitated via online platforms that match demand and supply (e.g. Cheng, 2016; Martin, 2016; Richardson, 2015; Tussyadiah, 2016).

There is no doubt that the sharing economy has transformed many aspects of the traditional tourism sector with digital transport and online booking platforms such as Uber and Airbnb, and other shared economy services like Eatwith or Vayable (Figure 1). Thus, the internet and new technologies (e.g. app developments), which act as intermediary between demand and supply, play a central role within the sharing economy (Belk, 2014; Cheng, 2016; Ert et al., 2016; Heo, 2016; Karlsson & Dolnicar, 2016; Richardson, 2015).

**Figure 1** Sharing Economy in Tourism

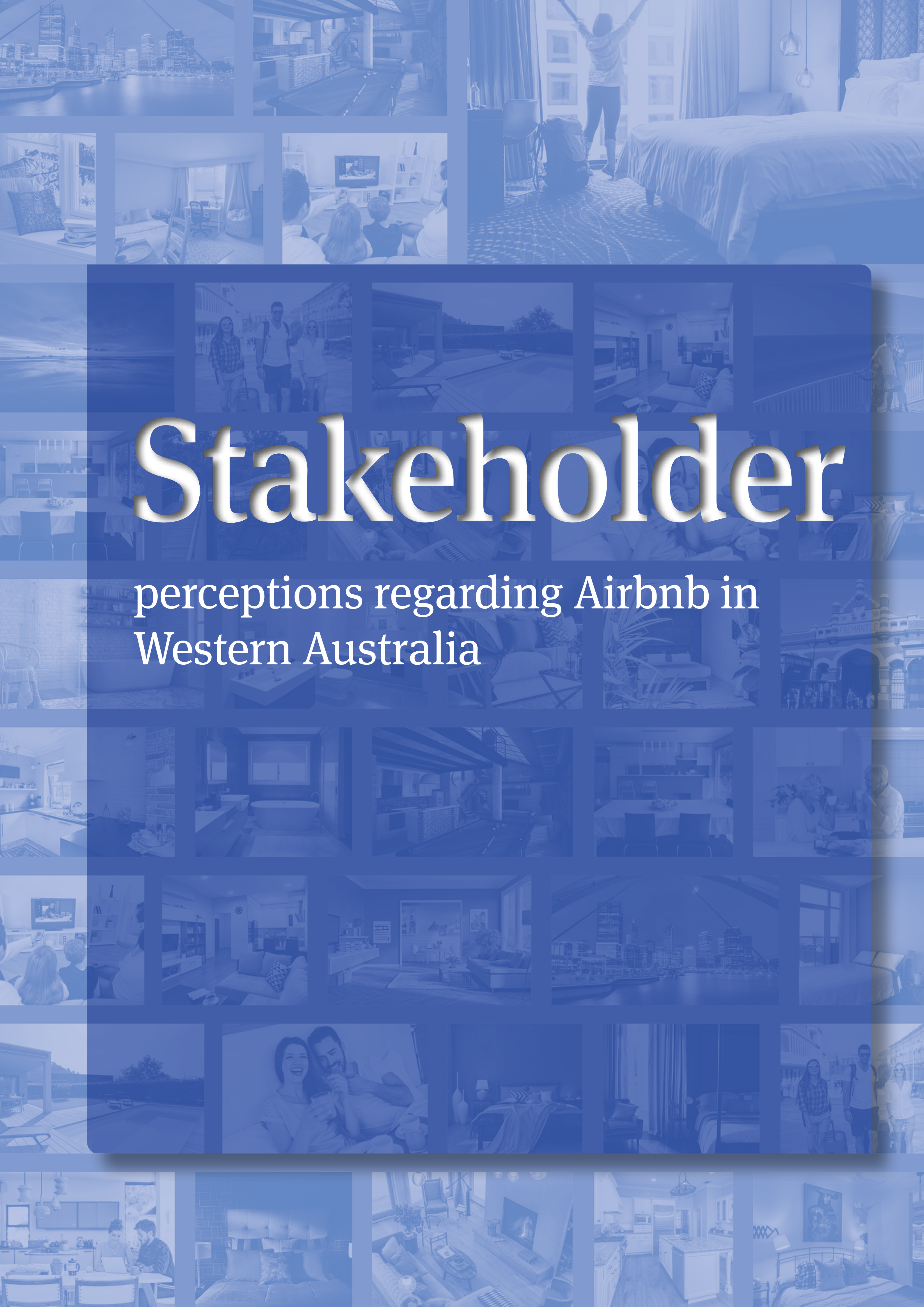

Source: Authors.

In the context of Airbnb for example, a web-based platform provides a mechanism which brings together guests and private hosts for the purpose of providing temporary accommodation. Although, the concept of sharing goods and services is not a new phenomenon, the web-based business model of the sharing economy adds new dimensions and technological opportunities to economic activities with respect to scale, convenience and costs (e.g. Guttentag, 2015; Oskam & Boswijk, 2016; Tussyadiah, 2016).

As the sharing economy has grown quickly in recent years it has attracted a lot of debate as well as positive and negative assessments and responses by government and industry stakeholders alike. Often, their views are not necessarily based on a common understanding of what constitutes the sharing economy. Instead they reflect a rather emotional debate between proponents and opponents who see in these developments either a potential to create new opportunities or a threat to traditional economic activities, where consumers buy products or services in contrast to sharing resources. To facilitate a more informed debate as well as an evidence based response to the shared economy phenomenon, it is essential to have access to reliable information that allows quantifying the shared economy's scale and impact. However, although research on the sharing economy has grown in recent years, it is often disjointed and robust data, which would assist in a better understanding of the phenomenon and a more evidence based discourse, is lacking (e.g. Cheng, 2016; Hamari et al., 2015; Heo, 2016).

By now the story of Airbnb's 'birth' is widely known. In short, two graduate students in San Francisco struggled to pay the rent for their apartment and so decided in October 2007, during a major conference in the city which had led to a shortage of accommodation, to rent out an empty room in their apartment as a B&B. As they also included an air mattress, the term 'Airbnb', short for "Airbed and Breakfast", was coined. Soon after, in 2008, the online platform Airbedandbreakfast.com (airbnb.com) was launched by its founders Brian Chesky, Joe Gebbia and Nathan Blecharczyk (Gallagher, 2017).

It is widely agreed that Airbnb has been amongst the most disruptive developments in tourism over the last ten years. The online accommodation platform allows non-tourism professionals to become hosts, and rent their rooms or entire apartments and houses to guests. With world wide more than 3 million listings, in more than 65,000 cities, in 191 countries (Airbnb 2017), Airbnb has shown exponential growth and provoked a variety of economic policy reactions worldwide. Due to these rapid growth rates, and associated economic and social impacts, Airbnb has attracted increasing attention and controversy by various industry, government and community stakeholders.



# Stakeholder

## perceptions regarding Airbnb in Western Australia

## Aim of analysis

Due to rapid growth rates and associated economic and social impacts, Airbnb has attracted increasing attention and controversy by various industry, government and community stakeholders in many cities and countries around the world.

More and more, Airbnb is also becoming a reality in Western Australia. Despite its (potential) influence on WA tourism and the wider economy, data on the size and impact of the phenomenon as well as information on the views and perceptions it generates are scant. As part of this research 12 key stakeholders from industry and government in WA were interviewed to gain an in-depth understanding of perceptions of the Airbnb phenomenon. In this context, one objective was to explore perceived challenges and opportunities for the WA tourism sector and broader economy. What transpired from these interviews was that stakeholders often, in general, based their opinions on the Airbnb phenomenon on anecdotal evidence. A diverse range of, and sometimes controversial, opinions were voiced reflecting different expectations, perceived benefits and concerns by the interviewed stakeholders from industry and government (Figure 2).

**Figure 2** Word cloud of stakeholder interviews


Source: Stakeholder interviews in WA (own data collection, 2015, 2016).

## Data basis

Between 2015 and 2016, 12 key stakeholders from the tourism industry and various government organisations were interviewed to capture their views on the Airbnb phenomenon in WA. Interviewees represented tourism industry peak bodies, state and and regional tourism organisations and associations, as well as selected government departments and local councils. They also included representatives from the tourism and hospitality education sector as well as different accommodation providers. Interviews lasted between approximately 30 minutes and 90 minutes each and were conducted in a semi-structured and generally open questioning style to allow respondents to convey their opinions about Airbnb in a rather unconstrained manner. Openness is a key requirement of qualitative interview techniques as it allows interviewees to voice their own problem definitions, descriptions of reality and suggestions for solutions (Gephart, 2004). Questions revolved around topics such as perceptions about the extent of the Airbnb phenomenon in WA, its features, its potential impacts, and measures that would need to be taken in terms of governance.

The interviews were recorded, transcribed and systematically analyzed with the GABEK/WinRelan method. GABEK allows analysis of qualitative, open interviews on a keyword basis and, hence, to identify statement patterns in the overall set of interviews. In this context, not the single interviewee is the focus (i.e. limited interest in “who” is speaking) but the comprehensive set of interview statements from all interviewees (i.e. the focus is on the “what” has been said) (Zelger, 2000). Based on that principle, the analysis transcends the individual respondents and treats the whole interview set holistically. If anything, statements are grouped on a thematic basis, not on the basis of who spoke (Pechlaner & Volgger, 2012).

As output, GABEK produces semantic networks of keywords that graphically display associations of interviewees (“association graphs”). It is important to note that due to complexity issues, a GABEK Association Graph does not display all related statements, but the aim is rather to cover some of the central themes that revolve around an issue. This means that the analysis does not claim to be exhaustive, nor is it directly possible to weigh the different opinions one against another and to determine their relative prevalence. Qualitative analyses such as GABEK are designed to identify qualities, themes and communicative as well as perceptive categories but they are not suited to quantify. Moreover, it needs to be emphasized that the reported links are based on (subjective, although to different degrees) perceptions of the interviewees.

## Results

The interviewed industry and government stakeholders raised several concerns regarding the advent of the Airbnb phenomenon in WA. At the same time, they also anticipated advantages and opportunities to arise from Airbnb in WA. Both hopes and concerns were voiced by the interviewees. The following section highlights some selected issues that have been reported both on the positive and negative sides of the opinion spectrum.

### Perceived problems and concerns

Critics (Figure 3), for instance, highlighted issues such as consumer protection and unfair competition as the non-traditional accommodation sector often avoids compliance with health and safety standards and adequate disability service provision, whereas the conventional accommodation sector is forced to spend considerable resources on the implementation of, and documentation of adherence to, these standards. Concerns were also raised over the issue of tax avoidance which, again, was seen as creating unfair competition. The absence of a legal or regulatory framework governing the shared economy was also seen as creating uncertainty around job security as it might lead to a surge in part-time or casual work arrangements that lack enforceable workplace safety and employment security standards.

> *"[Y]ou can run short stay accommodations in any building at any time, you don´t have to have accessibility disabled standards, you don´t have to worry about fire protection etc. All these issues change the dynamic in the market. [...] There is also the cost burden of building normal hotels or apartment establishments, they could be 30-40 per cent higher because of building standards." (Interview 2)*

Furthermore, there are fundamental differences in terms of defining what the sharing economy can or should capture. The question on what constitutes private vs commercial, for example, was a contested issue. Can the rental of an entire home or apartment via Airbnb (or even of more than one such homes or apartments) still be considered a private host-to-guest arrangement, or does this need to be captured under the realm of a commercial undertaking? Should private enterprise be restricted solely to the context of a home that is entirely shared with the host or a private room within the host's accommodation? From the perspective of some opponents, the renting out of an entire home or apartment by a host who permanently lives elsewhere was regarded as no different to running a conventional accommodation business, hence it was argued that this activity should be governed by the same regulatory requirements that also applies to the traditional accommodation sector.

> *"We are not concerned about the spare bedroom in someone's house, or the back room of someone's town house, also not about someone sleeping on the couch. We are concerned about commercial apartments, town houses and homes, that are available predominantly throughout the year for short stay accommodation. [...] What is the predominant use of the business or the premises? Someone who goes overseas for a month or two and lends the house out for someone while they are away isn´t a worry. But someone who classifies a building as its principle place of residence, has all the tax advantage of that and is on the short-term market 300 days of the year, that is an issue." (Interview 2)*

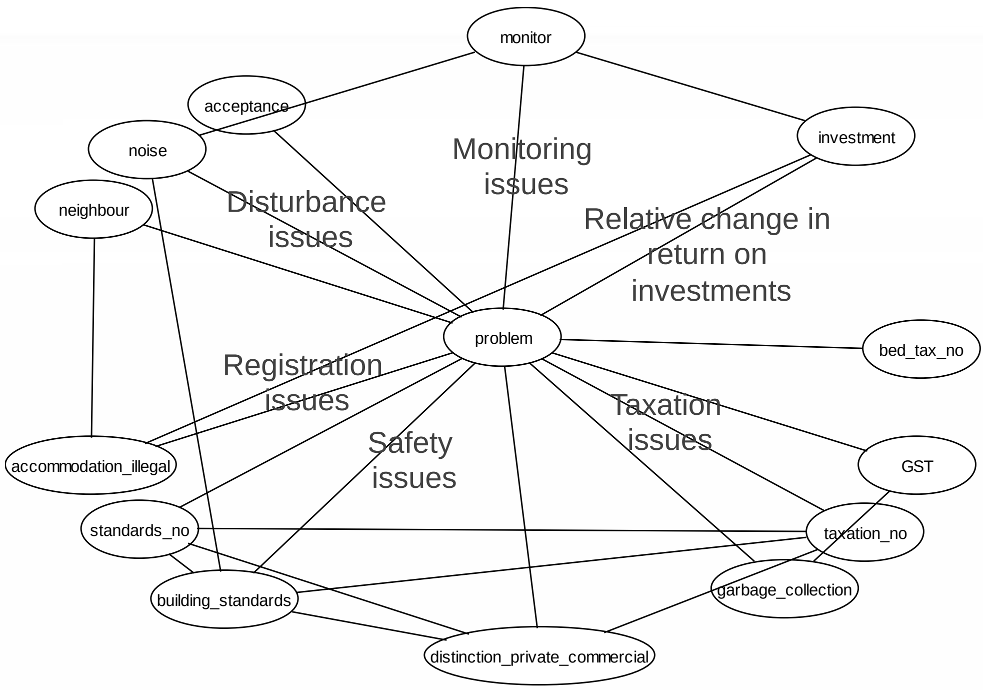
> *"It [Airbnb] is a mechanism between a consumer and any resident to 'sell' its property. [...] The distribution problem has been solved. [...] This has massive implication because in practical terms there is no longer a difference between commercial and residential property. In regulation, in the federal state and the micro level, in taxation, in cost pricing, in user charge there is a massive distinction between residential and commercial property. The cost of regulation and taxation for commercial goes in one box, the cumulative cost of regulation and taxation, costs in operating that room, which is a totally different one at Airbnb or on residential." (Interview 6)*

Thus, the often perceived as unfair or (partly) even illegal nature of Airbnb operations led to calls for government to adopt a policy position which recognises stakeholder concerns, and to consider developing appropriate governance mechanisms to deal with the question of Airbnb's legitimacy. Critics hereby pointed to an unregulated marketplace which in their view creates an uneven playing field as the accommodation-sharing platform constitutes a new and much less regulated element of competition to the market. Representatives from the hospitality industry, for instance, perceived Airbnb as a threat, claiming that the growth of the informal accommodation sector may in future risk the demand for conventional supply and contribute to a decline in rates, revenue and occupancy.

> *"Looking at it from the hotel industry, I think the prime concern is taking the competitiveness of an Airbnb type industry taking over their visitors." (Interview 12)*

> *"I think there is definitely an overlap [with the traditional accommodation sector]. [...] I suspect some of those from the hotel sector are expecting Airbnb may have a similar occupancy rate to their own [, which I doubt]. [...] Number of beds and occupancy rate need to be looked at." (Interview 5)*

**Figure 3** **GABEK-Association Graph indicating potential problems of Airbnb in WA as perceived by interviewed stakeholders**




**Source:** Stakeholder interviews in WA (own data collection, 2015, 2016), authors' design with GABEK/WinRelan.

In the context of a more competitive environment in the hotel market (see Section 1 on WA's visitor economy) not only the hospitality sector in general, but also government agencies appear to be partly worried about the rise in collaborative consumption. In their view, these concerns were further aggravated by the current oversupply of apartments, and a declining rental market in Perth as a result of a slowing economy where investors seek alternative investment returns by renting out units as short-term accommodation. Moreover, investment in hotels may become less interesting relative to apartment options.

> *"A lot of hotels are being built and commercial stock competing on the market. There is also an immense amount of residential buildings that we can't possibly fill because migration is not really going well like two years ago. So there are a lot of investors that think they will get a high return, but if they will not get occupied how are they going to get the money back. If I can't get off rental [...] they will get on Airbnb in the short market. It is the combination of new residential and commercial buildings that are going to cause a massive problem for at least the traditional sector. Just because of the room stock on the market." (Interview 6)*

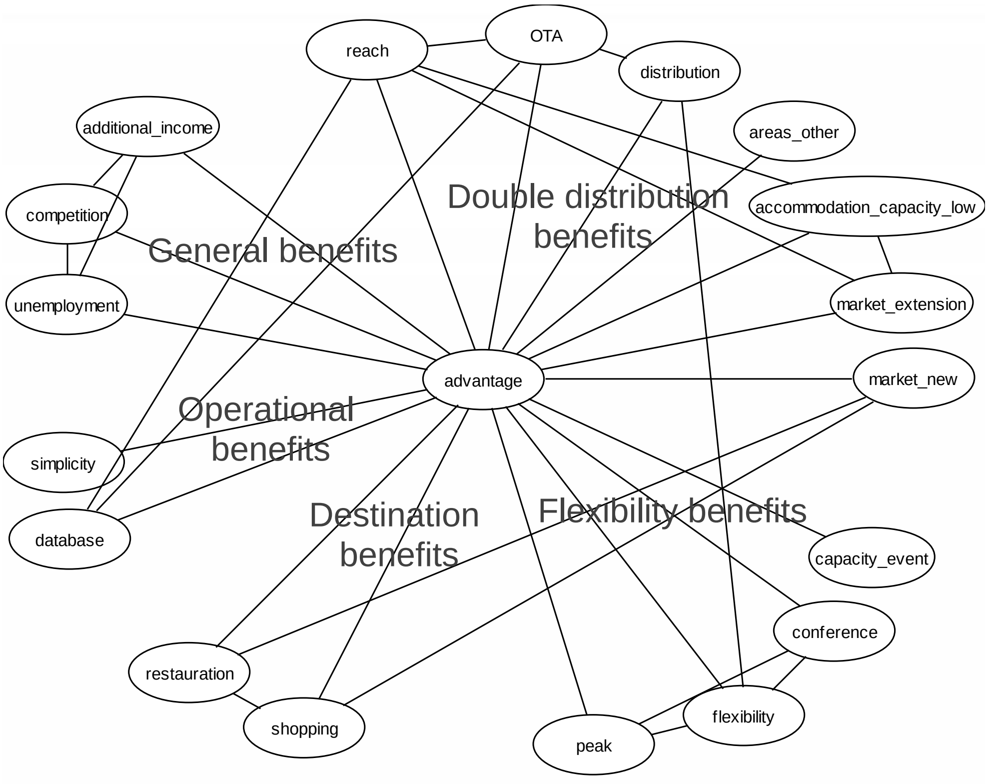
Further, concerns were also raised over the impact of a poorly regulated and monitored non-traditional accommodation sector on local neighborhoods, in particular where Airbnb hosts rent out apartments in group dwellings. Issues voiced in this context related to noise, increased traffic and the use of shared amenities by Airbnb guests:

> *"Things that we need to be aware of is regarding safety. Does it have fire extinguishers, does it have hard wired smoke alarm [...]. I also think it is a land use planning issue as well, I should add that. To provide that sort of advice to local governments who at the end of the day need to decide if they wish to get involved with the policing and approval [...]. The other thing is the noise, there is the community amenity." (Interview 5)*

## Perceived advantages and opportunities

On the other hand, there were also stakeholders who acted as advocates of the sharing economy or saw potential advantages and opportunities (Figure 4).

**Figure 4** **GABEK-Association Graph indicating potential advantages of Airbnb for WA as perceived by interviewed stakeholders**




**Source:** Stakeholder interviews in WA (own data collection, 2015, 2016), authors' design with GABEK/WinRelan.

They highlighted, for instance, the global reach of the distribution platform, which provides also a more flexible and user friendly set up and a more authentic tourism experience due to potentially close host-guest relationships. In their view, Airbnb can also assist destinations in better managing peak periods of tourism demand:

> *"If you have a flexible inventory of additional short stay licensed and regulated legal accommodations it can assist in peaks in the market, particularly when there are major events. We´ve had experiences with major conferences, events or activities that have been held. The nature of that market is that it can be flexible according to what the demand is [...]. As long as it is licensed regulated and they are paying proportionally the right fees and charges there should be a system which allows for that." (Interview 2)*

*"I think it is a different type of persons than those who use hotel accommodation, because these people are looking for a more local experience. They want to get into somebody's home. They can rent a whole apartment or house or also just a bedroom in a house with a family, a bit like a homestay. It is great because guests get to know these people through communication. There is regular communication going on. They almost go to friendship like an online friendship. The hosts on the other end are usually very helpful, with the information on the local area, they give recommendations on their favorite restaurants, on what to do in the area etc. If the hosts stay with the guests, guests usually love that. If the hosts don´t stay at the home with the guests usually there is a welcoming letter with useful tips. It is a home away from home." (Interview 1)*

*"I think it [Airbnb] is attractive to a lot of millennials, particularly to experience the local culture, that's the market they try to tap into. Quite a lot of hotel chains have tried to do that before with providing a local experience, we take you to the markets etc., but it's still not someone's lounge room." (Interview 7)*

Stakeholders also emphasized that Airbnb guests seem to favour the easy access to a wide range of accommodation options provided by the Airbnb platform, which often also appear to be more affordable compared to being booked through more traditional channels.

*"I can understand how they are popular with consumers, because they see it as cost saving and convenient. […] I don't think it's driven by people seeking a quality product, I think it is used by people looking for a holiday at reduced cost. […] Maybe it [Airbnb] is attracting more people here, particularly back when accommodation was so highly priced, potentially here it would have been an advantage that there was another layer of accommodation at a price range that wasn't available." (Interview 11)*

Stakeholders also underlined the opportunity of additional income generation for Airbnb hosts and highlighted also, on a more philosophical level, the benefits of social interactions generated through peer-to-peer exchanges and the underpinning ideology of sharing underutilized resources. Furthermore, they also anticipated positive economic benefits especially for regional areas, as in their view Airbnb guests generate more business for the local economy and also assist in creating additional job opportunities, potentially generating distribution benefits in particular in regional areas. Finally, in the view of some stakeholders it can be possible to access new markets and additional target groups for the destination:

*"I personally think it is fantastic, it is innovation. It keeps people on their toes. It is disruptive, but that is not bad; it does create innovation. It is a really different market to the normal type of people that book apartments or hotel accommodation or fully serviced accommodation. I don't see it as a competitor […]" (Interview 1)*

*"I believe without knowing the numbers […] that the growth is regional as well as metropolitan." (Interview 12)*

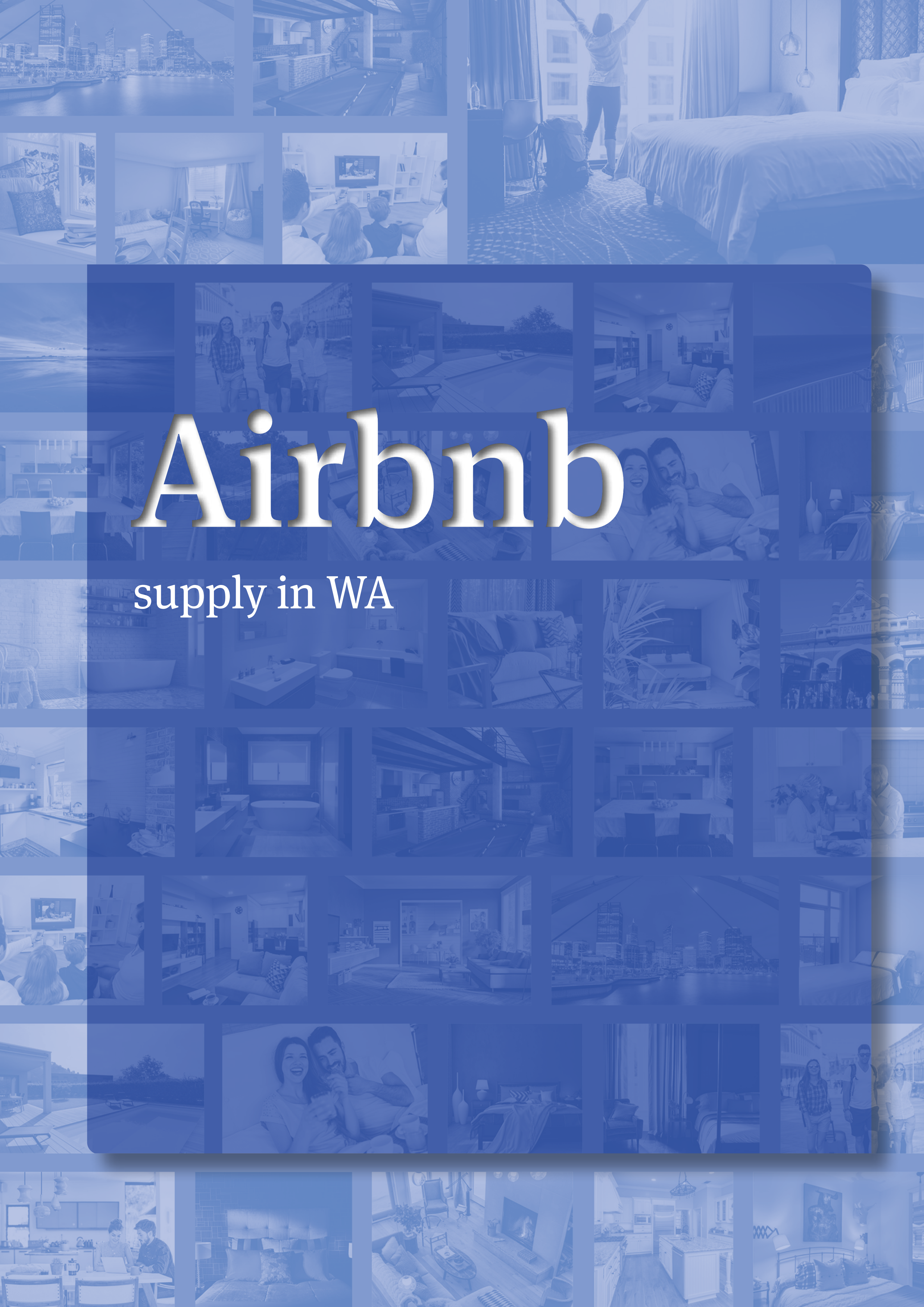
*"If people want to stay somewhere in Cottesloe, or Yallingup or somewhere where there is not a hotel, then where else could they stay [than in a short term rental]?" (Interview 9)*

*"I see new opportunities without question. [...] Visitors or travelers as perhaps using one form of accommodation on one part of the trip and using another form on another and not necessarily using always the same form. If anything, it creates more choice and thereby maybe increases the number of trips that they might otherwise not be doing. I see this as a lot more opportunity for all parts of the industry, but I do think there needs to be a reassessment of how incumbents can operate effectively without feeling being strangled in regulations that the other new elements don't have to obey. I think, it is about reaching a compromise between these two." (Interview 12)*

## Concluding remarks

Overall, stakeholders who participated in this study had mixed attitudes towards Airbnb, which was seen as adding a competitive element to the current market place that potentially could open up additional opportunities for tourism in WA but might also constitute a threat to the conventional accommodation sector. They recognized that the sharing economy, and in particular sharing platforms such as Uber and Airbnb, were indeed contested issues for WA's tourism sector that required close monitoring and governance in the future. Further, industry and government representatives did not see Airbnb necessarily as a new phenomenon but acknowledged that the accommodation platform had added a new technological aspect, which makes it difficult to predict its size and future growth and impacts.

Proponents and opponents agreed that there was currently a lack of reliable information to assess the extent and impact of Airbnb on WA's tourism sector and wider economy and uniformly called for more robust and accessible data as well as decisive leadership in governing the sharing economy.



# Airbnb

## supply in WA

## Aim of analysis

Little is known about the size, the dynamics and the characteristics of Airbnb in Western Australia (WA). To address this knowledge gap, this section explores the supply characteristics of Airbnb-delivered offerings based on the monitoring of Airbnb's development patterns for eleven months over the period May 2016 until March 2017. Amongst others, the analysis is focused on investigating the following questions:

- How many properties are available in WA?
- What types of properties are available?
- Where are they located?
- What are their occupancy rates?
- What is the estimated income for hosts?
- What development patterns can be noted?

## Data basis

The analysis of the supply is based on a partnership with "Inside Airbnb", which shared their estimates about aggregate data appearing on the Airbnb website for WA on a monthly basis from May 2016 until March 2017. Inside Airbnb (http://insideairbnb.com) is an independent, non-commercial website that draws on publicly available information on Airbnb activity in several regions and cities worldwide and shares its data with researchers, journalists and the wider community.

The data set obtained has been checked and aggregated before analysis. However, due to the involvement of an intermediary, it is impossible to guarantee the accuracy of information and data quality in all details and instances.

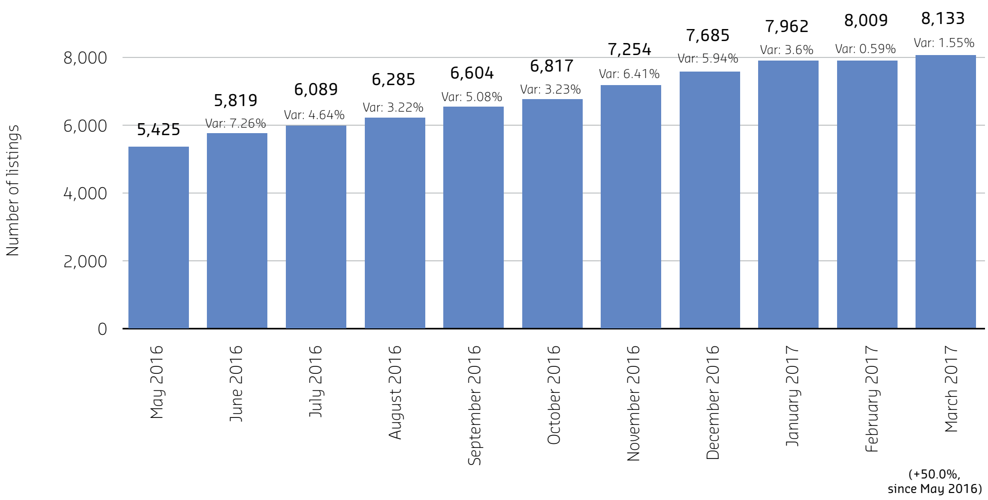
# Results

## Number of Airbnb listings and hosts

In March 2017, a total of 8,133 listings on the Airbnb platform ("accommodation offers") were recorded for WA. This is an increase of 1.6 per cent over the previous month and a total increase of 50.0 per cent since May 2016, when 5,425 listings were recorded, resulting in an average increase of about 4 per cent per month (Figure 5). The current 8,000 listings account for about one quarter of WA's total room capacity (see TCWA, 2016b).

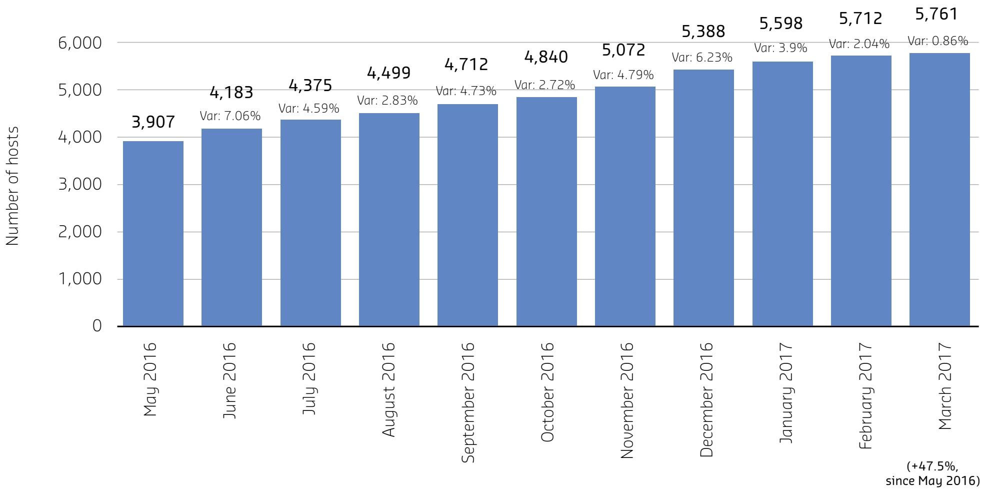
These listings, recorded as of March 2017, were offered by 5,761 WA hosts. In comparison with May 2016, a growth of 47.5 per cent can be noted, which is slightly below the increase in listings over the same period. Cumulated since 2008 7,700 different WA hosts have been at least temporally active on Airbnb. However, this does not necessarily mean that all of them are still active today. Figure 6 indicates the strong growth in (cumulated) hosts within a short and recent period of time. Up to January 2011, only 43 WA hosts in total had Airbnb listings, in January 2014 this number had risen to 1,244 hosts, and by January 2015 2,533 hosts listed properties on the Airbnb platform. Thus, the number of (cumulated) hosts grew by 90 per cent to 100 per cent annually between the years 2013 and 2016 (Figure 7). In comparison, growth during 2016, in the order of 50 per cent, appears to be relatively contained albeit still impressive. Nevertheless, this slowing down could be an early signal of a beginning saturation (if not scarcity) on the supply side.

**Figure 5** Number of Airbnb listings per month, WA, May 2016 to March 2017




Note: Only available listings are considered. Unavailability may refer to occupation by a guest (booking), availability not provided by the host ("blacked out" listing) or cessation of activity (deleted listing).
Source: Insideairbnb, estimates analysis and illustration supported by Eurac Research and Ruben Bassani.

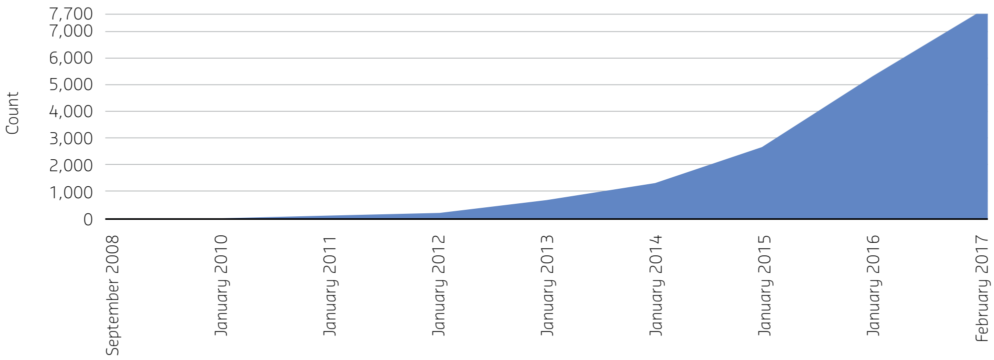
**Figure 6** Number of Airbnb hosts per month, WA, May 2016 to March 2017




**Note:** Only hosts from available listings are considered. Unavailability may refer to occupation by a guest (booking), availability not provided by the host ("blacked out" listing) or cessation of activity (deleted listing).
**Source:** Insideairbnb, estimates analysis and illustration supported by Eurac Research and Ruben Bassani.

By dividing the available listings by the number of hosts it is possible to generate an indicator that might be helpful to understand the degree of "professionalisation" of Airbnb supply. "Professional" Airbnb hosts, whose activities feature characteristics of a "business", can be assumed to be more likely to offer more than just a single accommodation on the platform (Inside Airbnb, 2017). In all considered months (May 2016 to March 2017), the share of WA hosts that offer just one accommodation on the Airbnb platform remains relatively contained, in comparison to other places around the World (Inside Airbnb, 2017).[1] For instance, in March 2017, 81.7 per cent of all WA Airbnb hosts had only single listings, and thus followed the one host-one listing principle. 11.3 per cent and 3.5 per cent respectively were the shares of hosts posting two or three listings simultaneously. Only 34 WA hosts (0.6%) had more than 10 listings on the Airbnb platform. There has been relatively little change in these percentages over the observed time period in this study (Figure 8).

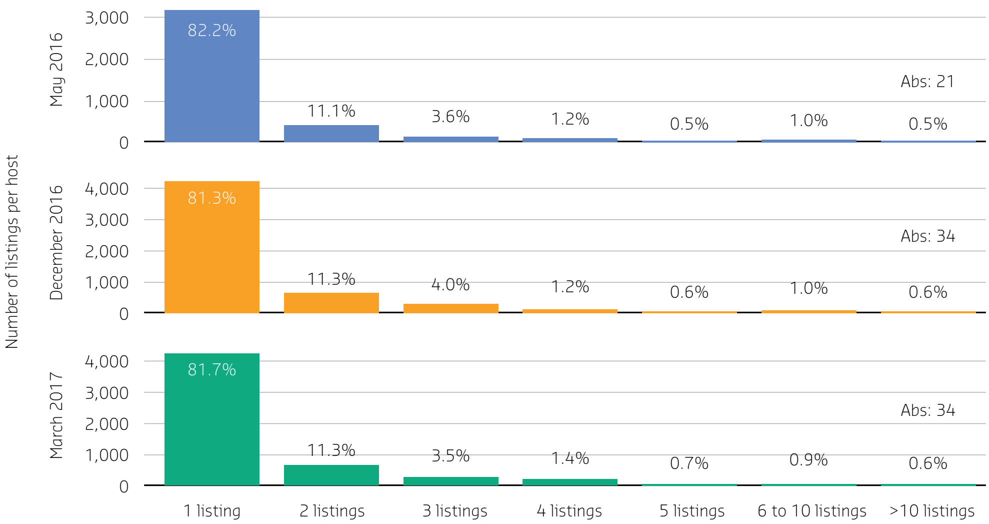
**Figure 7** Number of Airbnb hosts, cumulative, WA, March 2017




**Notes:** All listings that at one stage have been available on the Airbnb platform are considered for this graph. Consequently, they might currently be unavailable or might even have been deleted.
**Source:** Insideairbnb, estimates analysis and illustration supported by Eurac Research and Ruben Bassani.

1 One potential methodological shortcoming refers to the fact that hosts might create and register with multiple identities (Slee, 2017).

**Figure 8** Number of Airbnb listings per host, WA, May 2016 to March 2017




**Note:** Only available listings are considered. Unavailability may refer to occupation by a guest (booking), availability not provided by the host ("blacked out" listing) or cessation of activity (deleted listing).
**Source:** Insideairbnb, estimates analysis and illustration supported by Eurac Research and Ruben Bassani.

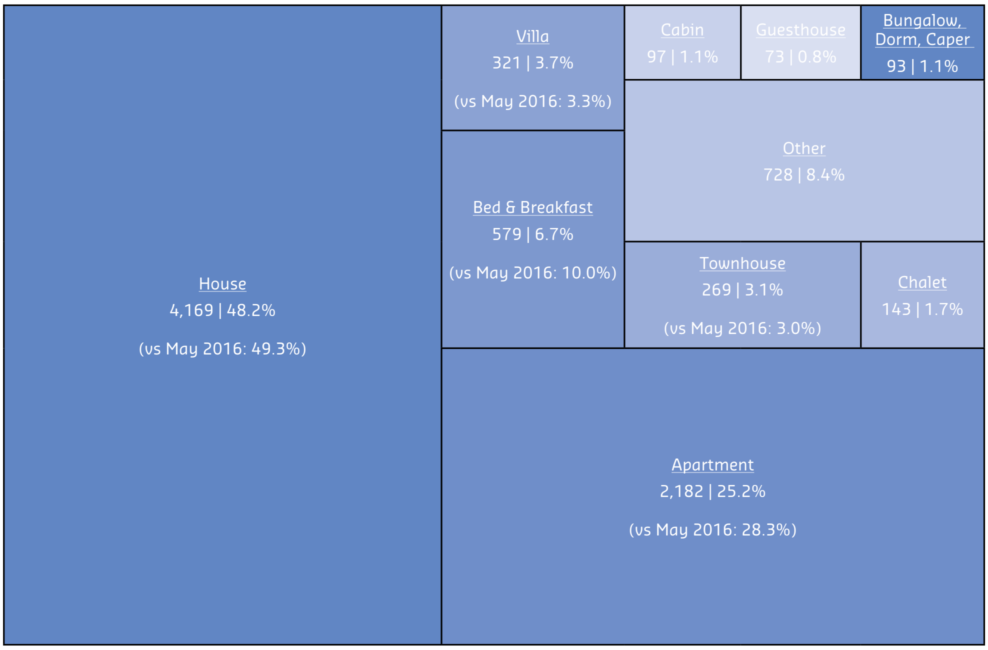
## Type of Airbnb listings

The Airbnb platform hosts a multitude of different types of accommodations. They can be distinguished at least by two dimensions. First, listings differ with regards to the type of property in which the accommodation is enclosed (e.g. houses vs apartments vs bed & breakfasts); second, they differ also with regards to the "room" type, i.e. the extensiveness of the rented property (i.e. shared room vs private room vs entire home/apartment).

Regarding the type of property listed on the Airbnb website (Figure 9), in March 2017, 48.2 per cent of all listings were stand-alone houses (or were rooms or beds located in houses). The share of such house-related listings has remained relatively stable since May 2016, compared to Bed & Breakfasts or apartments listed, which have seen their shares reduced over time. 25.2 per cent are apartments, or beds located in apartments, and thus part of multiple dwellings. In March 2017, there were also 579 WA Bed and Breakfasts offerings on the Airbnb platform (6.7%). Villas and townhouses accounted for a smaller, but increasing share.

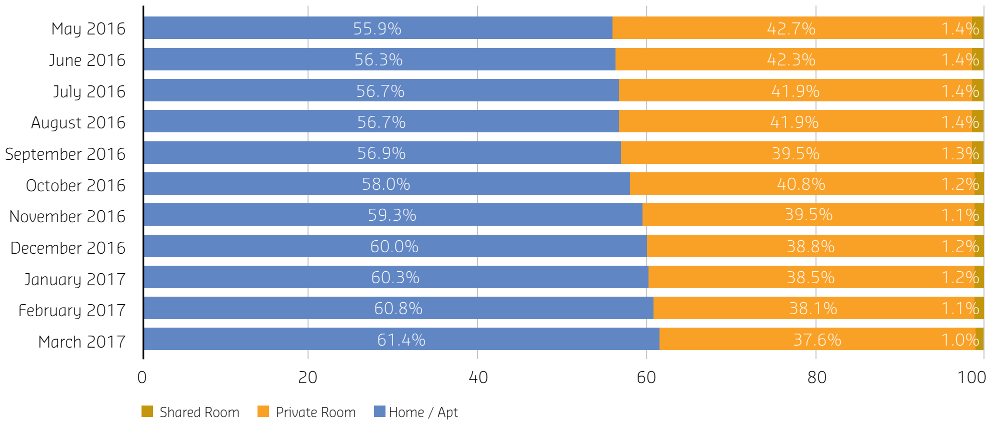
Regarding the room type (Figure 10), in March 2017, 61.4 per cent of all listed and available WA accommodations on the Airbnb platform were entire homes or entire apartments. The share of entire homes and apartments has steadily increased since May 2016, when 55.9 per cent had been of this type. Private rooms within a house or apartment were relatively less commonly offered in March 2017; they accounted for 37.6 per cent of all listings. Listings offering a "shared room" (i.e. a bed within a room that is also used by others) were rare, representing only 1.0 per cent of all WA Airbnb listings. The dominance of the entire homes/apartments category for Airbnb listings is relatively common in many places around the world. Their share in WA does not seem to differ substantially from the international trend (Inside Airbnb, 2017).

**Figure 9** Property type of Airbnb listings, WA, March 2017




**Note:** Only available listings are considered. Unavailability may refer to occupation by a guest (booking), availability not provided by the host ("blacked out" listing) or cessation of activity (deleted listing).
**Source:** Insideairbnb, estimates analysis and illustration supported by Eurac Research and Ruben Bassani.

**Figure 10** Room type of Airbnb listings, WA, May 2016 to March 2017



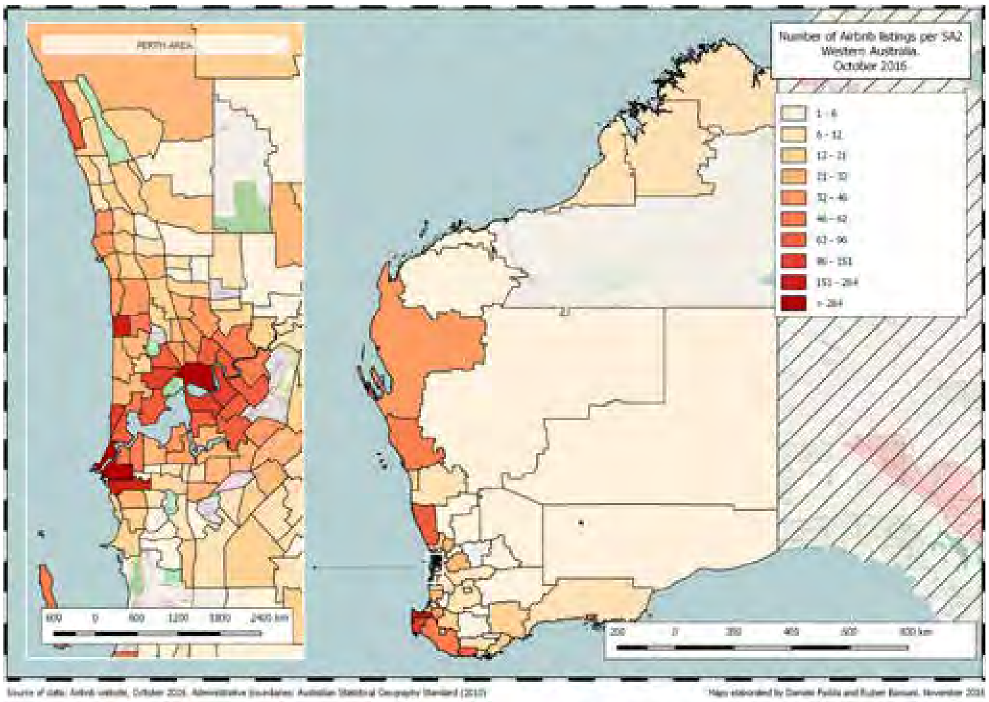

**Note:** Only available listings are considered. Unavailability may refer to occupation by a guest (booking), availability not provided by the host ("blacked out" listing) or cessation of activity (deleted listing).
**Source:** Insideairbnb, estimates analysis and illustration supported by Eurac Research and Ruben Bassani.

### Spatial distribution of Airbnb listings

Two principal hot spots of WA Airbnb listings can be identified (Figure 11). The first hotspot covers the areas on both sides of the Swan and Canning rivers, as well as some parts of the metropolitan coast in Perth (Figure 12). The second hotspot is located in the south west corner of WA in the wider Margaret River Region (Figure 13). In October 2016, the geographical areas (in accordance with SA2 classifications)[2] with the highest number of Airbnb listings is the City of Perth (588 listings), followed by Fremantle and Rottnest (311 listings) and Margaret River (295 listings). Other areas with relatively high numbers of Airbnb listings are the Busselton region (190), South Fremantle (187), Scarborough (178), Subiaco (150), Busselton (124), Cottesloe (122) and South Perth (121). In comparison, the northern regions of WA have relatively few Airbnb listings.

Regarding the dynamic development of the number of listings between May and October 2016, no easily interpretable patterns emerge (Figure 14). However, northern regions seem to have a tendency to increase their share of Airbnb listings. This is, however also true for some areas between Bunburry and Busselton, and also for some Perth suburbs with previously lower numbers of Airbnb listings. These tendencies might partly be interpreted as a "catch-up" phenomenon.

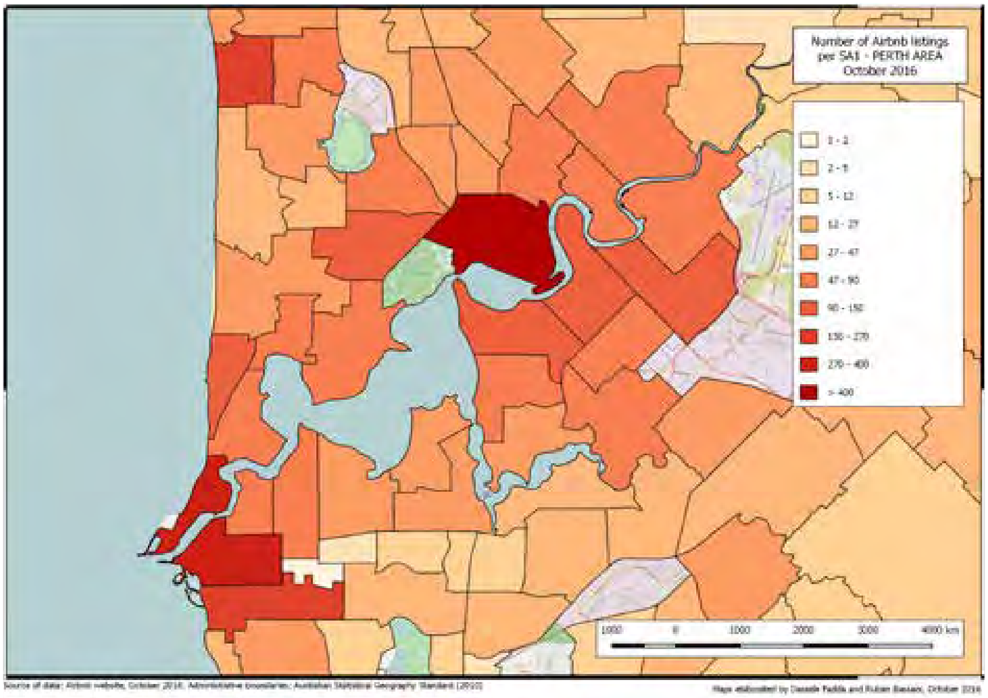
**Figure 11** **Location of Airbnb listings in WA, October 2016**




Note: Only available listings are considered. Unavailability may refer to occupation by a guest (booking), availability not provided by the host ("blacked out" listing) or cessation of activity (deleted listing). SA2 level boundaries are used.
Source: Insideairbnb, estimates analysis and illustration supported by Eurac Research and Ruben Bassani and Daniele Fadda.

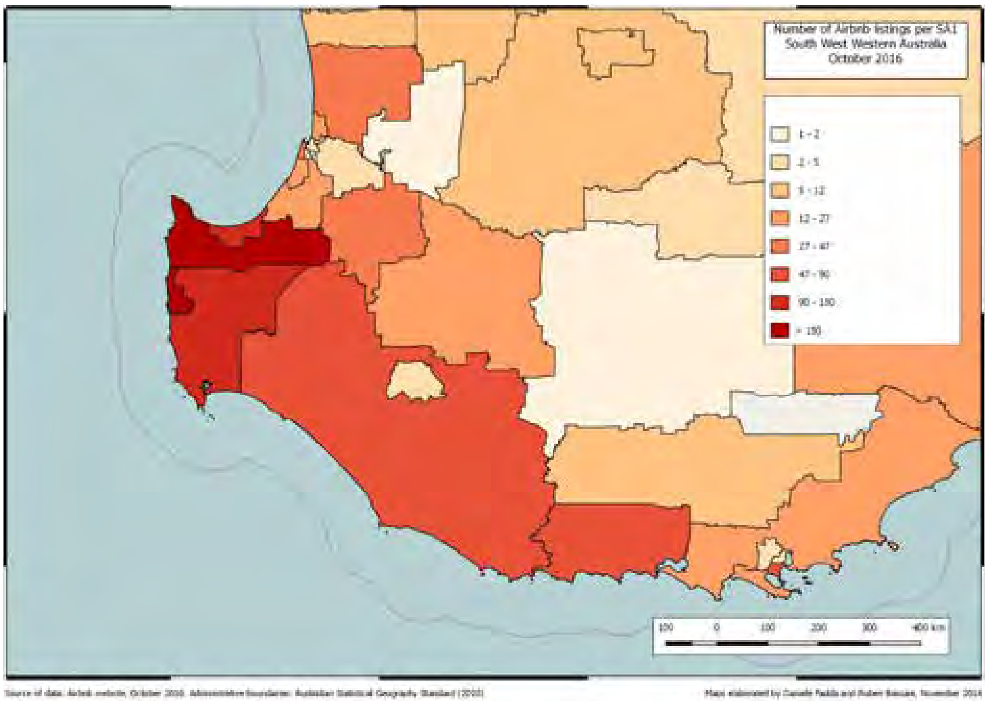
2 SA2 stands for "statistic area level 2," which is a spatial circumscription used by the Australian Bureau of Statistics and has been introduced to replace "Statistical Local Areas" (SLAs) to get a more consistent population size. SA2 is comparable with suburbs at city level and with smaller towns plus surroundings in rural areas. SA2 levels might not necessarily align with Government Area boundaries (Australian Bureau of Statistics, 2017).

**Figure 12** Location of Airbnb listings in WA: Focus on Perth metropolitan area, October 2016



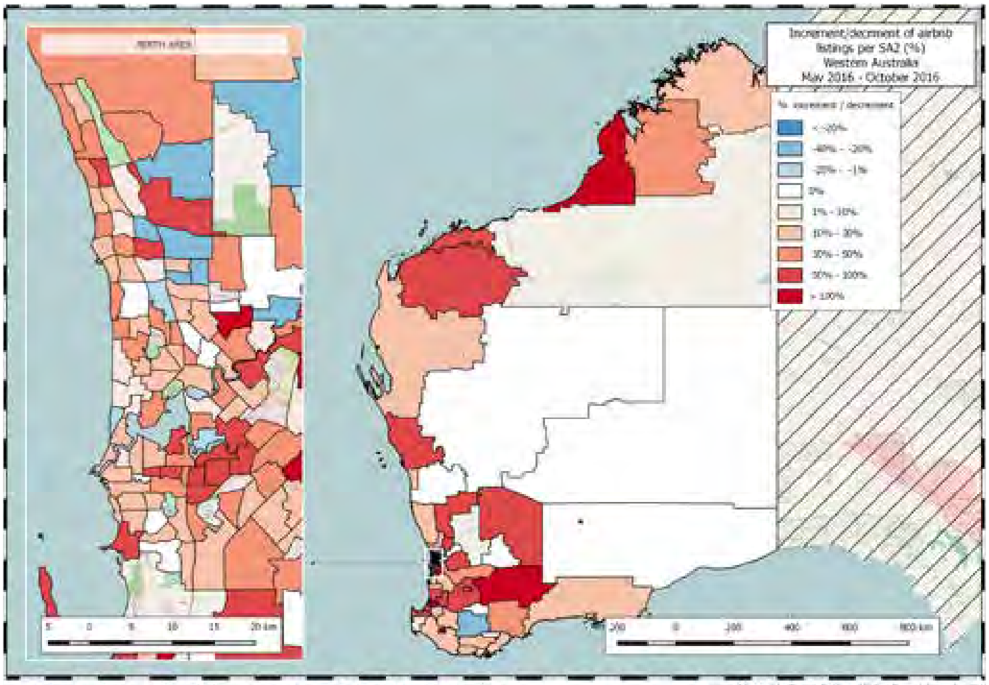

Note: Only available listings are considered. Unavailability may refer to occupation by a guest (booking), availability not provided by the host ("blacked out" listing) or cessation of activity (deleted listing). SA2 level boundaries are used.
Source: Insideairbnb, estimates analysis and illustration supported by Eurac Research and Ruben Bassani and Daniele Fadda.

**Figure 13** Location of Airbnb listings in WA: Focus on Australia's South West region, October 2016




Note: Only available listings are considered. Unavailability may refer to occupation by a guest (booking), availability not provided by the host ("blacked out" listing) or cessation of activity (deleted listing). SA2 level boundaries are used.
Source: Insideairbnb, estimates analysis and illustration supported by Eurac Research and Ruben Bassani and Daniele Fadda.

**Figure 14** Location of Airbnb listings in WA: Change from May to October 2016




Note: Only available listings are considered. Unavailability may refer to occupation by a guest (booking), availability not provided by the host ("blacked out" listing) or cessation of activity (deleted listing). SA2 level boundaries are used.

Source: Insideairbnb, estimates analysis and illustration supported by Eurac Research and Ruben Bassani and Daniele Fadda.

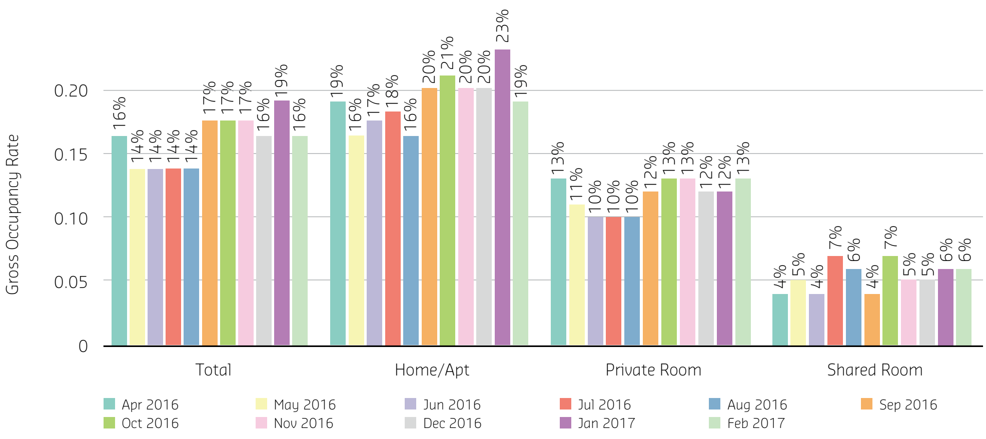
## Estimated occupancy rates and prices of Airbnb listings

Occupancy rates of Airbnb listings (Figure 15) can be interpreted as a further indicator of “professionalisation” of Airbnb activities. An occupation rate (gross) of 25 per cent means that the listing is occupied for three months, or 90 days, per year, a limit that is for example used as a legal cap by the City of London (see Section 5).

To estimate occupancy rates, Inside Airbnb’s “San Francisco Model” has been used (Inside Airbnb, 2017). Amongst others, a review rate of 50 per cent is used to convert reviews to estimated bookings. The average length of stay for Airbnb users in WA has been set at 4.1 nights for the purpose of this modeling (Source: Tourism WA, personal communication).

The room category of entire homes or apartments achieves the highest occupancy rates among all Airbnb room categories. For WA’s listed entire homes or apartments, with the only exception of January 2017 (23%), estimated occupancy rates remained below or equal to 21 per cent between April 2016 and February 2017. These properties are occupied an average of about 70 days per year. This is a low to intermediate value in worldwide comparison (Inside Airbnb, 2017). This is also much lower than the overall WA average occupancy rate for tourism accommodations (see Table 2, Chapter 1). Private rooms achieve even lower occupancy rates, with a maximum of 13 per cent throughout April 2016, November 2016 and February 2017, while shared rooms remain occupied equal or below 7 per cent across time.

**Figure 15** **Estimated occupancy rate of Airbnb listings, WA, April 2016 to February 2017**

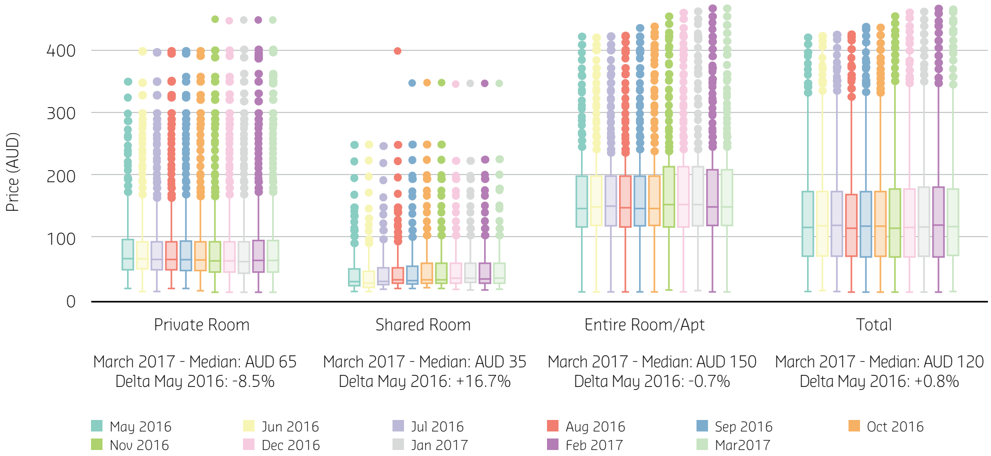



**Note:** Only available listings are considered. Unavailability may refer to occupation by a guest (booking), availability not provided by the host (“blacked out” listing) or cessation of activity (deleted listing). To estimate occupancy rates, Inside Airbnb’s “San Francisco Model” has been used (Inside Airbnb, 2017). Amongst others, a review rate of 50 per cent is used to convert reviews to estimated bookings. The average length of stay for Airbnb users in WA has been set at 4.1 nights for the purpose of this modeling (Source: Tourism WA, personal communication).

**Source:** Insideairbnb, estimates analysis and illustration supported by Eurac Research and Ruben Bassani and Daniele Fadda.

Nightly rates of WA Airbnb listings (Figure 16) need to be differentiated by room type. In March 2017, entire homes and apartments are rented out for a median rate of AUD 150 per night. Private room rates amount to AUD 65, and shared room rates to AUD 35 per night (the average across all types of Airbnb accommodations is AUD 120). Over the analysed months, prices of entire homes and apartments remained relatively stable. However, the growing presence of high priced outliers is noteworthy. The prices can be compared to average room prices in traditional WA accommodations, amounting to AUD 112 on average for WA in general, and to AUD 186 for the Perth metropolitan area (see Table 2, Chapter 1). This comparison shows that prices of Airbnb accommodations might be less different from traditional accommodations than sometimes assumed.

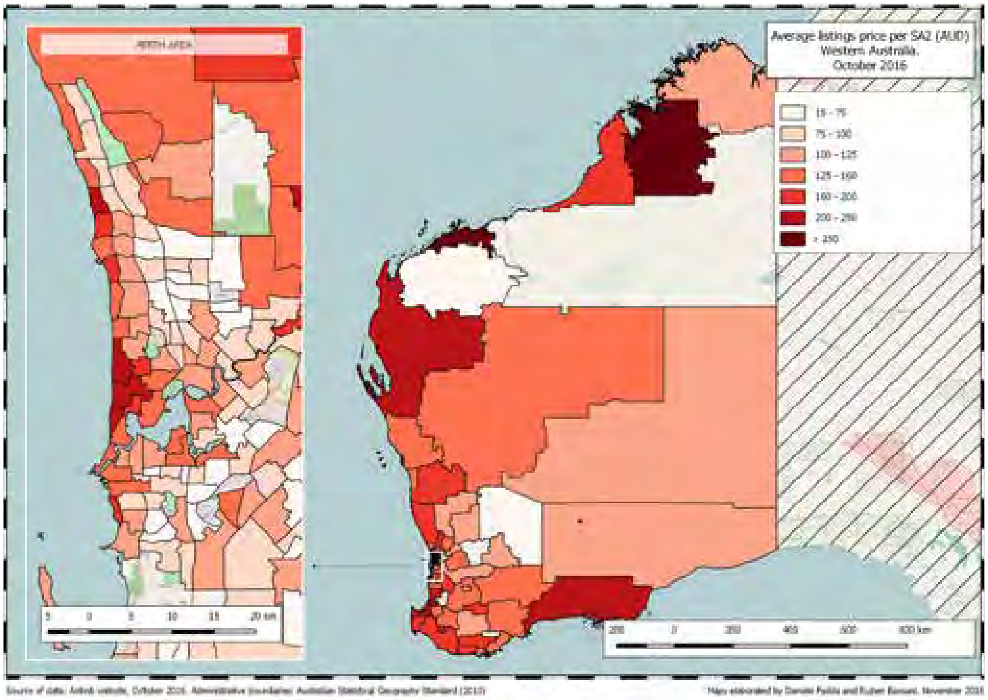
**Figure 16** Prices of Airbnb listings, WA, May 2016 to March 2017




**Note:** Only available listings are considered. Unavailability may refer to occupation by a guest (booking), availability not provided by the host ("blacked out" listing) or cessation of activity (deleted listing).
**Source:** Insideairbnb, estimates analysis and illustration supported by Eurac Research and Ruben Bassani and Daniele Fadda.

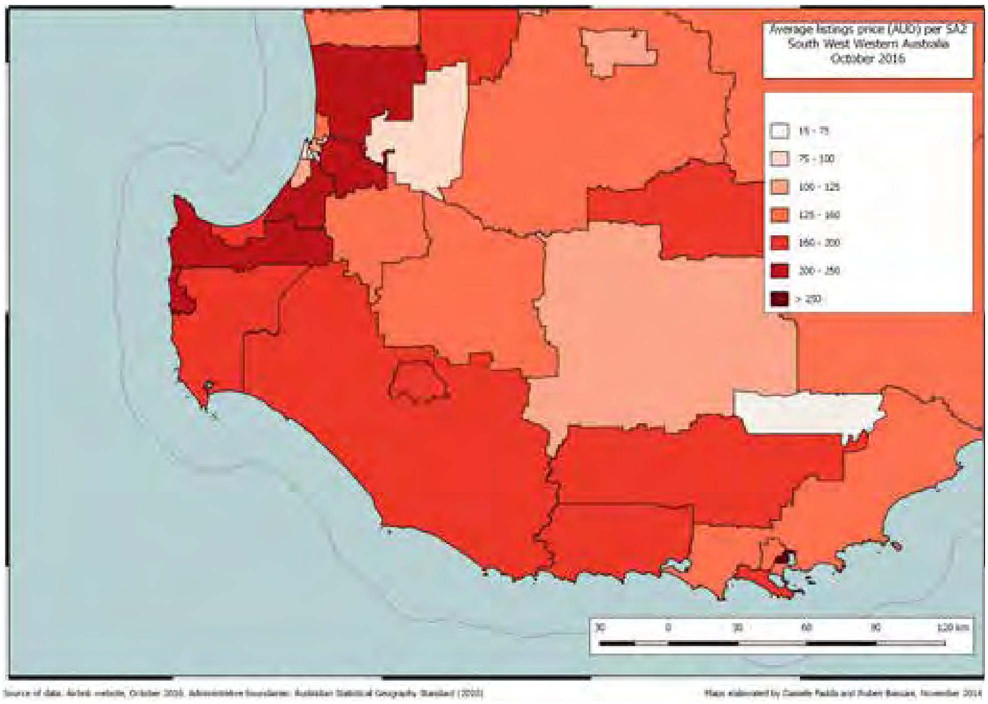
Regarding the spatial distribution of rates per night (Figures 17 and 18), the highest prices are achieved in Derby/West Kimberley (Australia's North West region), directly along the metropolitan coast in Perth (Cottesloe to City Beach, all with average prices above AUD 200 in October 2016), close to Mandurah and also along almost the entire coastline of the Australia's South West region from Geographe Bay and Margaret River (the average price for Margaret River was AUD 226 in October 2016) to Albany and even further to Esperance into the coastal areas of Australia's Golden Outback Region. In contrast, the average Airbnb price across all categories in the City of Perth is AUD 123 (for October 2016). It needs to be noted that the variety of different room types, in particular the listing of private rooms and shared rooms, might be proportionally higher in urban areas and might therefore impact on overall average rates.

**Figure 17** Spatial distribution of Airbnb listing prices, WA, October 2016




Note: Only available listings are considered. Unavailability may refer to occupation by a guest (booking), availability not provided by the host ("blacked out" listing) or cessation of activity (deleted listing). SA2 level boundaries are used.
Source: Insideairbnb, estimates analysis and illustration supported by Eurac Research and Ruben Bassani and Daniele Fadda.

**Figure 18** Spatial distribution of Airbnb listing prices: Focus on the South West, WA, October 2016

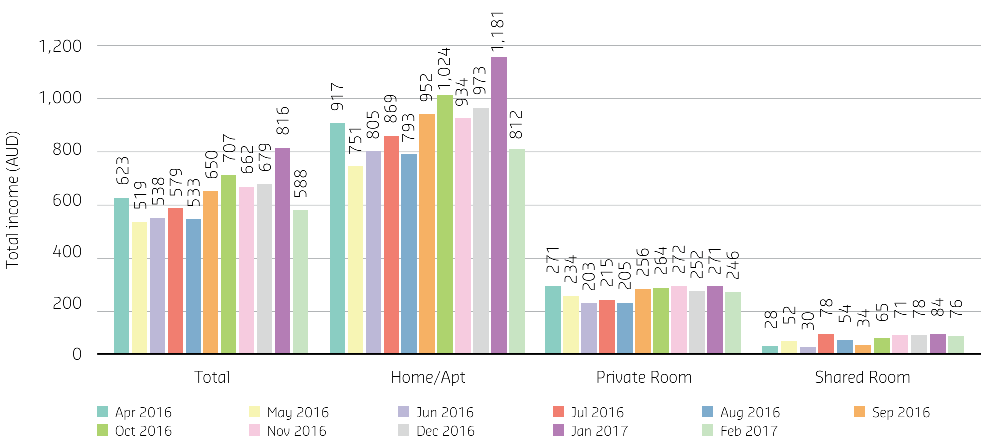



Note: Only available listings are considered. Unavailability may refer to occupation by a guest (booking), availability not provided by the host ("blacked out" listing) or cessation of activity (deleted listing). SA2 level boundaries are used.
Source: Insideairbnb, estimates analysis and illustration supported by Eurac Research and Ruben Bassani and Daniele Fadda.

## Estimated income of Airbnb hosts per listing

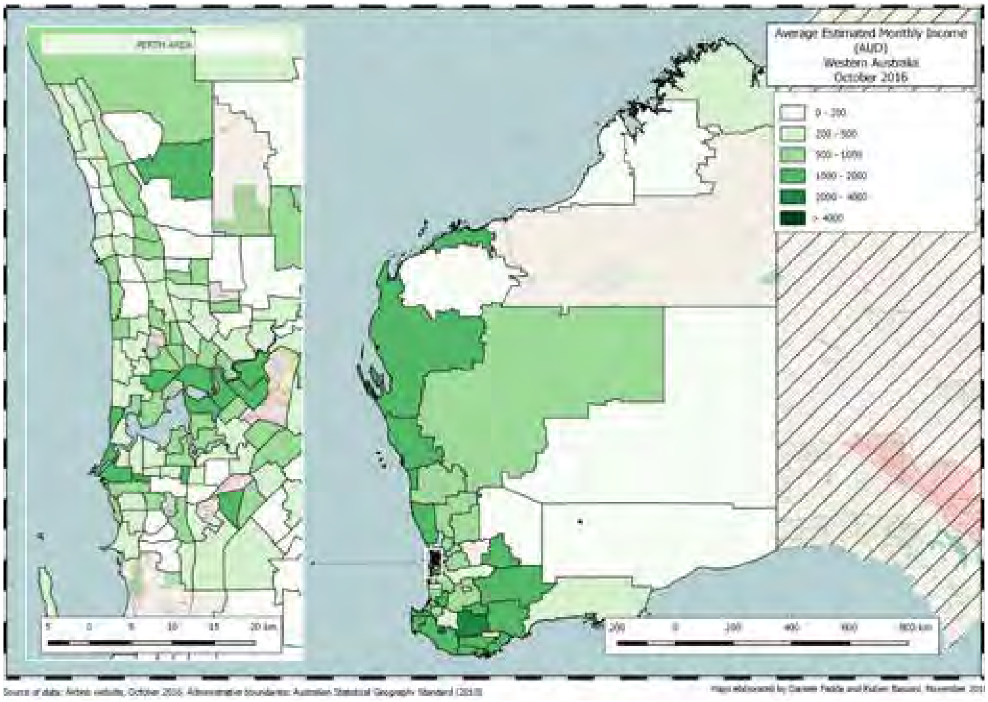
Based on daily rates and estimated occupancies, it is possible to estimate the average monthly income of Airbnb hosts in WA per posted listing (Figure 19). In February 2017, average WA Airbnb income per listing amounted to AUD 588. However, the highest average monthly income per listing was achieved in January 2017 with AUD 815. The average across all observed months amounts to AUD 626. When only the category of entire homes and entire apartments was considered, the average monthly income per listing was AUD 812 in February 2017, and 1,181 AUD in January 2017, which was the highest average monthly income observed. For private rooms, income was about AUD 246 in February 2017 and the highest average income was registered in November 2016 with AUD 271.

**Figure 19** **Estimated monthly income of Airbnb hosts per listing, WA, April 2016 to February 2017**




Note: Only available listings are considered. Unavailability may refer to occupation by a guest (booking), availability not provided by the host ("blacked out" listing) or cessation of activity (deleted listing).
Source: Insideairbnb, estimates analysis and illustration supported by Eurac Research and Ruben Bassani and Daniele Fadda.

**Figure 20** Spatial distribution of the estimated income of Airbnb hosts, WA, October 2016




Note: Only available listings are considered. Unavailability may refer to occupation by a guest (booking), availability not provided by the host ("blacked out" listing) or cessation of activity (deleted listing). SA2 level boundaries are used.
Source: Insideairbnb, estimates analysis and illustration supported by Eurac Research and Ruben Bassani and Daniele Fadda.

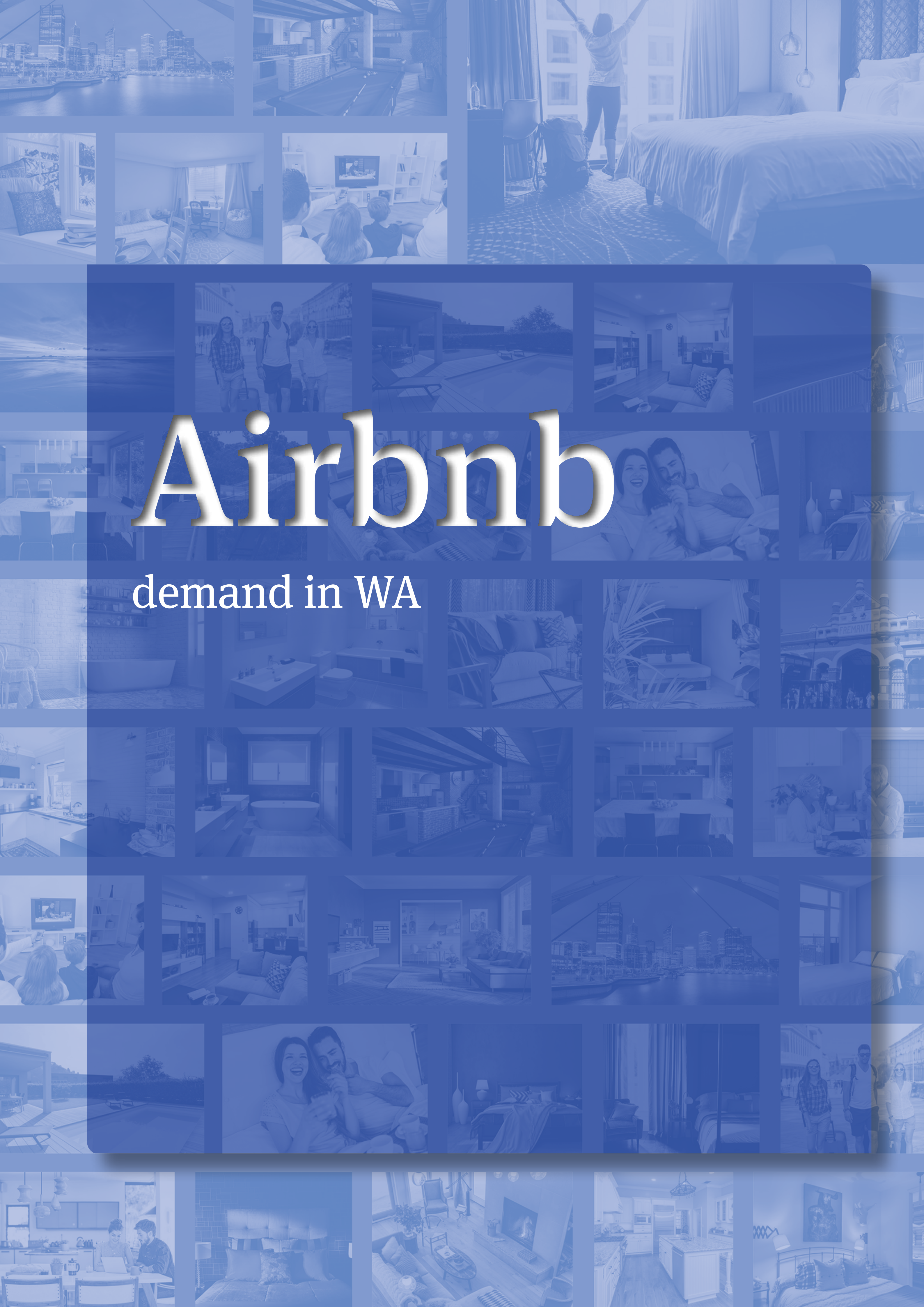
The territorial distribution of this income (Figure 20) indicates that it tends to be highest in the central suburbs of Perth on both sides of the Swan River as well as in the southwest corner of the state and along its western coastline. The total income per month across all WA hosts exceeds AUD 4.5 million.

## Concluding remarks

Supply data indicates that with more than 8,100 listings and more than 5,800 hosts, and annual growth rates between 50 per cent and 100 per cent over the last three years, Airbnb is a noticeable reality in Western Australia. It is distributed across the entire state, with hotspots in the metropolitan areas of Perth and Fremantle (especially along the rivers and the metropolitan coastline), and the South West of WA, in particular the areas close to Margaret River and Busselton. Regarding the type of accommodations, the renting out of entire homes and apartments dominates (compared to renting out single rooms), with houses being clearly more common than apartments. Airbnb accommodation supply in WA seems to remain mostly within the occasional realm, with more than 80 per cent being single listings ("one listing per host") and average occupancy rates remaining at or below 20 per cent even for the strongest category of entire homes and apartments (with a maximum observed monthly average of 23%), and thus not extending 75 days of occupancy per year on average. Average prices of Airbnb listings are sizable and allow Airbnb hosts to earn a monthly income of about AUD 626 (per listing) across all categories, observed months and areas. Thus, based on data from March 2017, the combined total income per month of all WA hosts exceeds AUD 4.5 million, although significant variations in income are noticeable.

# Airbnb

## demand in WA



## Aim of analysis

A major concern of key tourism stakeholders in WA refers to the perceived risk that Airbnb might be a potential threat to their business (see section on stakeholder opinions). From an economic point of view, it is seemingly important to ascertain whether Airbnb can contribute to create additional business, and to attract new and different guests into the destination or whether it works as a substitute to *existing* supply and mirrors *existing* demand. The purpose of this analysis on Airbnb demand was thus to explore the characteristics of Airbnb users[3] in WA compared to Airbnb non-users among the WA visitors, and to understand whether and how they differ from each other. Therefore, the prime focus of the analysis was set on identifying over- and under-presence of Airbnb users within specific visitor categories.

The analysis below primarily compares Airbnb users with Airbnb non-users for each variable separately. In this context, a note of caution regarding a causal interpretation is necessary: The *one-by-one* modelling of these variables neither allows capturing interplays between them nor establishing hierarchies of causal effects (e.g. is an observed difference due to the mere use of Airbnb or due to the fact a certain category of visitors prevails among Airbnb users). To capture such aspects and confounding effects, a simultaneous modelling is necessary. The concluding subsection of this chapter presents results of such a simultaneous multi-variable approach through a comprehensive logistic regression analysis.

3 "Airbnb users" are defined as using Airbnb at least once during their stay in WA.

## Data basis

The "International Visitor Survey" (IVS) and the "National Visitors Survey" (NVS) by Tourism Research Australia (TRA) provided the data basis for the analysis of Airbnb demand, and for identifying differentiators between Airbnb users and Airbnb non-users.

Each year the IVS surveys about 40,000 international visitors aged 15 years and over at their point of departure from Australia. The survey is conducted at eight international airports (Sydney, Melbourne, Brisbane, Cairns, Perth, Adelaide, Darwin and Gold Coast), employing a CAPI-approach (Computer Assisted Personal Interviewing), with obtained data published quarterly (TRA, 2016a). For the analysis presented in this chapter, only data for tourists who visited the state of WA within their travel itinerary, during 2015 (5,886 international visitors) and the first three quarters of 2016 (4,421 international visitors) were utilised.

Since 2015, the IVS-survey has included a question regarding the use of internet platforms to book accommodation in private homes or apartments, which allowed identification of Airbnb visitors for either the Perth metropolitan area or other parts of the State. For the analysis (of international visitors), the focus was set exclusively on the Airbnb platform with other, similar internet platforms for accommodation bookings not being considered.[4]

To analyse the use of internet platforms to book accommodation in private homes or apartments among *domestic* Australian tourists visiting WA, data collected through the NVS for 2015 and the first three quarters of 2016 was used. Each year, the NVS surveys approximately 120,000 Australian residents aged 15 years and over regarding their travel behavior (including day trips and outbound travel). Interviewees are selected via random digit dialing and interviews are conducted with a Computer Assisted Telephone Interviewing system (CATI) (TRA, 2016b). For the below analysis, only data for domestic visitors (intra-state and inter-state) who stayed in WA overnight and away from home, were considered. For 2015, the sample consisted of 3,871 domestic overnight visitors, and 3,350 domestic overnight visitors for the first three quarters of 2016.

The NVS also includes a question on the use of internet platforms to book accommodation in private homes or apartments, but in contrast to the IVS it does not differentiate between the various platforms, and thus specifically identify Airbnb users. Therefore, it was necessary to combine all users of internet platforms to book private accommodations in WA into a single category. This means the results for domestic travelers cannot be directly compared to findings for international visitors.

4 Please note that results are not necessarily directly comparable with the regular analyses produced by Tourism Research Australia, as methods slightly differ. In particular, in the present report a weighting of data has been avoided. This is however insignificant, as this report focuses on the *comparison* between Airbnb users and Airbnb non-users and does not attempt to extrapolate to overall numbers.

## Results

### International visitors: all trip purposes and holidaymakers

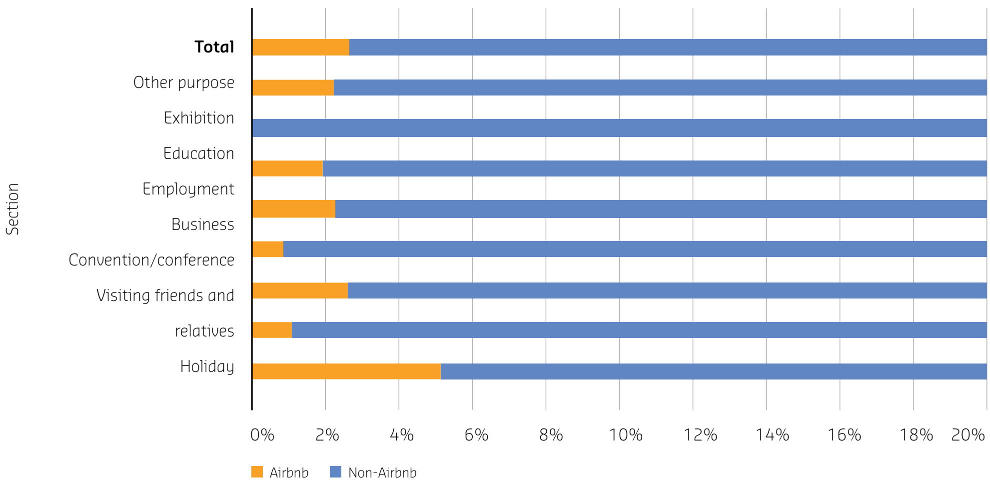
In 2015, 2.7 per cent of surveyed international visitors to Western Australia used the Airbnb platform to book their accommodation. In the first three quarters of 2016, the share of these Airbnb users increased to 5.6 per cent. The share of Airbnb users among holidaymakers is markedly higher than their share among international visitors when all trip purposes are considered: In 2015, 5.1 per cent of surveyed international holidaymakers in WA used the Airbnb platform, increasing to 9.9 per cent in the first three quarters of 2016.

#### *Trip purpose*

The collated data demonstrates that Airbnb is first and foremost appealing to holidaymakers (Figures 21 and 22). Airbnb users have a relatively stronger presence among those who indicate holiday as the purpose of their trip to WA. For the periods surveyed in 2015 and 2016, the rates of holidaymakers booking through Airbnb (5.13% and 9.86%, respectively) was significantly above the overall average rate of Airbnb visitors to WA (2.7% and 5.6% respectively). Moreover, holidaymakers accounted for 67.3 per cent (2015) and 68.3 per cent (2016) of all international Airbnb users to WA. In most other trip purpose categories, Airbnb users are underrepresented, which is especially evident for visiting friends and relatives (VFR) as well as for business and exhibition travel in 2015; and for VFR, business and employment in 2016. While Airbnb users in the category "convention/conference" were close to average in 2015 (2.63%), they almost reached a similarly high share as holidaymakers in 2016 (9.8%).

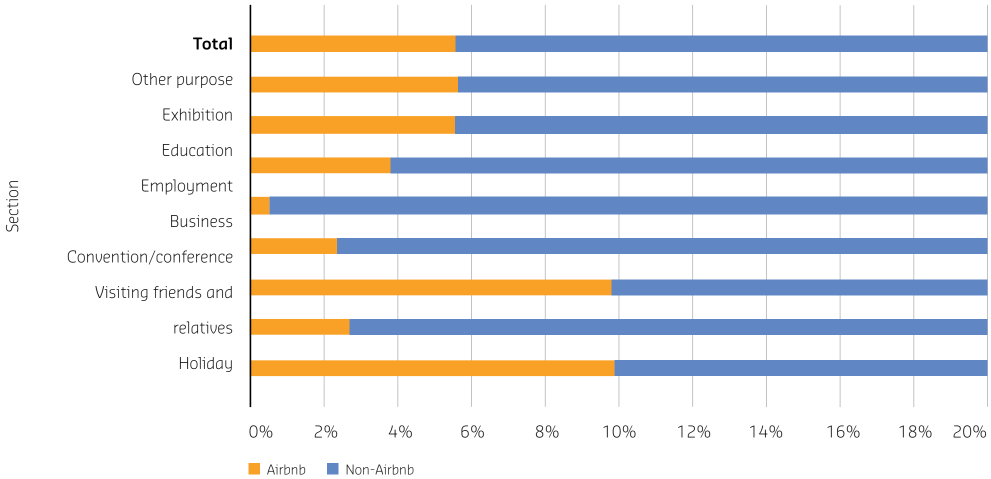
An inferential analysis reveals that for both years Airbnb usage in WA is not independent from travel purpose and the distributions in both groups (Airbnb, Non-Airbnb) regarding travel purpose are not equal (significance level 0.05).

**Figure 21** Share of Airbnb users in travel purpose categories, international visitors, WA, 2015




**Note:** Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (IVS, 2015), own analysis.

**Figure 22** Share of Airbnb users in travel purpose categories, international visitors, WA, January to September 2016

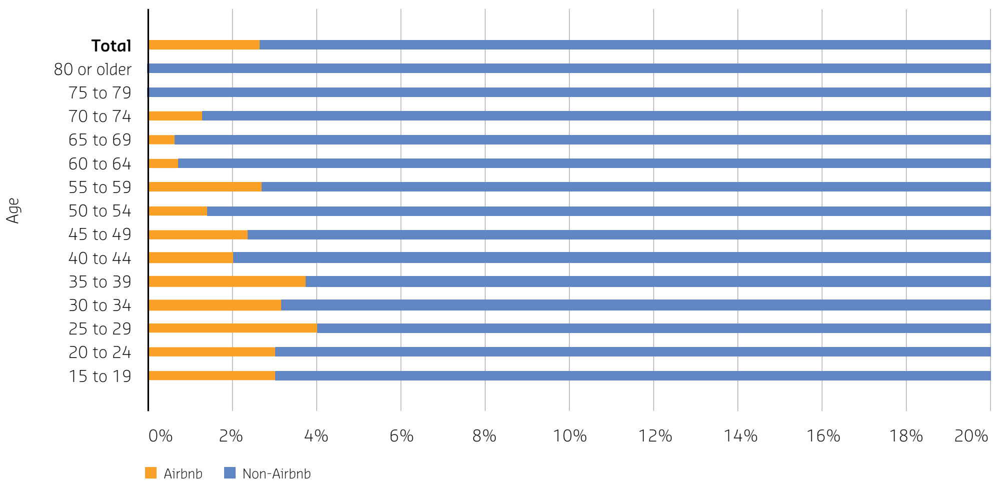



Note: Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
Source: Data basis – TRA (IVS, 2015), own analysis.

### *Age groups*

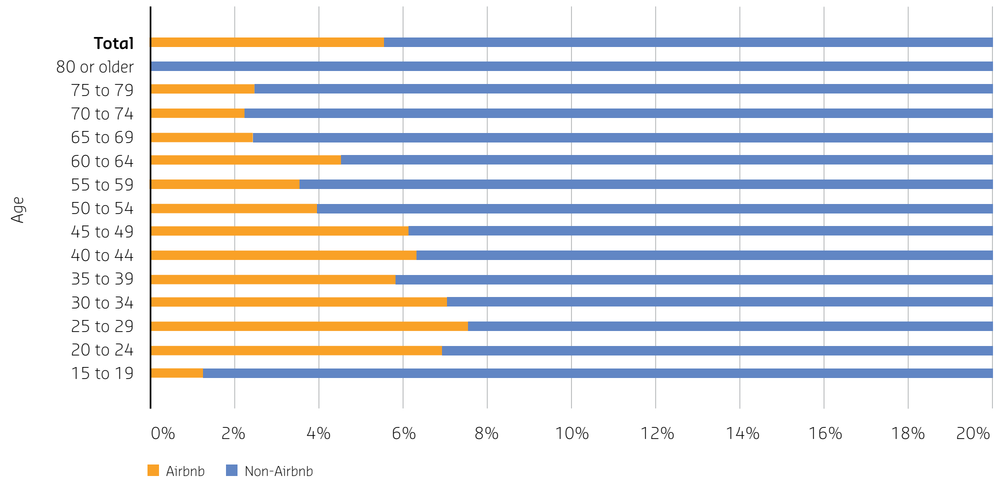
Overall, Airbnb visitors have a relatively stronger presence among younger to middle-aged WA visitors. While in 2015 the relative share of Airbnb users compared to Airbnb non-users was relatively strong and consistently above average for the age groups 25 to 39 years, in 2016 the age groups with above-average share of Airbnb usage expanded to comprise visitors aged 20 to 49 years. However, looking at each single category separately, the relative share of Airbnb users is highest for both, 2015 and 2016, in the group “25 to 29 years”. In 2015, 4.02 per cent and in 2016 7.56 per cent of all international visitors to WA aged between 25 and 29 years used Airbnb to book their accommodation (Figures 23 and 24).

**Figure 23** Share of Airbnb users in age groups, international visitors, WA, 2015




Note: Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
Source: Data basis – TRA (IVS, 2015), own analysis.

**Figure 24** Share of Airbnb users in age groups, international visitors, WA, January to September 2016

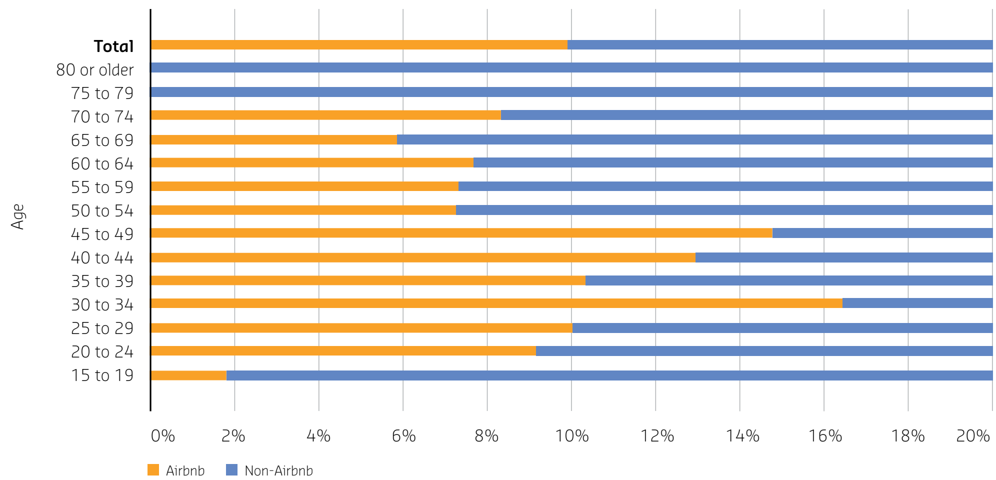



**Note:** Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (IVS, 2015), own analysis.

Similar results are obtained from a specific focus on holidaymakers (Figure 25): Younger categories of WA visitors have a relatively higher share of Airbnb users than older categories. However, when considering holidaymakers only, the highest relative shares are found in the age groups between 30 and 49 years (in 2016). Within the narrow age group of 30 to 34 years, 16.43 per cent of holidaymakers used Airbnb to book their accommodation in WA in 2016.

An inferential analysis reveals that for both years Airbnb usage in WA is not independent from age and the distributions in both groups (Airbnb, Non-Airbnb) regarding age groups are not equal (significance level 0.05). It is important to note that statistical significance could not be established if holidaymakers only were considered.

**Figure 25** Holidaymakers - Share of Airbnb users in age groups, international visitors, WA, January to September 2016



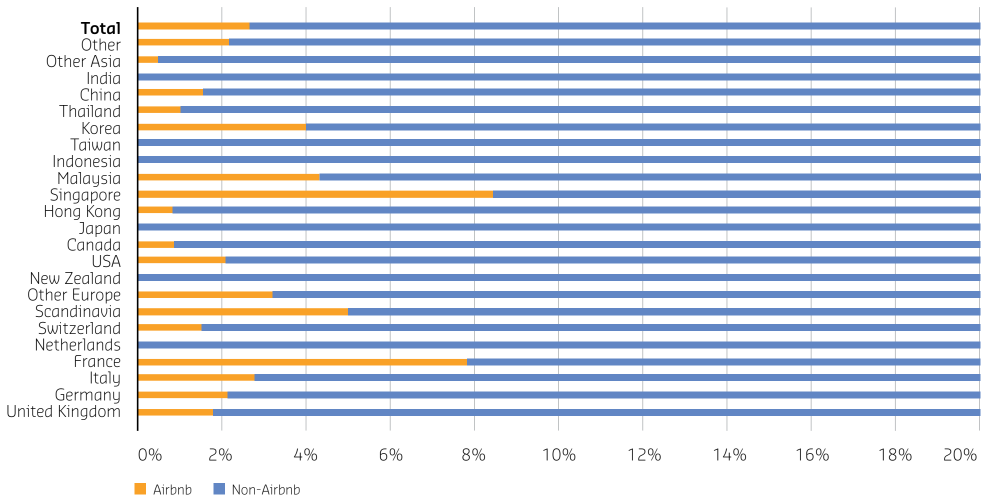

**Note:** Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (IVS, 2015), own analysis.

### *Country of origin*

Overall, using Airbnb when visiting WA seems to be an option that is more appealing for visitors from some source countries than others (Figures 26 and 27). Airbnb visitors have a relatively stronger presence among visitors from certain Asian countries such as Singapore, Malaysia and Korea (for Korea only in 2015) and selected European sources markets such as France or Scandinavian countries (for 2015, and partly for 2016). It is also interesting to note that Airbnb users exhibit a relatively contained presence in some of the most traditional source countries for WA, such as New Zealand and UK. A share of Airbnb users on or below average can also be noticed for countries that have repeatedly been seen (Tourism WA, 2012; Tourism WA, 2016) as potential future growth markets such as India and partly Indonesia, China as well as Taiwan.

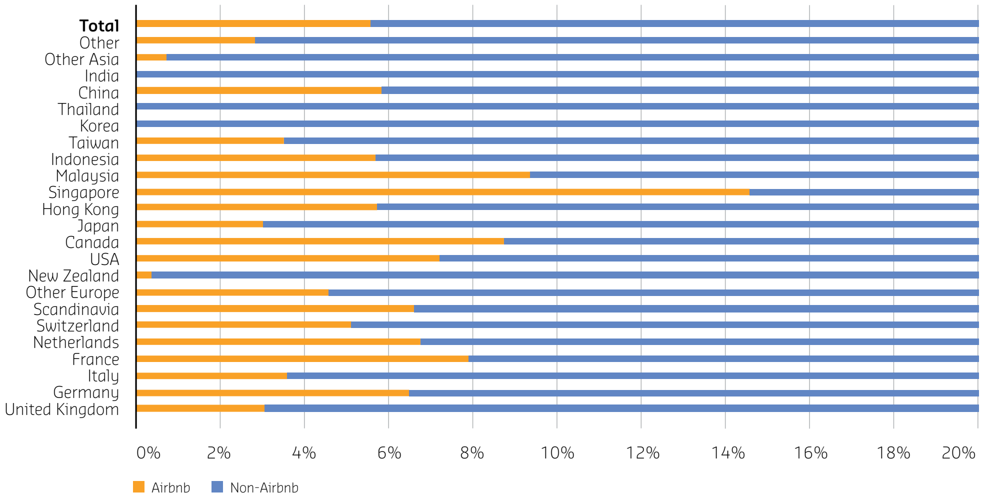
In 2015, 8.44 per cent of all WA visitors from Singapore booked their accommodation via Airbnb (vs. an overall average of 2.7% Airbnb users in 2015); in 2016, this share increased to 14.55 per cent (vs. an overall average of 5.6% Airbnb users in 2016). The essence of this finding does not change when the focus is set on holidaymakers only (Figure 28): 14.69 per cent of Singaporean holidaymakers in WA booked via Airbnb in 2015 (versus an overall average of 5.1 per cent Airbnb users among holidaymakers in 2015); and even 25.12 per cent, i.e. approximately one quarter, used the booking platform when visiting WA for holiday reasons in 2016.

**Figure 26** **Share of Airbnb users per countries of origin, international visitors, WA, 2015**




**Note:** Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (IVS, 2015), own analysis.

**Figure 27** Share of Airbnb users per countries of origin, international visitors, WA, January to September 2016

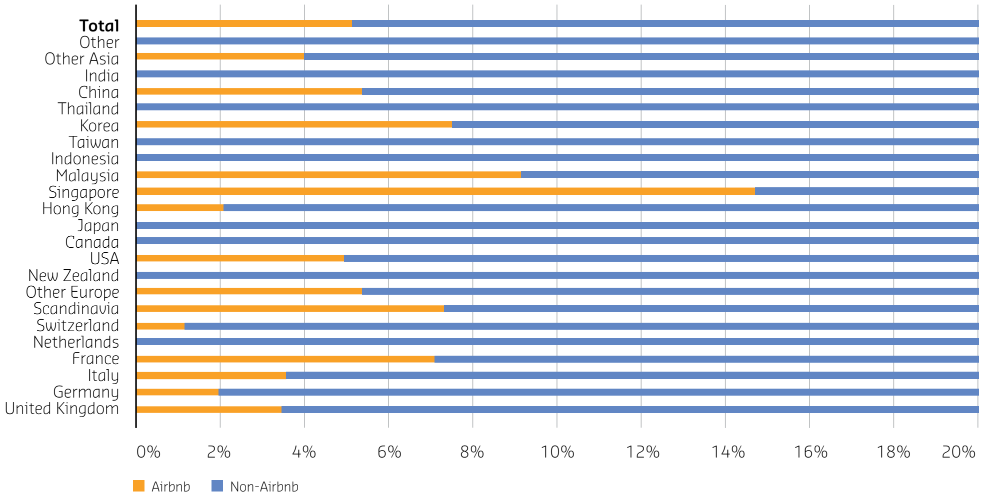



**Note:** Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (IVS, 2015), own analysis.

For many countries, there is a marked dynamic regarding the change in share of Airbnb users relative to non-users between the years 2015 and 2016. Indonesia, Canada, USA and also China, are among the source markets, where the share of Airbnb users among visitors to WA increased prominently in the inter-year comparison.

An inferential analysis reveals that, for both years, Airbnb usage in WA is not independent from country of origin and the distributions in both groups (Airbnb, Non-Airbnb) regarding country of origin are not equal (significance level 0.05). The same holds for the analysis restricted to holidaymakers.

**Figure 28** Holidaymakers - Share of Airbnb users per countries of origin, international visitors, WA, 2015




**Note:** Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (IVS, 2015), own analysis.

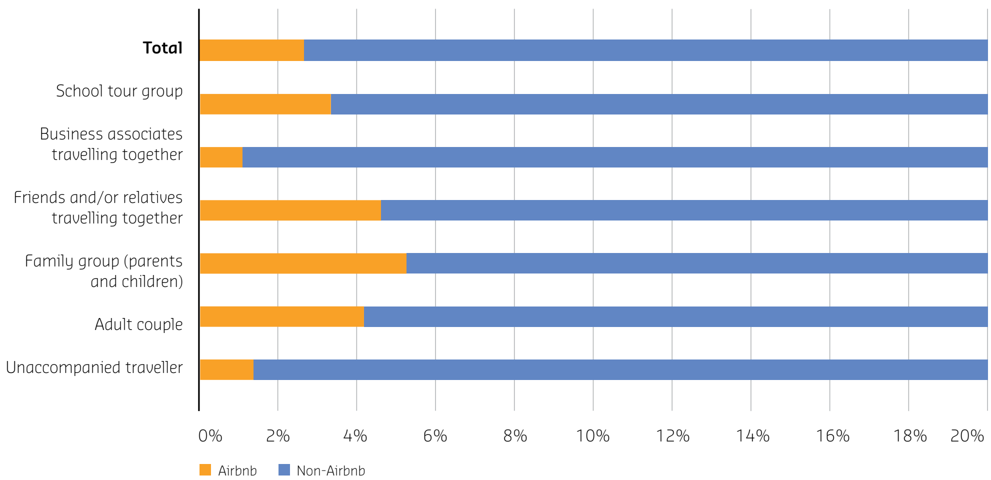
### *Type of travel party*

Overall, using Airbnb when visiting WA seems to be relatively more appealing for adult couples, friends or relatives travelling together and for families than for unaccompanied travelers. In other words: Airbnb is preferred by groups of travelers rather than by visitors travelling alone (Figures 29 and 30). In 2015, 5.25 per cent of families, 4.6 per cent of groups of friends and relatives, and 4.17 per cent of adult couples who visited WA booked their accommodation through Airbnb. These figures represent a higher share of Airbnb users among these travel party types when compared to average share for Airbnb users (2.7%). Similar results were obtained through the analysis of WA visitors focusing solely on the trip purpose “holiday” for the year 2015 (Figure 31): Family groups (8.16%), adult couples (7.27%) and groups of friends or relatives travelling together (6.07%) had a significantly higher share of Airbnb users than holidaymaker travel parties on average (5.1%).

Results for the year 2016 largely confirm the observations from 2015 with three aforementioned travel party types having significantly higher relative shares of Airbnb users, and, in particular, unaccompanied travelers choosing the Airbnb option less frequently than the average travel party: 1.39 per cent (2015) compared with 2.36 per cent (2015 holidaymakers), and in 2016 3.28 per cent compared with 5.5 per cent of holidaymakers.

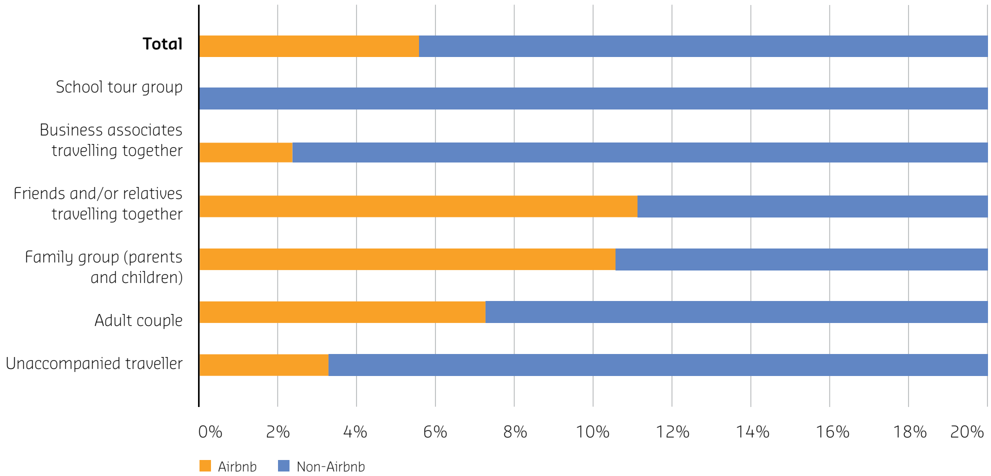
An inferential analysis reveals that for both years Airbnb usage in WA is not independent from travel party type and the distributions in both groups (Airbnb, Non-Airbnb) regarding travel party type are not equal (significance level 0.05). The same results are obtained when the analysis is restricted to holidaymakers.

**Figure 29** **Share of Airbnb users in travel party types, international visitors, WA, 2015**



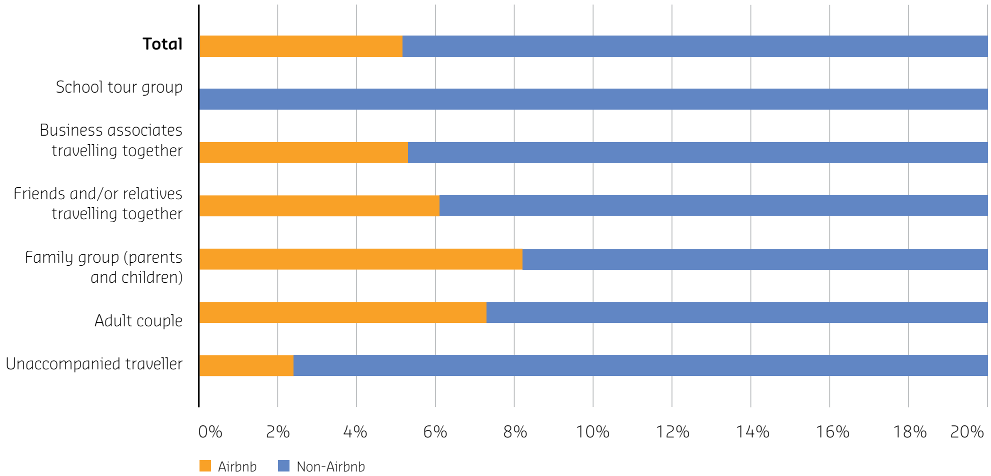

**Note:** Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (IVS, 2015), own analysis.

**Figure 30** Share of Airbnb users in travel party types, international visitors, WA, January to September 2016




**Note:** Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (IVS, 2015), own analysis.

**Figure 31** Holidaymakers - Share of Airbnb users in travel party types, international visitors, WA, 2015

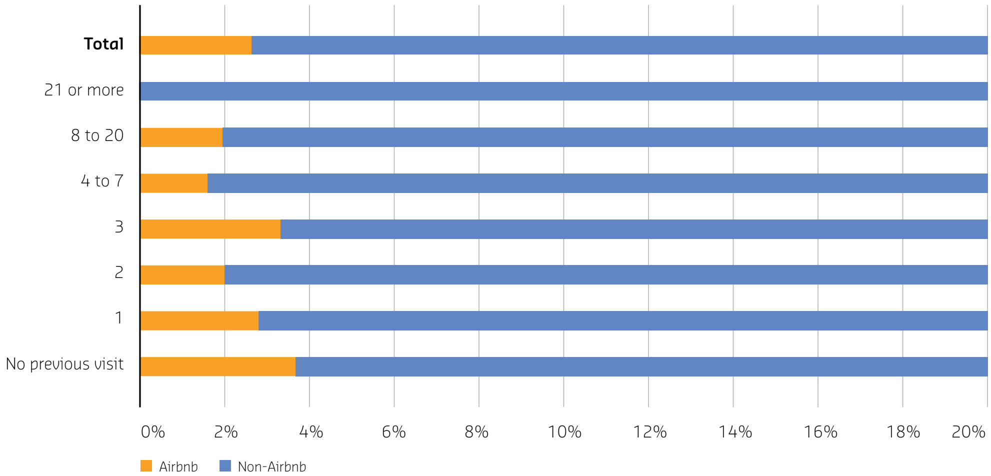



**Note:** Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (IVS, 2015), own analysis.

### *Previous visits*

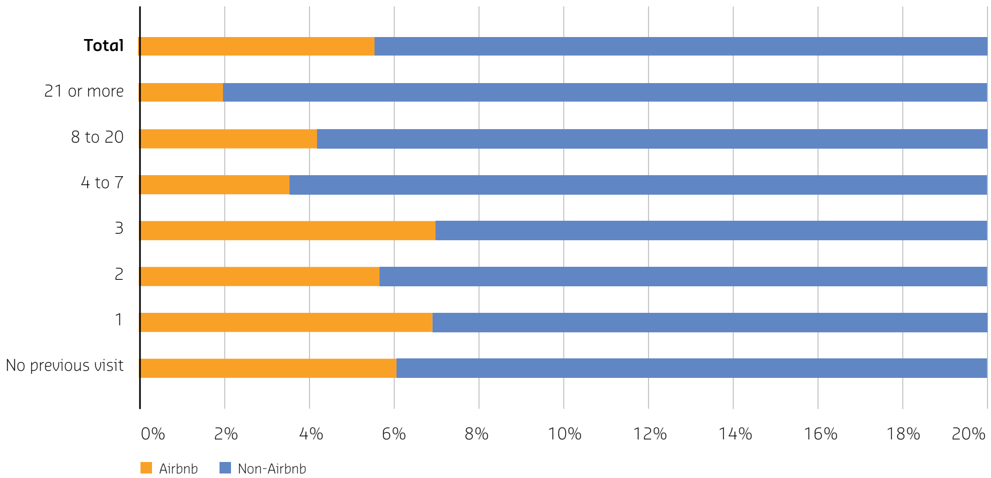
Overall, using Airbnb when visiting WA seems to be relatively more appealing to visitors that have limited prior experience in travelling to Australia (Figures 32 and 33). Among those visiting for the first time the relative share of Airbnb users amounts to 3.68 per cent (2015; average: 2.7%) and 6.09 per cent (2016; average: 5.6%).

**Figure 32** Share of Airbnb users per number of previous visits, international visitors, WA, 2015




Note: Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
Source: Data basis – TRA (IVS, 2015), own analysis.

**Figure 33** Share of Airbnb users per number of previous visits, international visitors, WA, January to September 2016

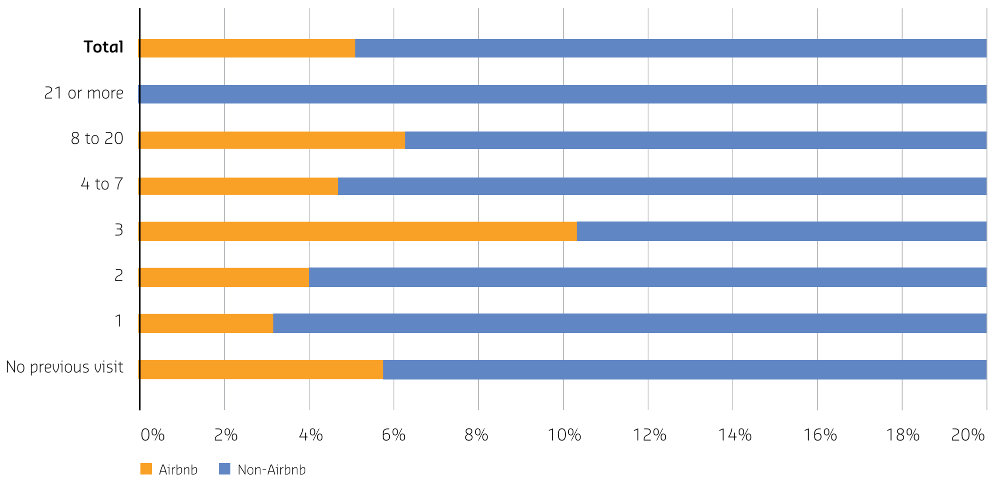



Note: Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
Source: Data basis – TRA (IVS, 2015), own analysis.

When focusing solely on holidaymakers (Figure 34), their share rises to 5.8 per cent (2015 holidaymakers; average: 5.1%) and 8.47 per cent (2016 holidaymakers; average: 9.9%) respectively. Thus, the share of Airbnb users amongst first time visitors to WA is in three of four cases above average. Similar results can be observed for all groups of visitors that have been to Australia for up to three previous visits. For example, in the group of holidaymakers who have previously visited Australia for three times, 10.34 per cent (2015) and 15.84 per cent (2016) booked an accommodation with Airbnb. These figures are, for both years, clearly above the average of holidaymakers using Airbnb.

An inferential analysis reveals that for both years Airbnb usage in WA is not independent from the number of previous visits (significance level 0.05), however for holidaymakers only this trend could not be confirmed.

**Figure 34** **Holidaymakers - Share of Airbnb users per number of previous visits, international visitors, WA, 2015**




**Note:** Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (IVS, 2015), own analysis.

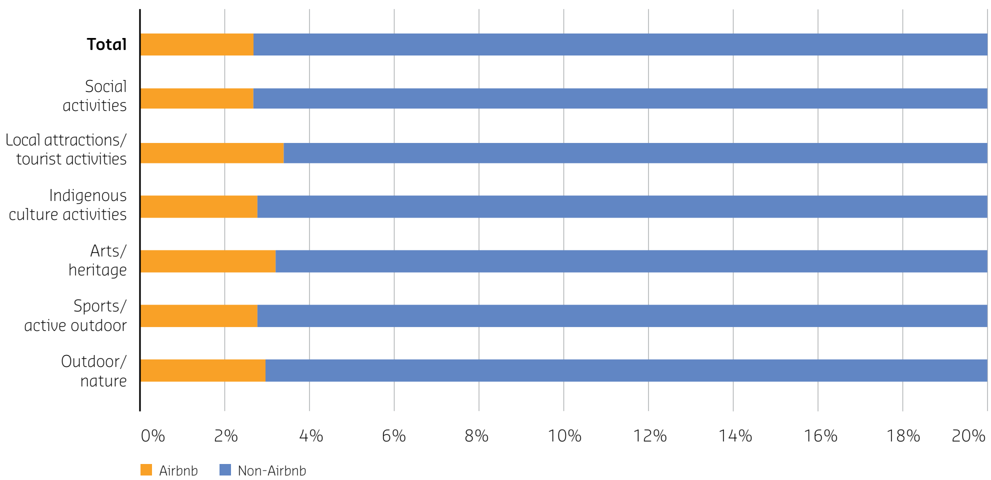
### *Trip activities*

All in all, using Airbnb when visiting WA seems to be relatively more appealing for visitors who like to visit local attraction points and participate in a range of tourism activities (Figures 35 and 36). The relative share of Airbnb users among those who participate in such activities in WA is above average for both years 2015 (3.4% vs. an overall average of 2.7% Airbnb users) and 2016 (6.6% vs. an average of 5.6%); similar results (Figure 37) can be obtained when holidaymakers only are considered (2015: 5.6% vs. an average of 5.1 per cent; 2016: 10.41 per cent vs. an average of 9.9%).

In contrast, there is a tendency for Airbnb users to be underrepresented among those WA visitors who engage in indigenous culture activities and who participate in sports and outdoor activities during their visit. This is in particular evident if holidaymakers only are considered. For instance, in 2015 the share of Airbnb holidaymakers in the category "sports and active outdoor" is 4.23 per cent, and in the category "indigenous culture activities" 3.89 per cent compared to an average of 5.1 per cent of Airbnb holidaymakers in total. In both categories, their relative share amongst holidaymakers only remains also consistently below average for 2016.

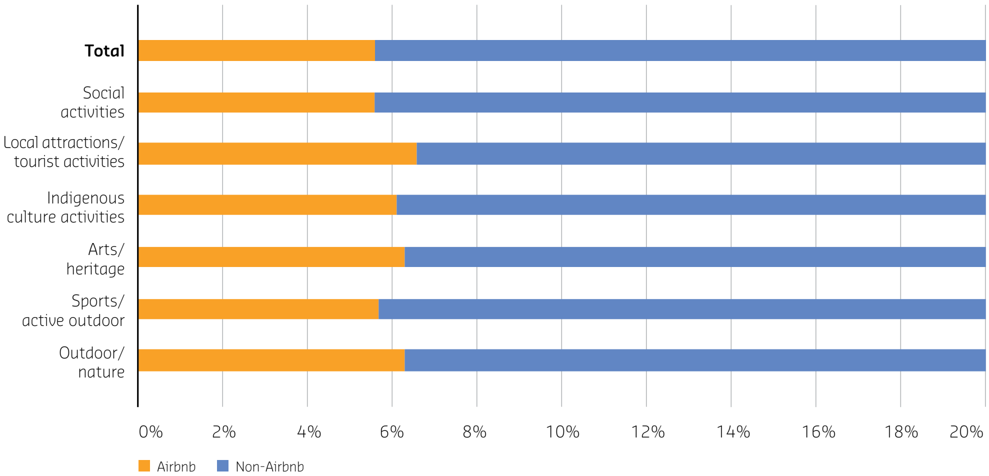
An inferential analysis reveals that for both years, Airbnb usage in WA is not independent from trip activities and the distributions in both groups (Airbnb user vs Airbnb non-user) regarding trip activities are not equal in all cases (significance level 0.05). The differences are statistically significant for "local attractions and tourist activities", "outdoor/nature" and "arts/heritage" in 2015 and 2016. However, it is important to note that if the analysis is restricted to holidaymakers only (2015), the difference between Airbnb users and Airbnb non-users only remains statistically significant for the category "local attractions and tourist activities". For holidaymakers in 2016, "indigenous culture activities" and "active outdoor/sports" are carried out to a statistically significantly lesser extent by Airbnb users compared to Airbnb non-users.

**Figure 35** **Share of Airbnb users per trip activities, international visitors, WA, 2015**



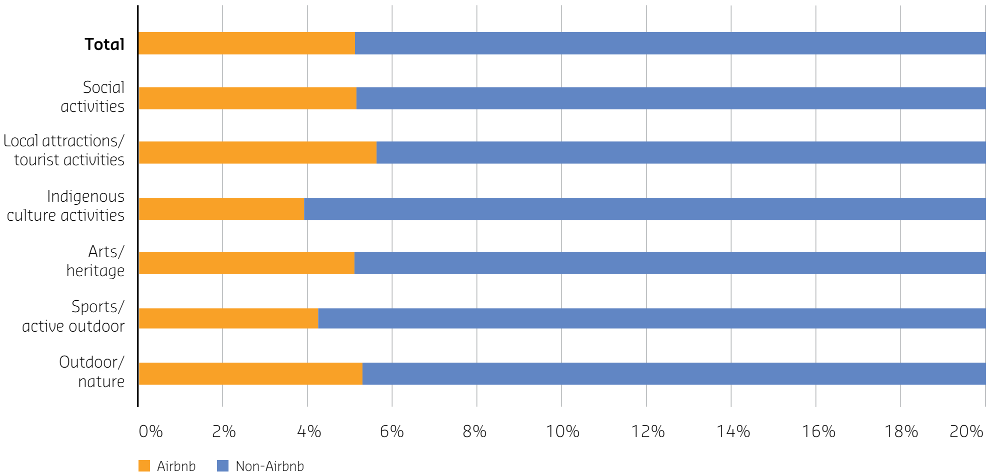

Note: Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
Source: Data basis – TRA (IVS, 2015), own analysis.

**Figure 36** Share of Airbnb users per trip activities, international visitors, WA, January to September 2016




**Note:** Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (IVS, 2015), own analysis.

**Figure 37** Holidaymakers - Share of Airbnb users per trip activities, international visitors, WA, 2015

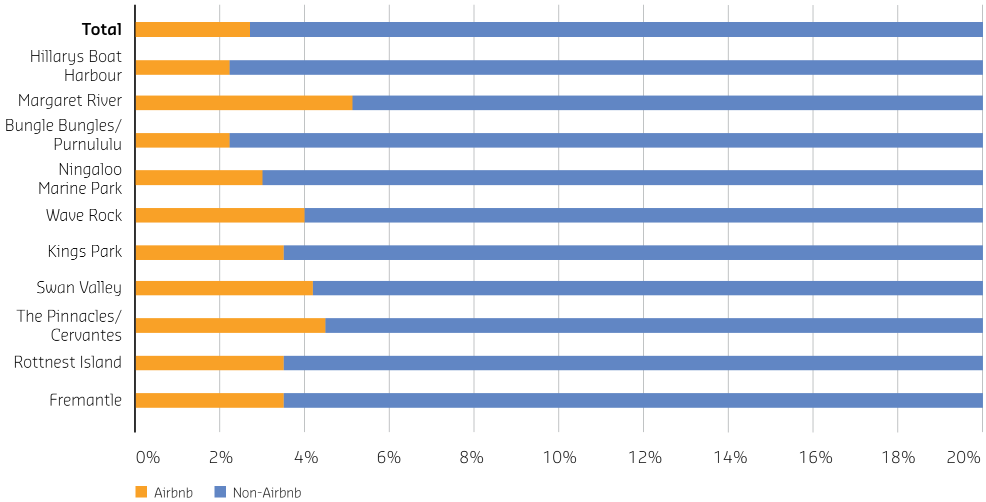



**Note:** Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (IVS, 2015), own analysis.

### *Places and attractions visited in WA*

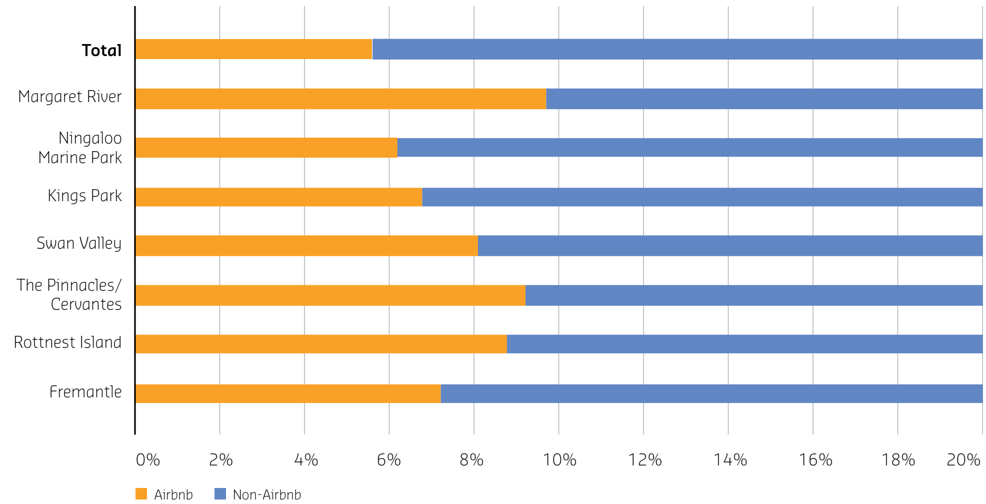
Using Airbnb when visiting WA appears to be relatively more appealing for tourists who visit regions in close proximity to Perth, such as Margaret River, the Swan Valley, the Pinnacles/Cervantes or Fremantle during their trip. Beyond that, it is remarkable that Airbnb users demonstrate a general tendency to visit more places in WA than Airbnb non-users (Figures 38 and 39). This observation holds also for holidaymakers only (Figure 40), except for the most distant places from Perth that have been considered such as the Bungle Bungles/Purnululu National Park or Ningaloo Marine Park.

**Figure 38** Share of Airbnb users per WA places visited, international visitors, WA, 2015



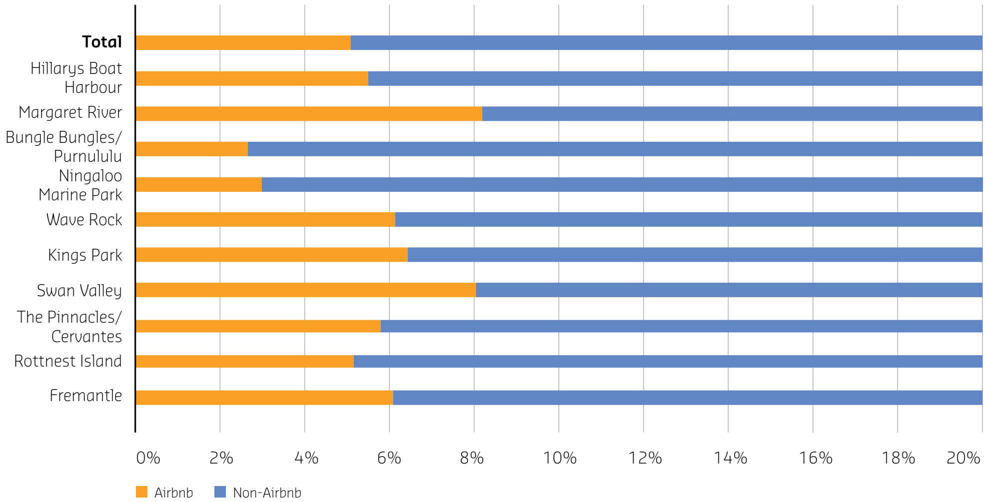

**Note:** Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (IVS, 2015), own analysis.

**Figure 39** Share of Airbnb users per WA places visited, international visitors, WA, January to September 2016




**Note:** Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (IVS, 2015), own analysis.

**Figure 40** Holidaymakers - Share of Airbnb users per WA places visited, international visitors, WA, 2015




**Note:** Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (IVS, 2015), own analysis.

Margaret River consistently exhibits the highest share of Airbnb users among all WA places included in the analysis. In 2015 Airbnb users constituted 5.1 per cent of all international guests visiting Margaret River, and even 8.18 per cent among holidaymakers only. In the following year (2016), the share of Airbnb users among visitors to Margaret River increased to 9.7 per cent and to 13.48 per cent among those who came to the region for "holiday" purposes. All numbers are clearly above the overall share of Airbnb visitors to WA. Another wine region in WA, the Swan Valley, records similarly high shares of Airbnb users among its visitors, if only holidaymakers are considered, the figures are 8.02 per cent for 2015 and 13.13 per cent for 2016.

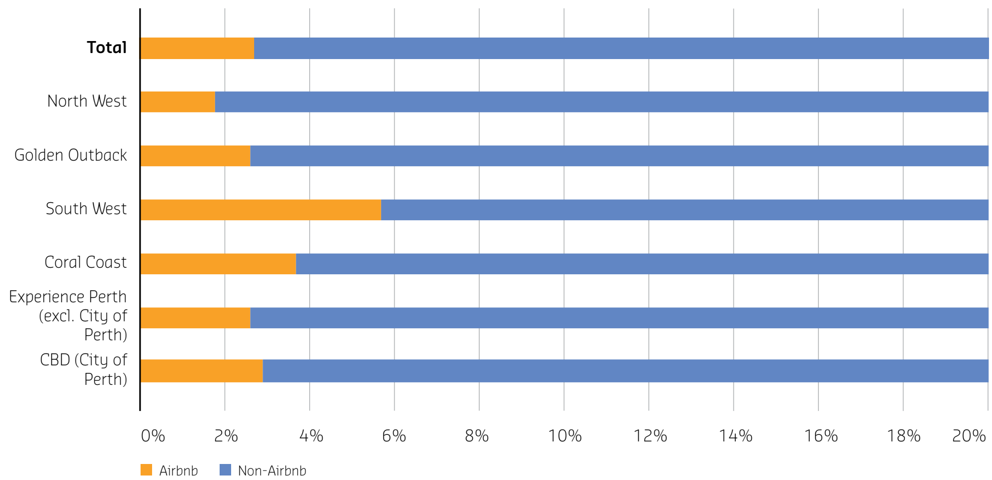
An inferential analysis reveals that for both years Airbnb usage in WA is not independent from places visited and the distributions in both groups (Airbnb users vs Airbnb non-users) regarding places visited are not equal for most (significance level 0.05). In all years and all subsets considered, the differences are statistically significant for "Fremantle," the "Swan Valley" and "Margaret River". For other places statistical significance depends on the year and the subset considered.

***Spatial distribution of accommodation***

Airbnb users have a different spatial distribution of their places of stay compared to Airbnb non-users in WA (Figures 41 and 42). Interestingly, Airbnb users do not stay only in the 'Experience Perth' region but clearly travel also to other tourism regions. Concerning visits to the different WA tourism regions (counted in a binary manner), the 'Australia's South West' (ASW) tourism region has the highest share of Airbnb users compared to Airbnb non-users. 5.7 per cent of all visits to ASW in 2015 and 10.7 per cent in 2016 were from Airbnb users, which is above the average of the overall share of Airbnb users among WA international visitors (2015: 2.7%; 2016: 5.6%). The same holds for holidaymakers only (Figure 43), where the ASW has again the highest share of stopovers by Airbnb users relative to non-users among all WA tourism regions (2015: 8.47%; 2016: 14.39%). This special role of ASW among Airbnb users is also confirmed in an inferential statistical analysis, where the difference between Airbnb users and Airbnb non-users are statistically significant across all analyzed years and subsets.

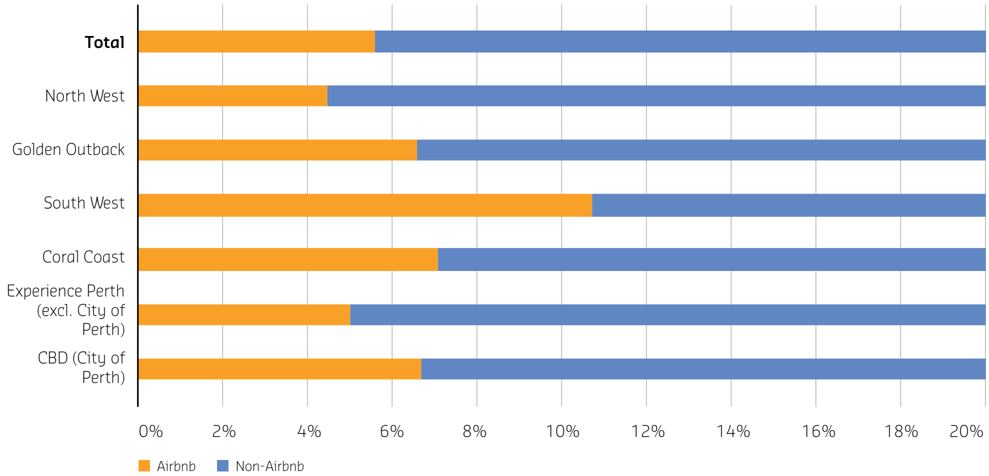
The share of visits by Airbnb users compared to Airbnb non-users is relatively close to average for the 'Experience Perth' region but is below average especially for 'Australia's North West' (ANW) tourism region, for both years 2015 and 2016 and for the subset of holidaymakers as well.

**Figure 41** **Share of Airbnb users per stopovers in WA tourism regions, international visitors, WA, 2015**



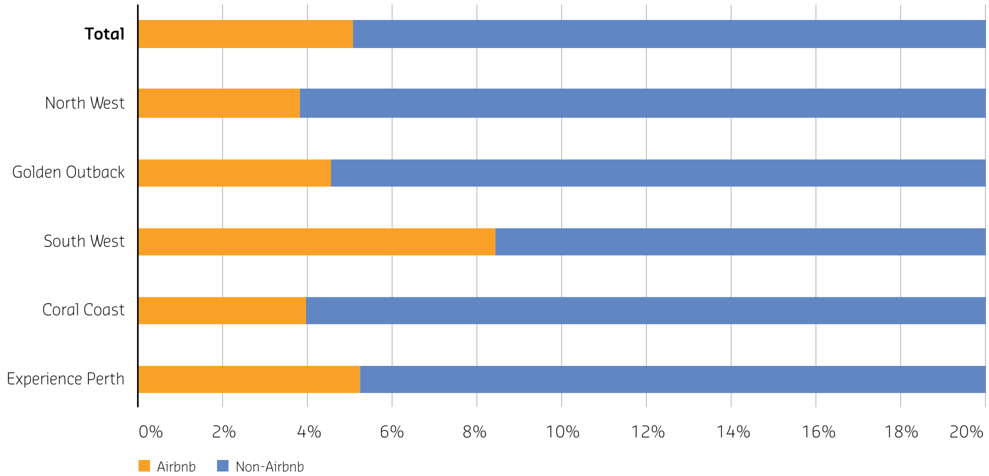

**Note:** Stopovers are calculated on a binary basis (0;1); percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (IVS, 2015), own analysis.

**Figure 42** Share of Airbnb users per stopovers in WA tourism regions, international visitors, WA, January to September 2016




**Note:** Stopovers are calculated on a binary basis (0;1); percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (IVS, 2015), own analysis.

**Figure 43** Holidaymakers - Share of Airbnb users per stopovers in WA tourism regions, international visitors, WA, 2015

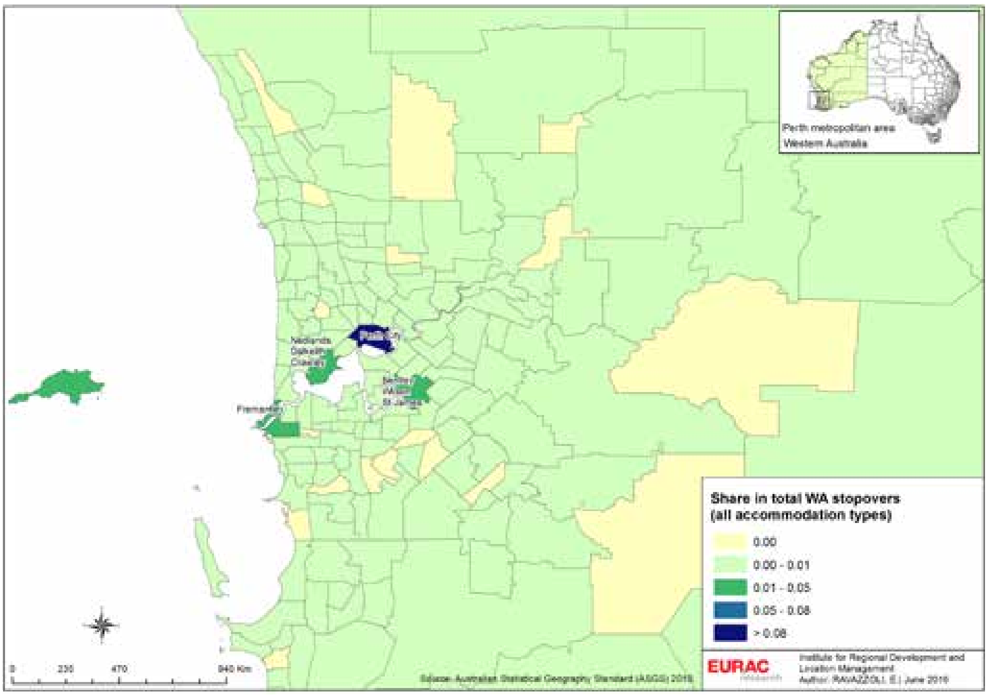


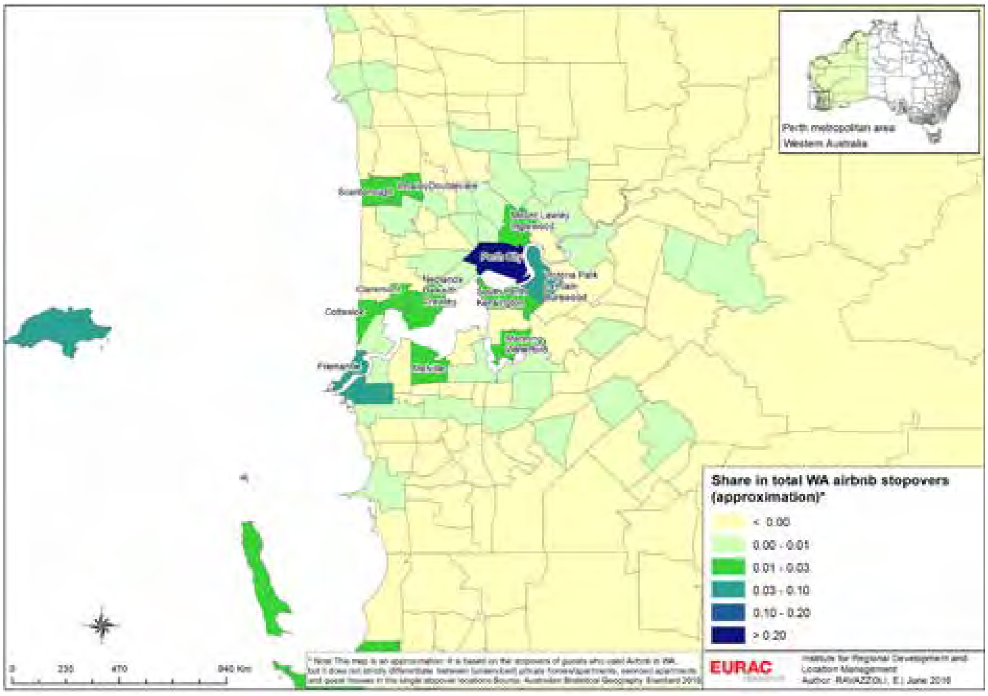

**Note:** Stopovers are calculated on a binary basis (0;1); percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (IVS, 2015), own analysis.

A more fine-grain analysis of the spatial distributions of places of stay on the so-called SA2-level[5] confirms the previously observed differences between Airbnb users and Airbnb non-users (Figure 44). Tables 4 and 5 indicate that the ranking of SA2-regions as places of accommodations differs between both groups. Whereas Perth City maintains its number one position, Margaret River, Fremantle and a couple of other suburbs in Perth as well as the Busselton region have a more important position among Airbnb users than among Airbnb non-users. In contrast, more peripheral places such as Albany or Broome have a higher ranking among Airbnb non-users than among Airbnb users. A close-up analysis of the wider Perth metropolitan area indicates that a few suburbs along the Swan and Canning rivers and the metropolitan coast are relatively more popular among Airbnb users than on average.

5 SA2 stands for "statistic area level 2," which is a spatial circumscription used by the Australian Bureau of Statistics and has been introduced to replace "Statistical Local Areas" (SLAs) to get a more consistent population size. SA2 is comparable with suburbs at city level and with smaller towns plus surroundings in rural areas. SA2 levels might not necessarily align with Government Area boundaries (Australian Bureau of Statistics 2017).

**Figure 44** Share of WA SA2-regions in total WA visits (1) for all visitors and (2) for Airbnb users, international visitors, Perth metropolitan area, 2015




Note: Percentages refer to the share in (1) total WA visits and (2) total WA visits of Airbnb users; it is only possible to identify Airbnb users (i.e. visitors that booked at least one accommodation via the Airbnb platform), it is however not possible to identify the booking platform for each single accommodation for a comprehensive trip itinerary.

Source: Data basis – TRA (IVS, 2015), own analysis I collaboration with Ravazzoli, E. (Eurac Research).

**Table 4** All accommodation types - Share of WA SA2-regions in total WA visits for all visitors, international visitors, WA, 2015

| Share in WA stopovers of all visitors | Rank | Share |
|---|---|---|
| SA2-Regions | | |
| Perth City | 1 | 25.6% |
| Exmouth | 2 | 5.1% |
| Margaret River | 3 | 4.3% |
| Fremantle | 4 | 3.5% |
| Albany | 5 | 2.4% |
| Broome | 6 | 2.0% |
| Ashburton | 7 | 1.9% |
| Geraldton | 8 | 1.7% |

Source: Data basis – TRA (IVS, 2015), own analysis.

**Table 5** Airbnb users - Share of WA SA2-regions in total WA visits for Airbnb users, international visitors, WA, 2015

| Share in WA stopovers of Airbnb users | Rank | Share |
|---|---|---|
| SA2-Regions | | |
| Perth City | 1 | 30.4% |
| Margaret River | 2 | 12.1% |
| Fremantle | 3 | 7.4% |
| Victoria Park, Lathlain, Burswood | 4 | 3.1% |
| Busselton region | 5 | 2.7% |
| Pemberton | 6 | 1.9% |
| Cottesloe | 6 | 1.9% |
| Melville | 6 | 1.9% |

Source: Data basis – TRA (IVS, 2015), own analysis.

### *Length of stay*

On average, Airbnb users spend less time in WA compared to Airbnb non-users. The median length of stay in WA for Airbnb users is respectively six (2015) or five (2016) days lower than length of stay for Airbnb non-users. For holidaymakers, this difference is less prominent: holidaymakers using Airbnb show a median length of stay in WA which is three days below the value of holidaymakers that do not use Airbnb in (2015, 2016). In both cases, differences are statistically significant (significance level 0.05).

### *Expenditure*

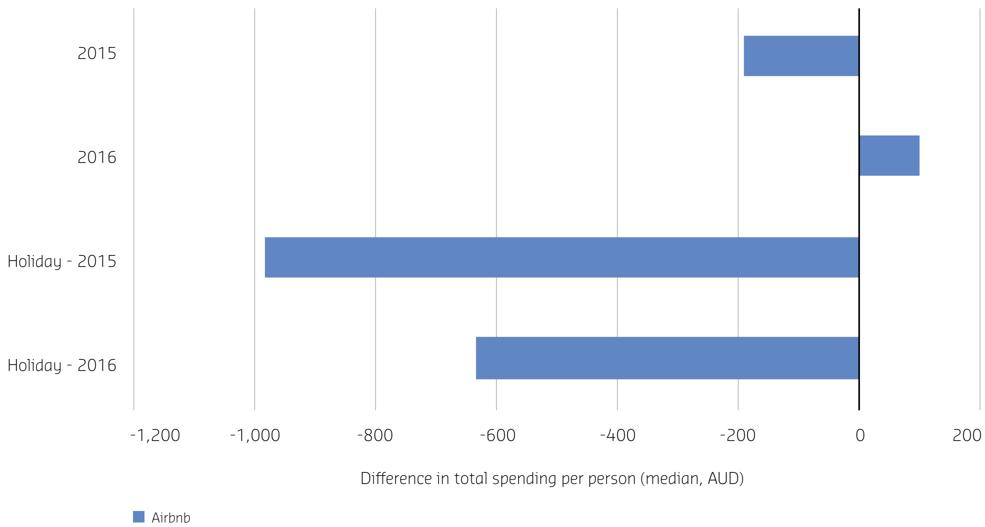
international Airbnb non-users (however, this trend needs to be seen in light of differences in length of stay as outlined in Section 4.3.1.9). Nevertheless, the median total expenditure for Airbnb users in 2016 is slightly higher (+AUD 98) than the median total expenditure for Airbnb non-users. This result is in contrast with findings from 2015, when median total expenditure of Airbnb users was found to be slightly lower (-AUD 189) than median total expenditure of Airbnb non-users. It needs to be highlighted, however, that these spending figures do not refer to spending in WA only, but to spending in Australia in total. However, an exploratory analysis limited to international visitors who did not travel to other Australian states as part of their travel itinerary did not result in substantially altered findings regarding expenditure for 2015.

The most noticeable difference in total expenditure between Airbnb users and non-users can be found if the subgroup of holidaymakers is considered. In 2015, holidaymakers not using Airbnb have a median total expenditure per person (in Australia) that is almost AUD 1,000 higher than that of Airbnb users.

A comparison of mean expenditure per item (Figure 46 and 47) indicates that differences in the spending for education largely determine the overall lower expenditure for Airbnb users relative to Airbnb non-users in 2015. Thus, to avoid data distortion by travel purpose (e.g. education) it is useful to focus on the subcategory holidaymakers. Analysing the spending behavior of this subcategory, it becomes evident that the category "food & accommodation" mostly accounts for the observed differences. This indicates that Airbnb users spend less on accommodation compared to Airbnb non-users. Moreover, holidaymaking Airbnb users also tend to spend less on tours, shopping and transport (2015). These findings for the subcategory holidaymakers can be confirmed with 2016 data.

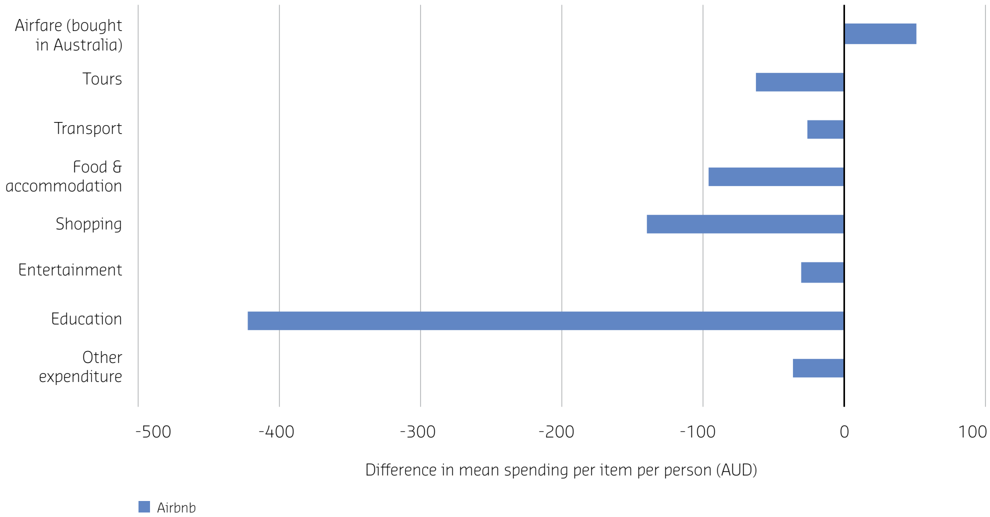
An inferential statistical analysis indicates that particularly the differences in expenditure regarding the categories "transport" (with all type of trip purposes) and "food & accommodation" (with holidaymakers) remain statistically significant in both years. In contrast, differences in total expenditure are only statistically significant for the subset of holidaymakers.

**Figure 45** **Difference in total expenditure per person of Airbnb users compared to non-users, international visitors, WA, 2015 and January to September 2016**



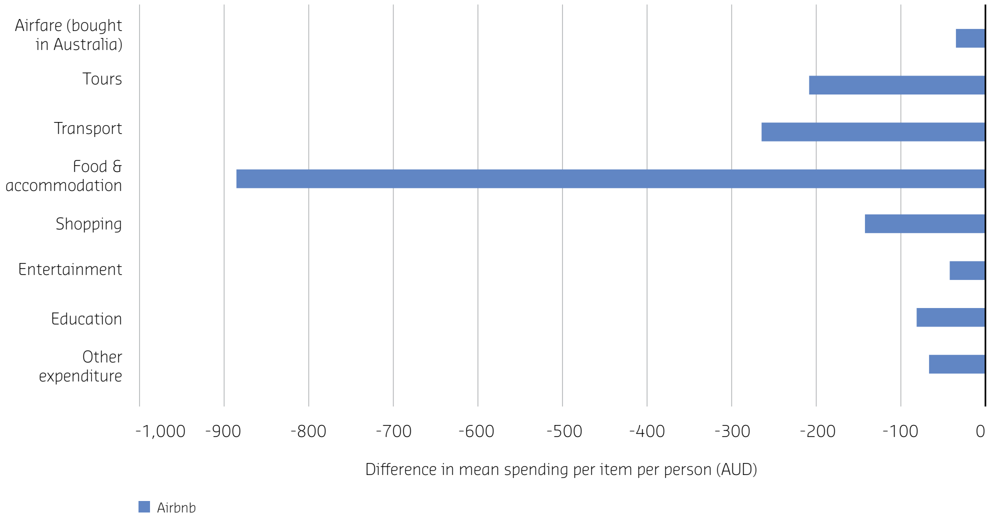

**Source:** Data basis – TRA (IVS, 2015), own analysis.

**Figure 46** Difference in mean of per item expenditure per person of Airbnb users compared to non-users, international visitors, WA, 2015




**Source:** Data basis – TRA (IVS, 2015), own analysis.

**Figure 47** Holidaymakers – Difference in mean of per item expenditure per person of Airbnb users compared to non-users, international visitors, WA, 2015




**Source:** Data basis – TRA (IVS, 2015), own analysis.

## Domestic visitors: all trip purposes

The share of users of internet platforms to book private accommodations (including but not limited to Airbnb) among domestic visitors is lower than their share among international visitors, and does not exhibit the same relative growth figures between 2015 and 2016. In 2015, 2.1 per cent of surveyed domestic overnight visitors in Western Australia (both intra- and inter-state), used internet platforms to book private accommodations. In the first three quarters of 2016, the share of private accommodation website users among domestic overnight visitors in WA increased slightly to 2.7 per cent.

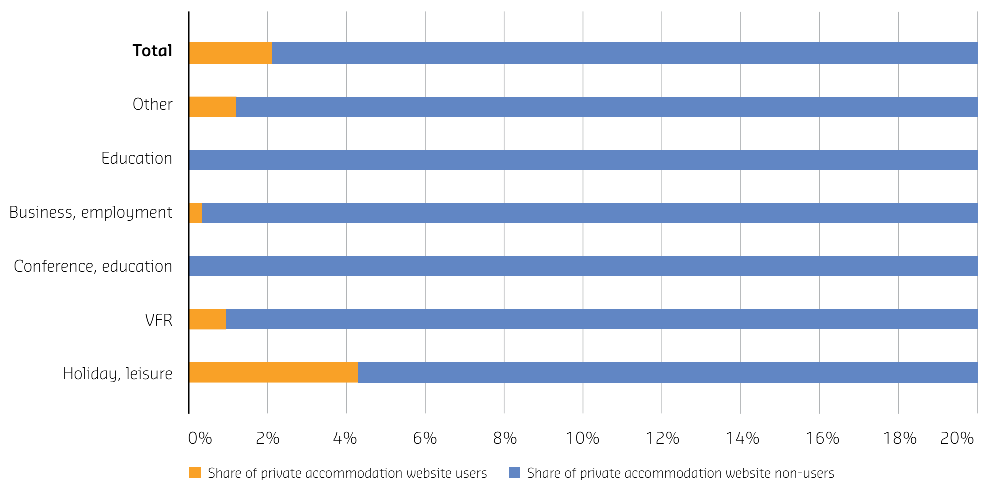
### *Trip purpose*

Data collected from domestic overnight visitors in WA confirms the finding that private accommodation websites (such as Airbnb) are first and foremost appealing to holidaymakers (Figures 48 and 49). Users of private accommodation websites have a relatively stronger presence among those who indicate holiday as the purpose for their trip to WA. In 2015, 4.29 per cent and in 2016, 5.16 per cent of all holidaymakers to Western Australia booked their accommodation with a private accommodation website, which is markedly above the overall average of private accommodation website users among all domestic WA visitors for these years (2.1% and 2.7%, respectively).

Regarding the other trip purposes (i.e. VFR, conference & exhibition, business & employment, education as well as 'other'), domestic visitors who use private accommodation websites to book their accommodations in WA are underrepresented in 2015 and 2016.

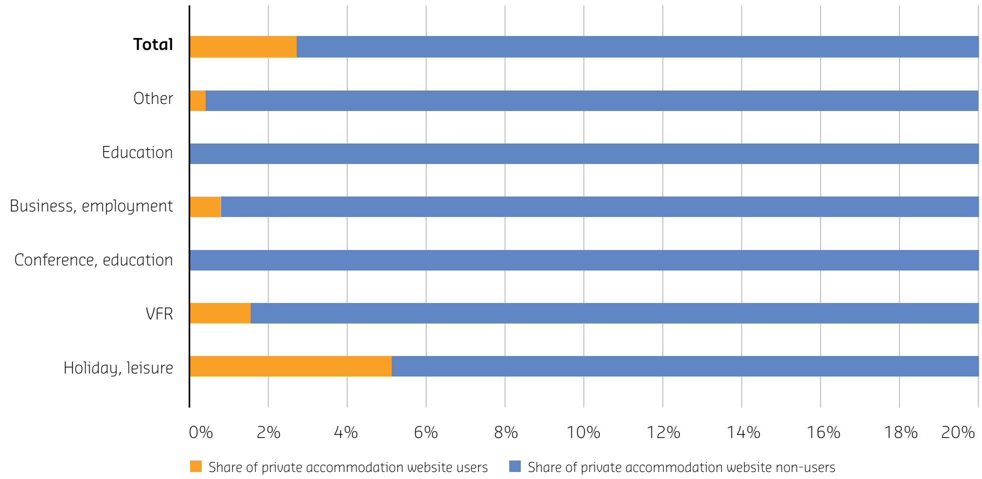
An inferential statistical analysis reveals that for both years, use of private accommodation websites for domestic stays in WA is not independent from travel purpose and the distributions in both groups (use vs non-use of private accommodation websites) regarding travel purpose are not equal (significance level 0.05).

**Figure 48** **Share of users of private accommodation websites in travel purpose categories, domestic visitors, WA, 2015**




**Note:** Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (IVS, 2015), own analysis.

**Figure 49** Share of users of private accommodation websites in travel purpose categories, domestic visitors, WA, January to September 2016




**Note:** Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (NVS, 2016), own analysis.

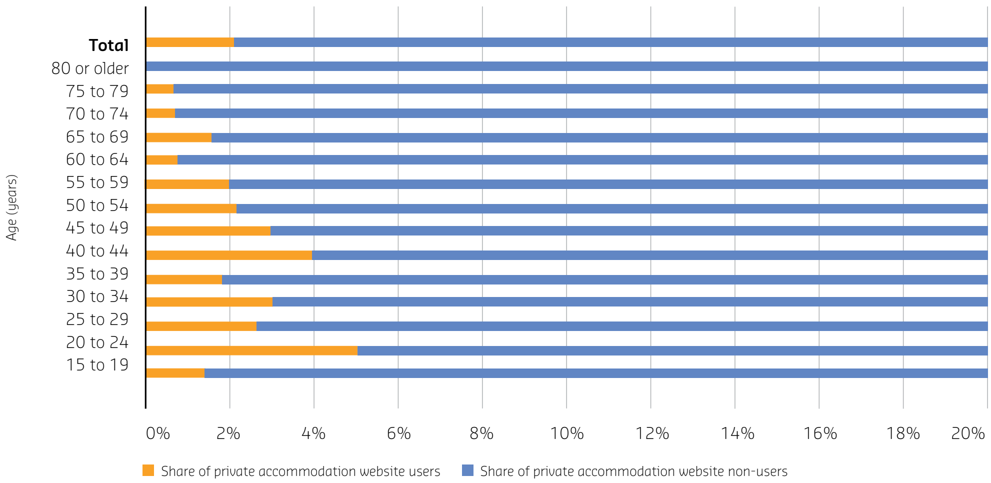
### *Age groups*

Overall, bookings via private accommodation websites (such as Airbnb) tend to be relatively more appealing to younger and middle-aged domestic WA visitors (Figures 50 and 51). Both in 2015 and 2016, the relative share of users of private accommodation websites compared to non-users of those websites is above average for almost all age groups between 20 and 49 years. In contrast, to what has been noticed for international visitors, users of private accommodation websites have a relatively strong presence also in the age group between 50 to 59 for 2015, and even 50 to 69 in 2016.

Depending on the year of analysis, the highest relative share of users of private accommodation websites can be found in the age bracket 20 to 24 years (2015: 5.02% used private accommodation websites) or 40 to 44 years (2016: 4.4% used private accommodation websites). This indicates once again the importance of these websites also for more mature travelers.

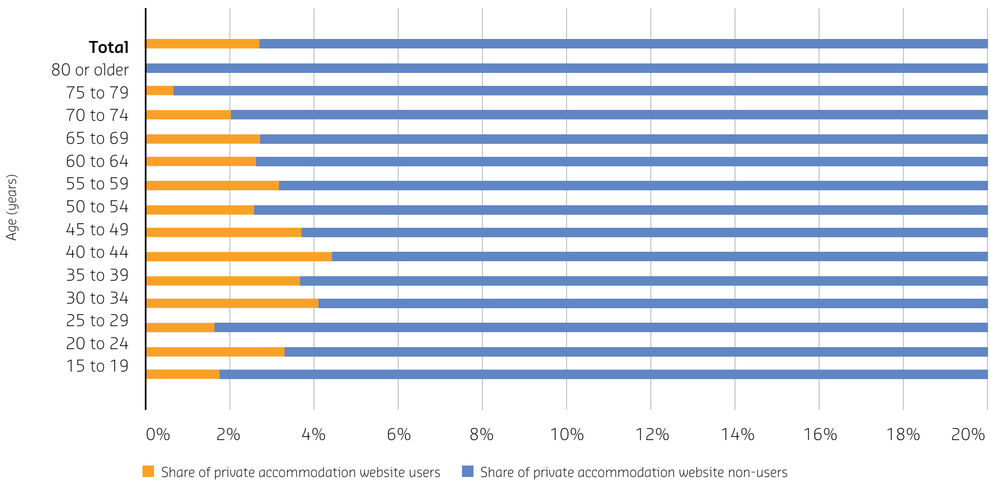
In 2016, less pronounced differences in the distribution of users of private accommodation websites vs. non-users of these websites among different age groups of domestic visitors can be noticed. Indeed, an inferential analysis reveals that while for 2015 the use of these websites to book accommodation in WA is not independent from age (significance level 0.05), the independence hypothesis could not be rejected for 2016 data. This indicates that the impact of age on the relative probability of use of private accommodation websites by domestic overnight visitors in WA needs to be interpreted cautiously.

**Figure 50** Share of users of private accommodation websites in age groups, domestic groups, WA, 2015




**Note:** Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (NVS, 2015), own analysis.

**Figure 51** Share of users of private accommodation websites in age groups, domestic visitors, WA, January to September 2016



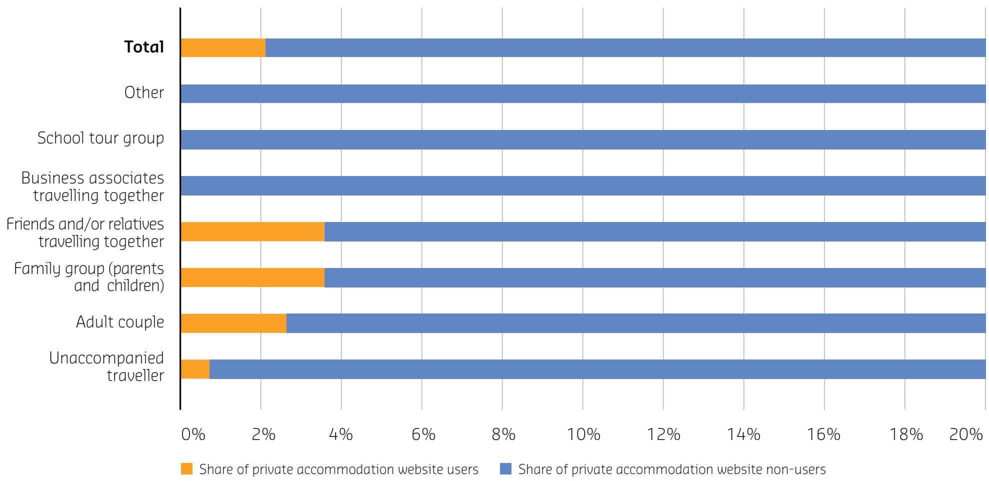

**Note:** Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (NVS, 2016), own analysis.

### *Type of travel party*

The analysis of domestic overnight visitors provides further evidence that using private accommodation websites (such as Airbnb) when visiting WA seems to be relatively more appealing for families, friends or relatives travelling together or for adult couples than for unaccompanied travelers (Figures 52 and 53).

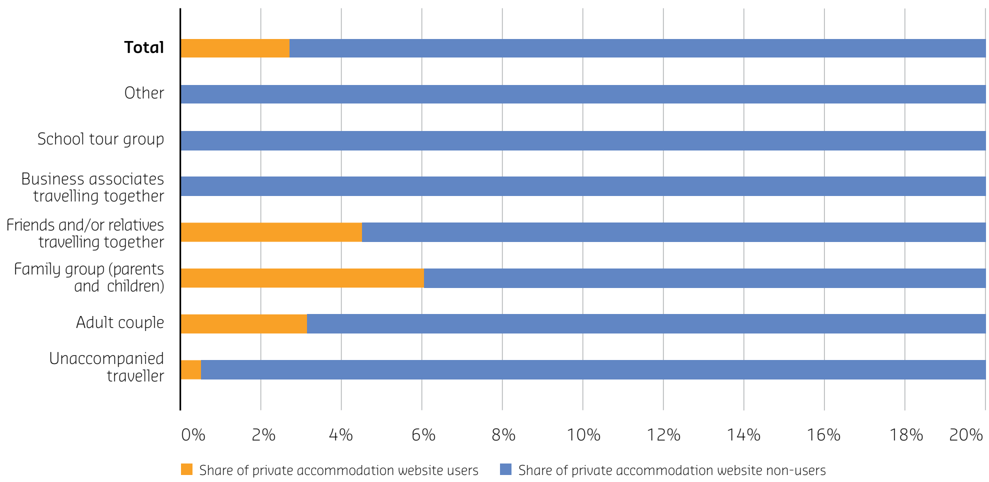
In 2015, 3.57 per cent of families, 3.56 per cent of groups of friends and relatives and 2.63 per cent of adult couples among domestic visitors to WA booked their accommodation through a private accommodation website. These figures are above the average share of private accommodation website users in 2015 (2.1%). Results for 2016 confirm these trends with the three aforementioned travel party types having markedly higher relative shares of private accommodation website users. In contrast, unaccompanied travelers choose to use these websites relatively less frequently than the average travel party (2015: 0.72% vs. an average of 2.1%; 2016: 0.5% vs. an average of 2.7%).

**Figure 52** Share of users of private accommodation websites in travel party types, domestic visitors, WA, 2015




Note: Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
Source: Data basis – TRA (NVS, 2015), own analysis.

**Figure 53** Share of users of private accommodation websites in travel party types, domestic visitors, WA, January to September 2016




Note: Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
Source: Data basis – TRA (NVS, 2016), own analysis.

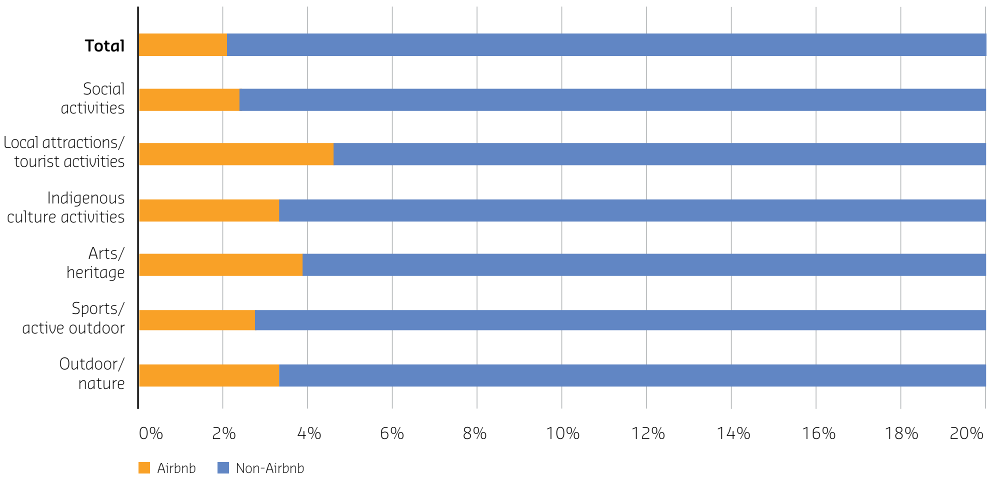
An inferential analysis reveals that for both years use of private accommodation websites for domestic stays in WA is not independent from travel party type and the distributions in both groups (use vs non-use of private accommodation websites) regarding type of travel party are not equal (significance level 0.05).

### *Trip activities*

All in all, using private accommodation websites (such as Airbnb) when visiting WA seems to be relatively more appealing in particular for domestic overnight tourists who like to visit local attraction points and participate in a range of tourism activities (Figures 54 and 55). Their relative share was 4.61 per cent in 2015 compared with an overall average share of 2.1 per cent and 6.48 per cent in 2016 vs. an average of 2.7 per cent. More generally, for most trip activities the share of users of private accommodation website is above average in both years (2015, 2016). For instance, the share of private accommodation website users among those who engage in arts and heritage related trip activities is 3.92 per cent in 2015 (vs. an overall average share of private accommodation website users of 2.1%) and 5.03 per cent in 2016 (vs. an average of 2.7%).

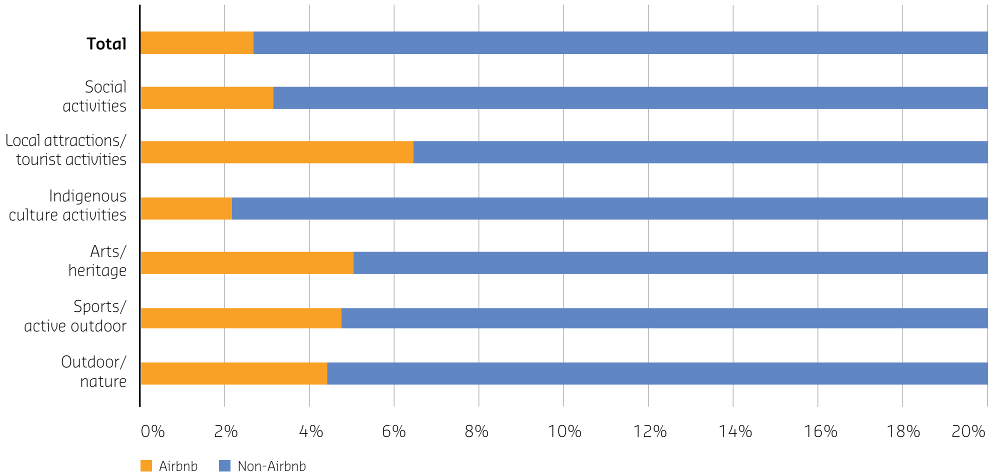
An inferential analysis reveals that for both years usage of private accommodation websites in WA is not independent from trip activities in almost all cases (significance level 0.05) except for “indigenous culture activities” (2015, 2016) and “active outdoor/sports” (2015).

**Figure 54** Share of users of private accommodation websites per trip activities, domestic visitors, WA, 2015




Note: Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
Source: Data basis – TRA (NVS, 2015), own analysis.

**Figure 55** Share of users of private accommodation websites per trip activities, domestic visitors, WA, January to September 2016




**Note:** Percentages calculated separately within each category; the axis scale is shown only up to a value of 20 per cent to improve readability.
**Source:** Data basis – TRA (NVS, 2016), own analysis.

## Concluding remarks

The above results indicate that among international visitors to WA Airbnb users differ in several aspects from Airbnb non-users. Similar differences can been found between domestic overnight visitors who use private accommodation booking website and those who do not use them. Many of the obtained results are consistent for both years of analysis, 2015 and 2016 (quarter 1 to quarter 3). Moreover, most findings can also be confirmed when focusing the analysis specifically on the subgroup of holidaymakers.

However, to understand which variables are key in differentiating Airbnb users from Airbnb non-users, it is necessary to simultaneously consider these variables in a multivariable analysis to control for potential overlapping and confounding effects. Therefore, a logistic regression (Hosmer & Lemeshow, 2000) for a balanced subset of the 2015 data for international WA visitors was carried out. The results of the logistic regression indicate that visitors' trip purpose, source country, travel party type, trip activities and the spatial distribution of the booked accommodation (i.e. where they stayed in WA) are those variables that impact strongest on the probability of international WA visitors to use the Airbnb platform.

Regarding trip purpose, holidaymakers have a significantly higher probability to use Airbnb when compared to those who visit friends and relatives. WA visitors from Singapore or Malaysia have a significantly higher probability to use Airbnb than visitors from the UK, who have been used as a base-line. In contrast, visitors from New Zealand, but also from several other Asian countries have a significantly lower probability to use Airbnb when compared to UK visitors. Regarding travel party type, couples and families have a significantly higher probability of using Airbnb in WA than unaccompanied travelers. International Airbnb users in WA participate also significantly more often in a range of tourism activities or visit attraction points than Airbnb non-users. Finally, those international visitors who also visit the semi-peripheral regions of WA (such as Australia's South West and the Coral Coast regions) have a higher probability of using Airbnb at least once during their WA trip.

How can these findings be interpreted in a condensed manner? Looking at trip purpose and trip activities it is obvious that Airbnb use in WA is relatively more probable for holidaymakers interested in tourist activities and visiting local attraction points. Other trip activities (e.g. cultural tourism) are less clear differentiators. This can be interpreted that Airbnb users are not necessarily *alternative* tourists (i.e. alternative to mainstream visitors), but rather particularly *intensive* or *interested* holidaymakers. They seem to have a genuine interest in the destination whilst enjoying the social dynamics within their travel group. As has been shown, they travel often as adult couples, families or groups of friends. They do not spend most of their time in their accommodation but they tend to move around in the area and the state, at least as far as semi-peripheral regions such as Australia's South West are concerned. This on the one hand indicates that Airbnb users are not 'city only' tourists. On the other hand, the high share of Airbnb users among visitors to the Margaret River region also needs to be considered. This tourism region might be described as a "hidden champion," which is chique and high quality, but not yet overly famous in an international context. The observed fit between Airbnb users and the Margaret River region can be read as an indication for Airbnb users to be rather innovative holidaymakers, falling into the subgroup of relatively fast innovation adopters known as "early majority" (Rogers, 2003). This indicates that Airbnb users to WA are not necessarily the very "early adopters" at the extreme discovery end of the market, but that the Airbnb phenomenon increasingly captures more average and mainstream market segments.

Furthermore, the analysis reveals the role of specific source markets as a predictor of Airbnb usage when staying in Western Australia. Visitors from some of the most traditional source countries for WA such as New Zealand or the UK have a low or average propensity to use Airbnb. The same holds for some of the more recently emerging albeit promising source markets (e.g. China and India). This is in sharp contrast to the high share of Airbnb users among visitors from Singapore or Malaysia. This interpretation partly parallels the interpretation with respect to innovation adoption: In both perspectives, not the extreme ends of the markets, i.e. the very early adopting visitors or the most "alternative tourists," seem to constitute the key group of Airbnb users in WA; rather, Airbnb users among WA visitors appear to be part of a group that could be termed "innovative mainstream" (Tables 6 and 7).

**Table 6** **All accommodation types – Top six WA source markets for all visitors, international visitors, 2015**

| Source market | Rank | Share |
|---|---|---|
| United Kingdom | 1 | 18.1% |
| Singapore | 2 | 10.5% |
| Malaysia | 3 | 8.7% |
| New Zealand | 4 | 7.0% |
| USA | 5 | 5.7% |
| China | 6 | 4.4% |

**Source:** Data basis – TRA (IVS, 2015), own analysis.

**Table 7** **Airbnb users - Top six WA source markets for Airbnb users, international visitors, 2015**

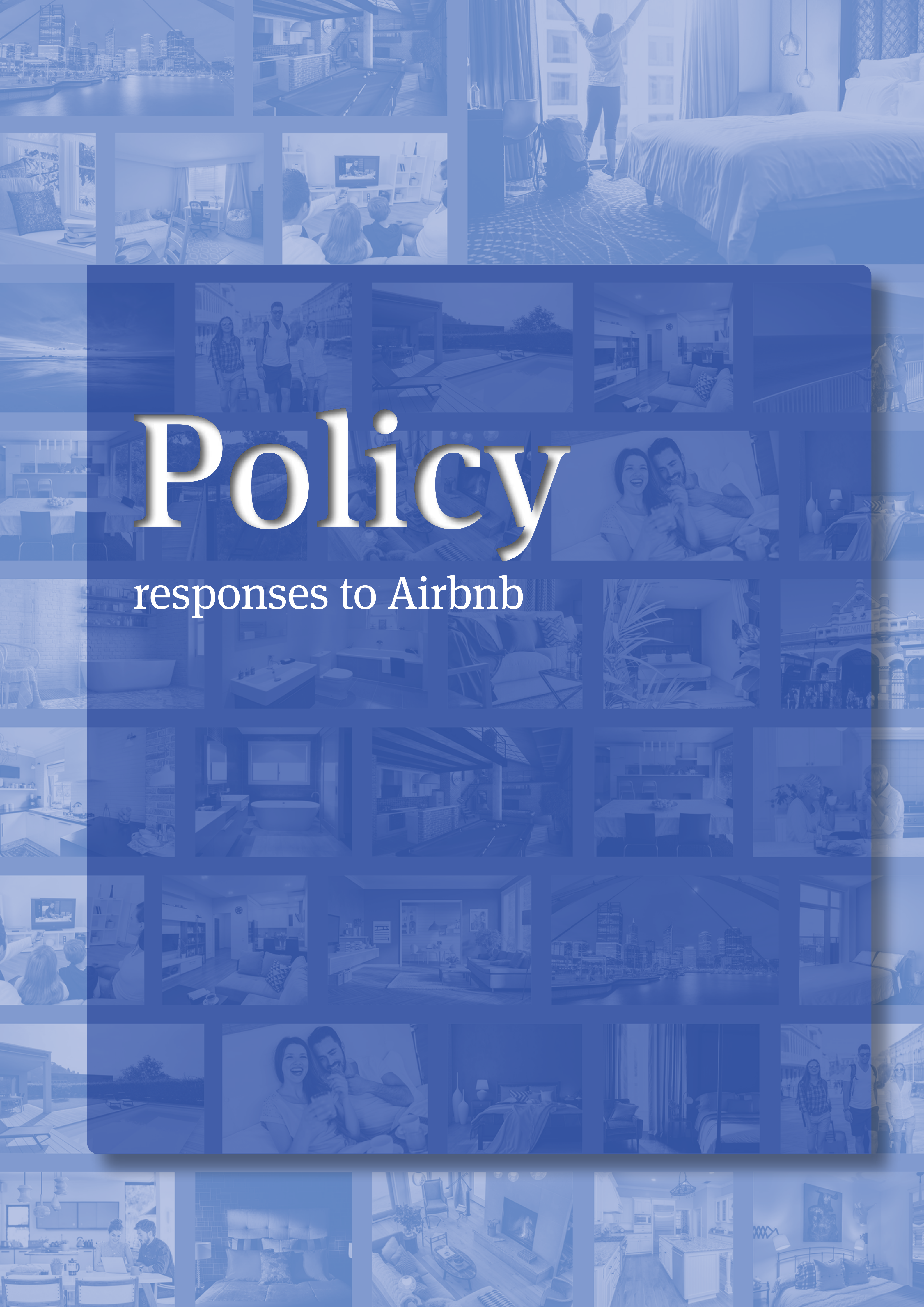
| Source market | Rank | Share |
|---|---|---|
| Singapore | 1 | 33.3% |
| Malaysia | 2 | 14.1% |
| United Kingdom | 3 | 12.2% |
| France | 4 | 8.3% |
| USA | 5 | 4.5% |
| Scandinavia | 6 | 3.8% |

**Source:** Data basis – TRA (IVS, 2015), own analysis.

Finally, the study's findings do not clearly support the argument that Airbnb usage in WA is only, or mostly, driven by economic considerations. Although a better cost-benefit ratio may play a role, the obtained findings tend to confirm that the Airbnb phenomenon is "[...] a hipster (rather than survival) phenomenon: driven and benefited by people with high cultural, digital and networking capital" (Dredge & Gyimóthy, 2015, p. 296).

# Policy

## responses to Airbnb



## Aim of analysis

Around the world, governments are responding to the Airbnb phenomenon in a variety of ways. Some are deliberately refraining from proactive agency entirely, or at least until a regulatory and governance framework has been established or public consultation has concluded. Others have banned short-term leasing of residential accommodation, or restricted the number of days allowed, with and without registration requirements. It can be assumed that the decision for governments to initiate policy or regulatory responses may be influenced by the magnitude of the impact of increased short-term rentals in different communities. In addition to considering town planning, land use, community amenity and the impact on tourist accommodation incumbents such as hotels, governments would also be interested in the impact of additional economic activity, new income streams for residents, and possible additional tourist or hotel tax collections.

This part of the analysis aims to explore instruments that have been applied by several jurisdictions worldwide to deal with the phenomenon of private short term rentals like Airbnb to inform the adoption of suitable instruments for the WA context.

It needs to be mentioned that in November 2015, Airbnb published its Community Compact, outlining its commitment to working with cities where Airbnb has a significant presence. In addition to working with cities to collect tourist or hotel taxes, if applicable, Airbnb pledges to publish annual Home Sharing Activity Reports for those cities with a significant presence (noting that 'significant' is not defined). Details to be provided in these reports include:

- "The total annual economic activity generated by the Airbnb community.
- The amount of income earned by a typical Airbnb host.
- The geographic distribution of Airbnb listings.
- The number of hosts who avoided eviction or foreclosure by sharing their home on Airbnb.
- The percentage of Airbnb hosts who are sharing their permanent home.
- The number of days a typical listing is rented on Airbnb.
- The total number of Airbnb guests who visited a city.
- The average number of guests per listing by city.
- The average number of days the average guest stayed in a city.
- The safety record of Airbnb listings." (Airbnb, 2015)

Since the launch of the Community Compact, details of the economic impact of Airbnb in many cities around the world have become more readily available through a new website: www.airbnbaction.com.

## Data basis

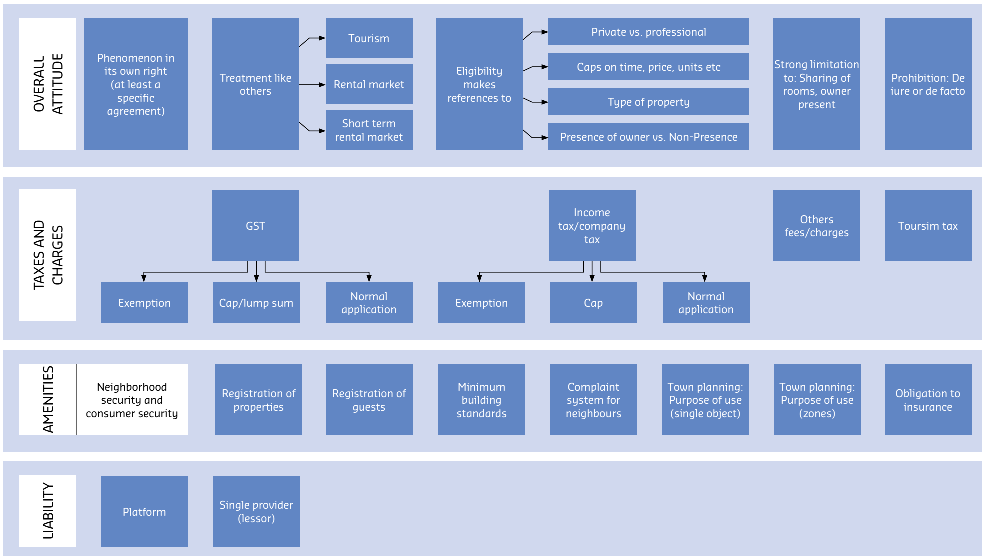
This section reviews nine international case studies, London, New York, San Francisco, Barcelona, Rome, Berlin, Hong Kong, Amsterdam and Singapore. In addition, information on recent debates and developments in Australia is provided. Reports, legal sources and secondary sources such as media reports served as data sources for this review. The reported situations are as per March 2017. However, please note that the situation and measures are evolving dynamically.

Where available, mainly through www.airbnbaction.com, details regarding the economic impact of Airbnb are also provided as context to the scale and location of Airbnb accommodation in those cities.

## Policy framework

Based on the detailed analysis of what instruments have been employed to deal with Airbnb in terms of policy reactions in the context of the case study cities (see 5.3.2), a model of policy instruments could be developed. Figure 56 shows this model and can be read as a set of tools that offers an overview of different instruments that are available for governments to deal with a private short term rental phenomenon like Airbnb.

**Figure 56** Overall model of policy tool set




Source: Own analysis, graphical optimization by EURAC (Ruben Bassani, Giorgio Bellante and Daniele Fadda).

These measures can be subdivided into:

- Identification of general attitudes towards Airbnb: First, this category addresses whether the phenomenon is treated in its own right, i.e. as something completely new that requires specific regulations, or something that can be dealt with by making reference to existing regulatory and legislative frameworks. Second, it specifies the different circumstances when short term rentals via the Airbnb platform are permitted or prohibited.
- The policy response to Airbnb in terms of taxes and charges: This category addresses how different jurisdictions deal with the phenomenon with regards to GST, income taxation /company taxation, tourism tax and other fees and charges.
- The response to potential issues in terms of amenities (neighborhood security) and consumer safety: This category covers topics and instruments that affect consumer and neighborhood safety and security such as registration, minimum building standards, complaint systems, town planning as well as insurance.
- Liability and accountability issues: This category addresses whether the onus of responsibility and liability lies with the single provider only or whether the platform is also held reliable.

## International case studies

To capture destination governance and tourism policy responses in destinations around the world, nine international case studies from London, New York, San Francisco, Barcelona, Rome, Amsterdam, Berlin, Hong Kong and Singapore were reviewed.

***London, UK***

The government of the United Kingdom (UK) has taken a proactive approach to the sharing economy, including platforms such as Airbnb (Figure 57). In 2014, it commissioned an independent review of the sharing economy and published a government response in March 2015, with several measures included in the subsequent UK budget (Wosskow, 2014; Department of Business, Innovation and Skills, 2015).

A key outcome of the review was the establishment of the Emerging Industry Action Group in July 2015, comprising public servants and representatives from the Sharing Economy UK (SEUK) – a trade association for organisations such as Airbnb and Taskrabbit established in March 2015.

Other actions following the independent review of the sharing economy include:

- updating procurement frameworks to allow sharing economy solutions, such as Uber and Airbnb, for public servant accommodation and travel;
- establishing two pilot sharing cities (Leeds and Manchester) focusing on transport, car clubs, shared parking, unused spaces and equipment;
- development of a tax guide and online tax calculator;
- amending standard tenancy agreements to remove an explicit ban on sub-letting;
- allowing home sharing in London for up to 90 days p.a. without government approval;
- supporting car clubs and integrating them with public transport; and
- vacant government-owned space made available to start-ups, small and medium businesses, charities and social enterprises for free, prior to disposal of surplus assets.

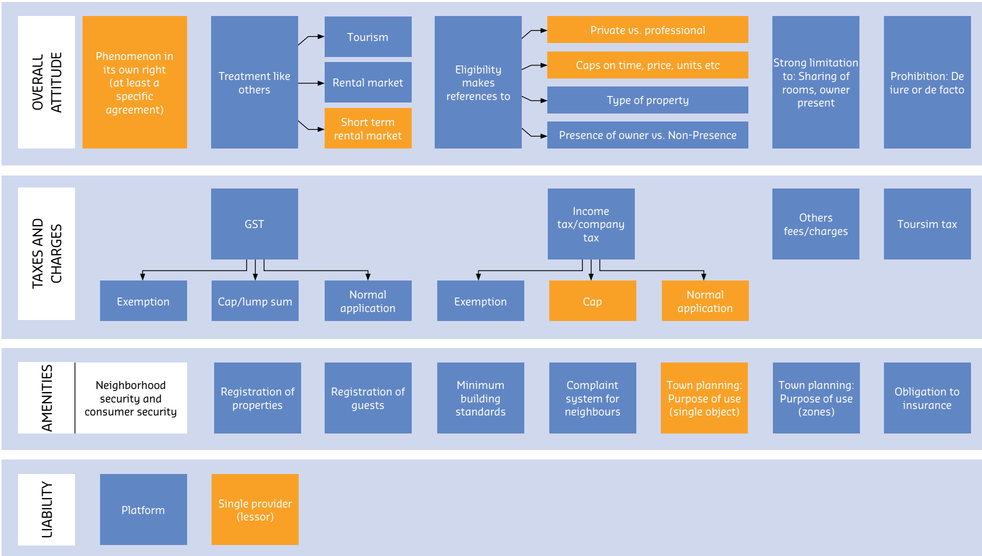
In the above example, the UK government has not only considered regulatory issues, but also actively supported and encouraged new and disruptive market participants. Legislative changes also occurred, including the *Deregulation Act 2015*, which amended the *Greater London Council (General Powers) Act 1973*. It became effective on 26 March 2015. Sections 44 and 45 (Short-term use of London accommodation) of the Deregulation Act lay out that:

- “the use as temporary sleeping accommodation of any residential premises in Greater London does not involve a material change of use if two conditions are met":
  - (1) “[...] the sum of [...] the number of nights of use as temporary sleeping accommodation [...] in the same calendar year does not exceed ninety.”
  - (2) “the person who provided the sleeping accommodation for the night was liable to pay council tax.”

With particular reference to renting out whole or part of residential accommodation, the UK government's Rent a Room Scheme allows short-term rentals in the Greater London area for up to 90 days (cumulative per calendar year) without the need for planning permission or registration. Any income received is considered to be rent, and therefore no Value Added Tax (VAT) is payable. Income tax is payable once a tax-free threshold of £7,500 is reached, effective from 6 April 2016 – previously £4,250 p.a. (UK Government, 2016).

The 90-day-per-year limit has recently been reified in an agreement with Airbnb, which resulted in the automatic ban of listings from the platform once the 90 days p.a. were reached (Woolf, 2016).

**Figure 57** Policy measures employed by London, UK




Note: The table is an indication only and focuses on some certain aspects of particular relevance to the case study and does not purport to be complete.
Source: Own analysis, graphical optimization by EURAC (Ruben Bassani, Giorgio Bellante and Daniele Fadda).

### *New York, USA*

The latest available statistics from Airbnb for the city of New York (Figure 58) cover the period 1 June 2015 to 1 June 2016, and state the median number of nights booked per listing as 47, with median annual earnings of US$5,474. With a total of 41,373 listings as of 1 June 2016, just over half (22,253, or 54%) are for entire homes and apartments, with the remainder being private rooms or shared spaces. Airbnb states that it has removed 2,233 whole home listings from hosts with multiple listings, as this suggests they are not renting out their primary place of residence, and are instead acting on a commercial basis (Airbnb, 2016).

There have been several inquires and reports into short-term rental of residential accommodation in New York, with varying foci on housing affordability, building safety standards, the impact on rent controlled and rent stabilised properties, and taxation issues.

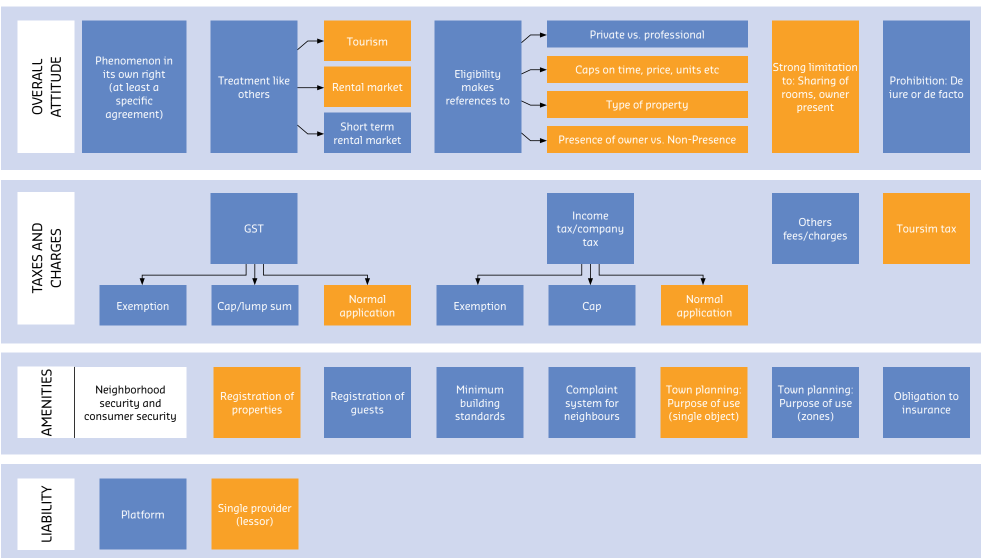
The New York State Multiple Dwelling Law was amended in 2010 to remove ambiguity regarding the short-term rental of permanent residences in Class A multiple dwelling buildings, whether owned or rented (State of New York, 2010). The amendment makes clear that renting out a residential apartment for a period of less than 30 days is prohibited, unless the permanent resident is present, as clearly outline on Airbnb's website, along with other licensing and regulation requirements (Airbnb, 2016). In addition, the City of New York increased fines for illegal conversion of apartments in residential buildings into short-stay hotel rooms (City of New York, 2012). Despite this, a review of short-term rentals from 1 January 2010 to 2 June 2014 found that approximately 72 per cent of Airbnb listings appeared to violate New York laws (Schneiderman, 2014).

In June 2016, both houses of the New York legislature voted to further amend the Multiple Dwelling Law to make it unlawful to advertise a property in a Class A multiple dwelling building, with $1,000 for a first offence, $5,000 for a second violation and $7,500 for each further violation (Clampet, 2016). In October 2016, the bill was signed by the Governor, which means that New York further tightened the leeway for short term rentals, declaring even the posting or advertising of an unlawful situation (short term rentals without the owner present) on a website as a criminal offence (Dalton, 2017; State of New York, 2016; Walters, 2017).

Similar to some other jurisdictions, New York has tourist accommodation fees and taxes that apply to registered hotels and other tourist accommodation, including boarding houses and bed and breakfasts. The New York State Hotel Unit Fee is $1.50 per unit per day, and the Hotel Room Occupancy Tax is 5.875 per cent, effective from 20 December 2013, and New York State and City sales taxes also apply (Department of Finance, n.d.). The host is responsible for collecting and remitting these hotel taxes. It has been estimated that $33 million in Hotel Room Occupancy Taxes were foregone due to private short-term rentals (Schneiderman, 2014).

Airbnb has repeatedly called for changes to New York City laws to allow Airbnb to collect and remit these taxes, as it does in many other jurisdictions, but as the current laws ban short-term rentals, it is unable to do so. Only Tomkins County in New York State has signed a tax agreement with Airbnb (Airbnb, 2016).

**Figure 58** **Policy measures employed by New York, USA**




**Note:** The table is an indication only and focuses on some certain aspects of particular relevance to the case study and does not purport to be complete.
**Source:** Own analysis, graphical optimization by EURAC (Ruben Bassani, Giorgio Bellante and Daniele Fadda).

***San Francisco, USA***

A survey of Airbnb activity in San Francisco covering the period 1 June 2014 to 31 May 2015 calculated a total of US$338 million of economic activity in the city for more than 300,000 visitors, with $105 million for Airbnb rental income, and $233 million for other tourism related expenditure. Hotel taxes contributed $12 million to government revenues, with an additional $5.5 million in sales tax. The percentage of people reporting their primary residence as their Airbnb rental increased from 81 per cent in 2012 to 93 per cent in 2015 (Airbnb, 2015).

As the home of Airbnb, San Francisco (Figure 59) was the first city in the world to enter into a formal tourism partnership with the San Francisco Travel Association. This is intended to support local merchants and meeting and event planners by providing neighbourhood-specific tourism tool kits, and help ensure hosts meet local planning and taxation obligations (Airbnb, 2015).

The San Francisco Office of Short Term Rentals is responsible for registration of short term rental properties. It has a comprehensive website outlining the relevant laws and planning codes, and the rights and responsibilities of property owners wishing to rent out all or part of their home. Key information provided includes (Office of Short Term Rentals, n.d.):

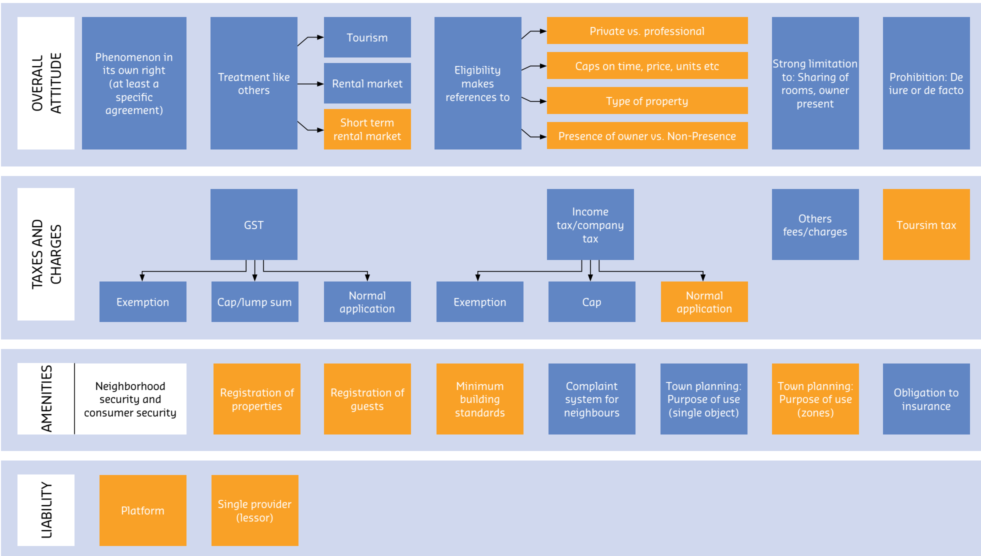
- San Francisco Ordinance No 218-14 was signed on 27 October 2014, amending administrative and planning codes relating to short term rental of residential properties, and allowing those under certain conditions;
- effective from 1 February 2015, a residential unit may be let by the permanent resident (including tenants) for periods of 30 nights or fewer;
- part or whole of a residential unit may be rented for a maximum of 90 days per year if the permanent resident is not present, and no maximum number of nights if the permanent resident is present;
- residential units must be registered with the Office of Short Term Rentals, and hosts must complete quarterly reports outlining all stays within the previous three months;
- the fee for the initial application of $50 and registration is valid for two years;
- the registration number must be included at the top of the listing details when advertising a registered property on platforms, such as Airbnb;
- tenants may not charge more than their monthly rent when renting out their residential property;
- proof of liability insurance for $500,000 or more (directly insured or provided through a platform such as Airbnb) must be provided at the time of applying for registration;
- only one residential unit may be registered by any person; and
- affordable housing / income restricted housing units are not eligible to be registered for short-term rental.

In line with other tourist accommodation in San Francisco, a 14 per cent hotel tax (Transient Occupancy Tax) applies to Airbnb rentals, and is collected through Airbnb's payment system. Income tax is applied to the income earned by hosts, and a host may be considered to be running a business for tax purposes if substantial services are offered for a fee (San Francisco Business Portal, 2015).

In July 2016, the San Francisco Chronicle ran a series of articles about Airbnb's impact in San Francisco (Said 2016), the third in an annual series regarding Airbnb's listings data. Considering only active listings (i.e. removing those with no reviews by visitors), there were 5,504 Airbnb listings in San Francisco in 2016, 29 per cent higher than in 2015, which was in turn 21 per cent higher than in 2014.

In comparison, however, only 2,587 hosts from all short-term rental platforms had obtained the required business registration certificate, and as of 7 July 2016, only 1,472 had successfully registered, as required with the Office of Short-Term Rentals, and included their registration number on all listings. In order to improve compliance with the law, amendments were approved in June 2016, which required hosting platforms to verify listings were validly registered with the Office of Short-Term Rentals, or face penalties of $1,000 per violation per day. Airbnb has objected to these changes, and has filed a suit with the US District Court claiming that the changes are unlawful and unconstitutional (Said, 2016). However, the court decision rejected Airbnb's claim, which led the company to offer closer collaboration with the city (Kokalitcheva, 2016).

**Figure 59** **Policy measures employed by San Francisco, USA**




Note: The table is an indication only and focuses on some certain aspects of particular relevance to the case study and does not purport to be complete.
Source: Own analysis, graphical optimization by EURAC (Ruben Bassani, Giorgio Bellante and Daniele Fadda).

*Barcelona, Spain*

For Barcelona (Figure 60) Airbnb has made available data from two economic impact studies (Table 8), based on activity in 2013 and 2015 (Airbnb, n.d; Airbnb, 2016), however the statistics provided differ. Key statistics include:

**Table 8** **Size of Airbnb in Barcelona**

| | 2013 | 2015 |
|---|---|---|
| Number of hosts | 4,000 | 9,200<br>Typical host earns €5,100 over 58 nights |
| Number of guests | 277,000<br>(n.b. 170,000 reported in original 2013 study) | Almost 900,000 |
| Total economic impact | €128 million<br>(reported as US$175 million in original 2013 study) | €740 million |

Source: Airbnb, 2013; Airbnb, 2015.

This significant growth in the number of hosts is despite the requirement for registration of the tourist use of a dwelling. The Government of Catalonia's Ministry of Business and Knowledge website (n.d.) provides comprehensive information regarding the use of dwellings for tourist use. Key requirements include:

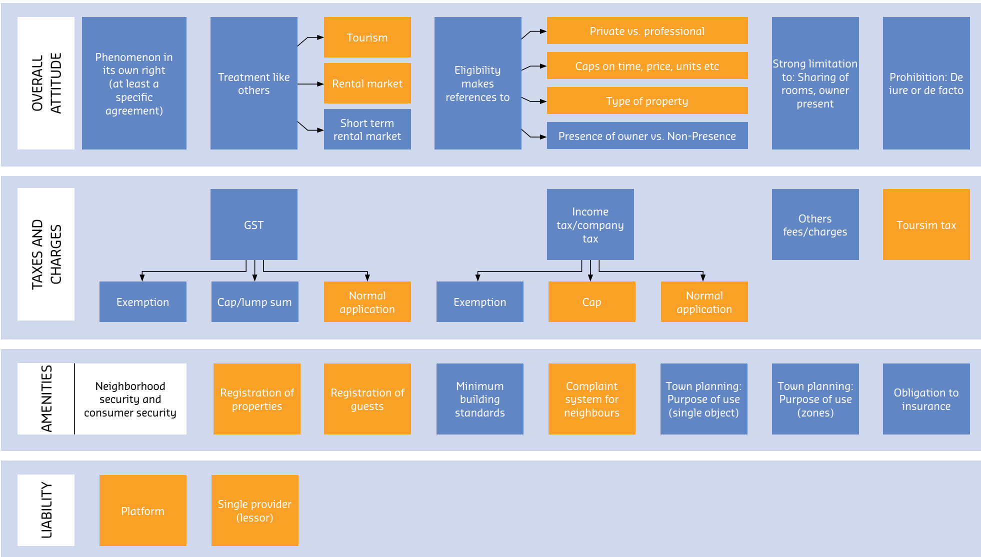
- registration of any dwelling rented for a fee for up to 31 days, two or more times per year;
- registration is through the town council, and details contained in an official register of the Directorate-General for Tourism;
- tourist tax must be collected and paid (€0.65 per night in Barcelona, €0.45 per night in other parts of the Catalonia region);
- details of guests must be sent to the Directorate-General of Police; and
- both guests and neighbours are provided a telephone number for queries or complaints.

There have been reports that the laws have been breached in Barcelona, with fines of €24,000 against Airbnb for hosts failing to register their properties, or attempting to rent out individual rooms instead of the whole dwelling (Investopedia, 2015).

On 26 February 2016, Airbnb announced that Government of Catalonia officials have recognised the need for new rules to support the sharing economy, and home sharing in particular (Airbnb, 2016).

However, reports of new and extended fines to Airbnb and other home sharing platforms due to continued non-compliance with laws, particularly the necessity of licensing of short term rentals, have emerged towards the end of 2016 (Badcock, 2016). This strict course of the city may be partly due to a situation of overly high tourism pressure, particularly in the city centre. Therefore, it is not clear whether new proposals of Airbnb to enter similar agreements as the cities of Amsterdam and London, which limit presence on the platform to non-professional landlords (one unit per host), will be finally accepted by the Barcelona city council (Tadeo, 2017).

**Figure 60** Policy measures employed by Barcelona, Spain




Note: The table is an indication only and focuses on some certain aspects of particular relevance to the case study and does not purport to be complete.
Source: Own analysis, graphical optimization by EURAC (Ruben Bassani, Giorgio Bellante and Daniele Fadda).

## *Rome, Italy*

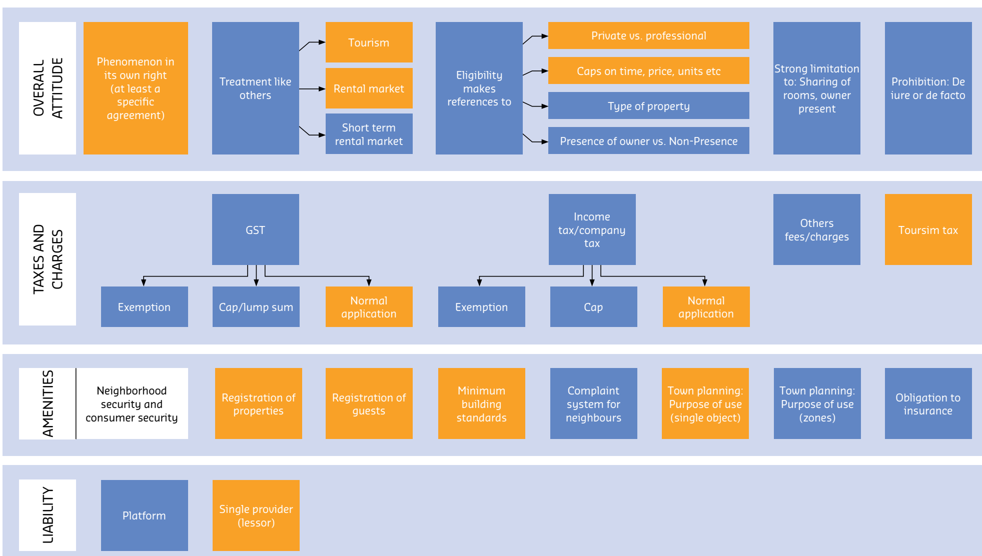
To assess the situation in Rome (Figure 61), a mix of national, regional and city-specific regulations need to be considered. Among others, the national legislation differentiates between professional and non-professional (occasional) accommodation providers and defines the parameters for taxation. Regarding income tax, income from short term rentals need to be declared (as "different type of income"). VAT (i.e. GST) applies as for every other commercial activity. There, is a possible exclusion form VAT (GST) if the service can be considered as occasional and non-professional.

On the national level, there is a specific legislative proposal on the sharing economy pending for discussion in the Italian parliament (Tentori et al., 2016). This proposal suggests recognising the sharing economy as a specific form of economic activity, requiring specific legislation, regulation and taxation lump sums. However, platform operators would be obliged to collect these taxes (“tax substitute”).

Tourism regulations are specific for each region and include different categories that could apply to Airbnb listings as well. Potentially applying categories, for example renters of private rooms, holiday apartments, bed and breakfast and rentals for tourism purposes. In addition, there is an obligation to communicate the details of persons hosted (TULPS, 1931) for every publicly offered for profit accommodation, including rentals for periods shorter than 30 days. “Holiday apartments” without hosts residing are considered as non professional activity and require a period of non activity of at least 100 days per year and rental periods of between 3 days and 3 months; all safety and security, sanitary and town planning requirements must be adhered to (Regione Lazio, 2015). Finally, private apartments used as tourism accommodations must be declared to the municipality, as is specifically noted.

The City of Rome has recently amplified existing legislation to cover offers of the sharing economy. In addition, Airbnb signed a contract with the municipality that obliges its service providers to register every guest in a specific online system for security purposes (Nozzoli, 2016).

**Figure 61** Policy measures employed by Rome, Italy




Note: The table is an indication only and focuses on some certain aspects of particular relevance to the case study and does not purport to be complete.
Source: Own analysis, graphical optimization by EURAC (Ruben Bassani, Giorgio Bellante and Daniele Fadda).

### *Amsterdam, Netherlands*

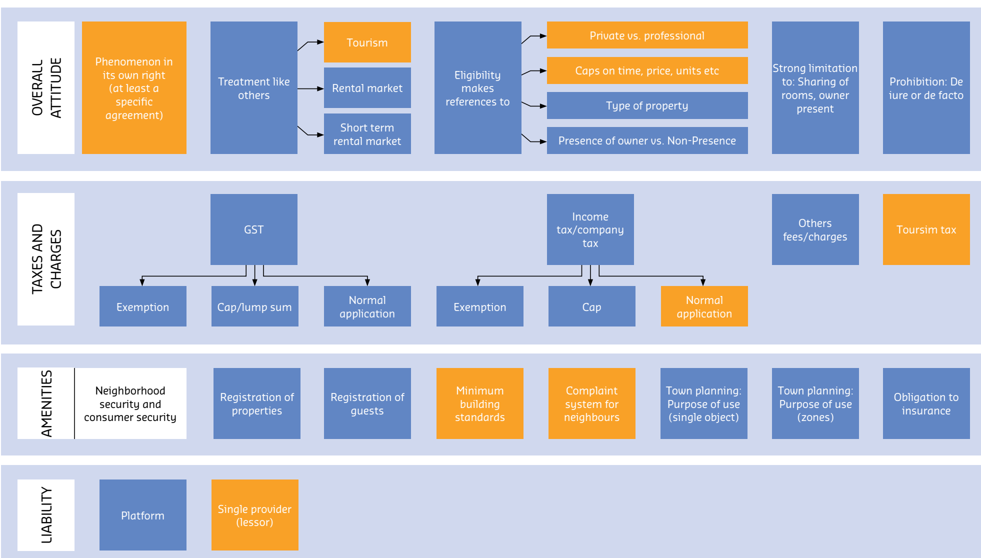
Amsterdam (Figure 62) has a reputation of being a city welcoming the sharing economy (Amsterdam Marketing, 2014). In 2014, the City Council explicitly allowed private short term rentals, introducing a new category of housing called "Particuliere vakantieverhuur" (private holiday rentals). This category requires that owners (or main occupants, if the landlord consents) only occasionally rent out, pay tourism taxes, obey minimum fire safety standards, do not create disproportionate disturbance to neighbours, and rent out their premises to a maximum of four people at any time for a maximum of 60 days (City of Amsterdam, 2014; Gowling, 2014). Further, income from short term rentals must be declared (Clarke, 2014).

Amsterdam was the first European city to sign an agreement with Airbnb regarding the specific regulation of the private short term rental phenomenon. In December 2014, the City of Amsterdam and Airbnb agreed to collaborate in providing legal information on home sharing to hosts in form a brochure compiled by the city council. In addition, the agreement stipulated Airbnb's assistance in the collection of the Amsterdam tourism tax (Amsterdam Marketing, 2014). To cover the whole range of its regulations and to strengthen their implementation ("tackling bad actors"), the City of Amsterdam sought a wider ranging agreement with Airbnb. In 2016, it thus replaced the initial arrangements with an updated agreement, which obliges Airbnb to block listings that do not follow rental rules (City of Amsterdam, 2016; Woolf, 2016).

The agreement focuses on four priorities that include:

- An automatic blocking of rentals from the Airbnb platform if they exceed the rental cap of 60 days per year (unless proper licenses can be shown);
- introduction of a neighbor complaint online tool and a dedicated hotline for such complaints;
- collaboration of Airbnb in sharing aggregate data with the responsible authorities in Amsterdam as well as in responding to justified requests (law enforcement) for individual data, and
- paralleling the pioneering agreement with other home sharing platforms.

**Figure 62 Policy measures employed by Amsterdam, Netherlands**




Note: The table is an indication only and focuses on some certain aspects of particular relevance to the case study and does not purport to be complete.
Source: Own analysis, graphical optimization by EURAC (Ruben Bassani, Giorgio Bellante and Daniele Fadda).

*Berlin, Germany*

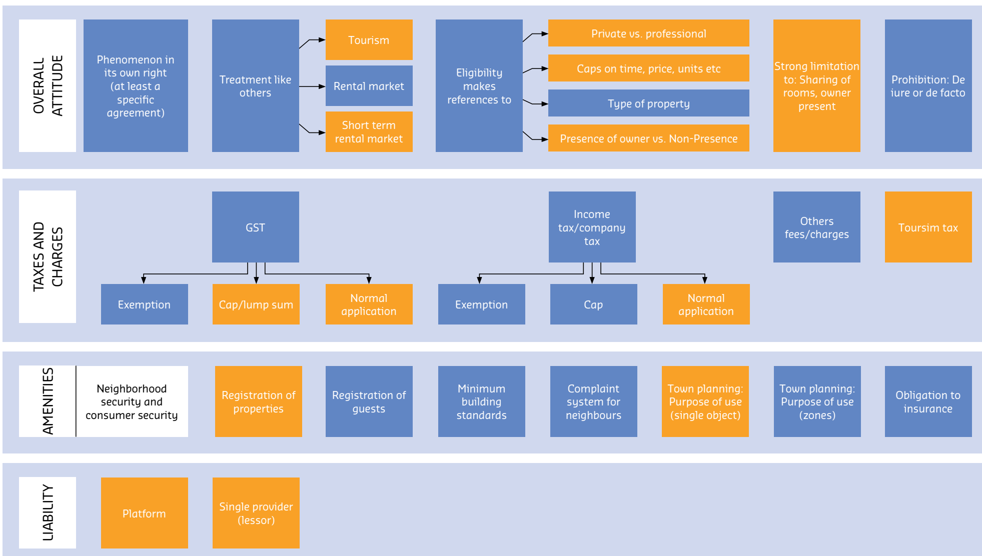
The latest economic impact statistics for Berlin (Figure 63) available from Airbnb covers the period from January to December 2015, with an estimated €370 million of associated economic activity generated in the city (Airbnb, n.d.). During this time, more than 20,000 people hosted 568,000 guests, who stayed an average of 4.6 nights. The typical host earned €1,800 from 34 nights, and almost 75 per cent of all listings were rented for less than 90 days per annum (Airbnb, 2016).

In May 2014, Berlin introduced the Law on the Prohibition of Misuse of Housing, aiming to reduce the number of residential apartments that are used for short-term tourist accommodation, and are thus excised from the traditional housing supply. The law bans the short-term letting of entire houses or flats, though individual rooms can continue to be rented out, subject to registration requirements for short-term rentals, and as long as those rooms don't comprise more than half of the available floor space. There are also restrictions on the amount that can be charged i.e. not more than the average rent for the neighbourhood, intending to remove the financial incentive for short-term rather than long-term rentals (O'Sullivan 2016).

A recent study by Schäfer and Braun (2016) analysed Airbnb data sets from 2014 and 2015 in Berlin, and found that 5,555 residential flats – equivalent to 0.3 per cent of total housing stock – were being misused as defined under the new law. Approximately two-thirds of these were located in five central neighbourhoods. Of those, Berlin Mitte was the worst offender with 7 per cent of housing stock used for tourist accommodation in breach of the Law.

A two year grace period ended on 1 May 2016, and property owners or renters who now breach the law can face fines of up to €100,000 (The Guardian, 2016). This move does appear to have resulted in the desired drop in entire apartments being listed for short-term rental, with listings on Airbnb dropping from 11,000 in February 2016 to 6,700 in March, ahead of the end of the transition period (O'Sullivan, 2016).

**Figure 63** Policy measures employed by Berlin, Germany




Note: The table is an indication only and focuses on some certain aspects of particular relevance to the case study and does not purport to be complete.
Source: Own analysis, graphical optimization by EURAC (Ruben Bassani, Giorgio Bellante and Daniele Fadda).

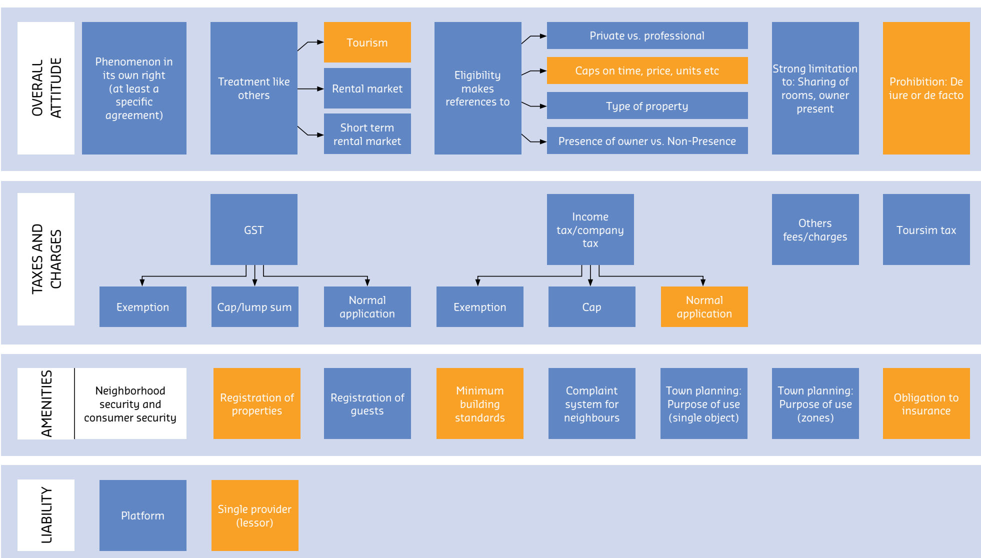
### *Hong Kong, China*

Tourist accommodation in Hong Kong (Figure 64) is regulated by the Office of the Licensing Authority of the Home Affairs Department. Two distinct classifications of tourist or short term accommodation exist. The first is defined by the Hotel and Guesthouse Accommodation Ordinance (Cap 438), with a hotel or guesthouse being a premise in which sleeping accommodation is provided in exchange for payment, for a period of less than 28 continuous days. Operators of these premises must be licensed, the term of which can range from 12 to 84 months (Office of the Licensing Authority, 2015). The other type of accommodation is known as a bedspace apartment, which is defined under the Bedspace Apartments Ordinance (Cap 447) as any flat where 12 or more bedspaces (including a bed, bunk or floor space intended for sleeping accommodation for a single individual) are occupied or available for occupation under rental agreements (Office of the Licensing Authority, 2009). Unlike hotels and guesthouses, no maximum timeframes are specified. The types of properties advertised through forums such as Airbnb are likely to fall into the category of hotels and guesthouses. Indeed, the Home Affairs Department initiated a review of the Hotel and Guesthouse Accommodation Ordinance in July 2014 with the aim of combatting unlicensed premises (Home Affairs Department, 2014).

Under Hotel Accommodation Ordnance Cap 348, a Hotel Accommodation Tax is to be imposed on hotel and guesthouse accommodation. However, effective from 1 July 2008, the rate of tax is 0 per cent (previously 3%), so this effectively no longer applies (Inland Revenue Department, 2013).

In December 2015, the Home Affairs Department announced additional administrative measures to be effective from 28 December 2015, which included the requirement for a 24 hour manned counter at a licensed guesthouse (general), public liability insurance of HK$10 million per event, and the introduction of different licences (hotel, and three different types of guesthouse: general, holiday camp and holiday flat) depending on the approved use of the property (Home Affairs Department, 2015).

**Figure 64 Policy measures employed by Hong Kong, China**




Note: The table is an indication only and focuses on some certain aspects of particular relevance to the case study and does not purport to be complete.
Source: Own analysis, graphical optimization by EURAC (Ruben Bassani, Giorgio Bellante and Daniele Fadda).

## *Singapore*

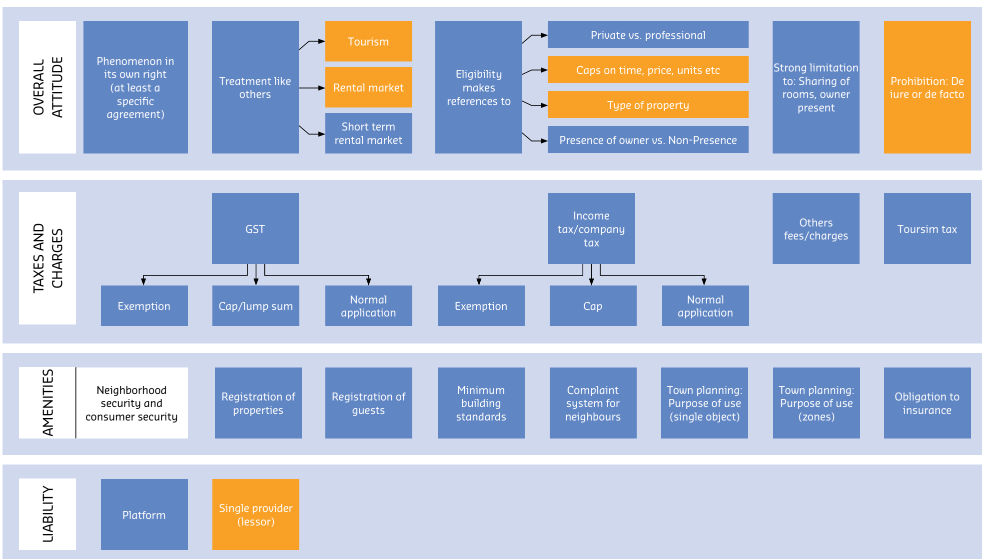
Under existing guidelines overseen by the Urban Redevelopment Authority (n.d.), renting, leasing or subletting a whole private residential unit or individual room is not allowed in Singapore for a period of less than six months on a daily, weekly or monthly basis (Figure 65). Similar rules apply for subletting properties purchased through the Housing and Development Board, with a minimum period of six months for any subletting application (Housing and Development Board, n.d.). If a residential property is rented, including subletting, for six months or more, income tax is payable on the rent received (Inland Revenue Authority of Singapore, n.d.).

In early 2015, it was reported that the Singapore government had started a review of these guidelines, and that the Urban Redevelopment Authority had commenced public consultation into the guidelines governing short term rentals through platforms such as Airbnb (Purnell, 2015). Reports of the Urban Redevelopment Authority's engagement with Airbnb were ongoing in late 2015, as the review of short term rental and subletting guidelines continued (Lee, 2015).

Despite consultation in 2015 involving approximately 2,000 online survey respondents and discussions with almost 100 stakeholders including Airbnb, the Urban Redevelopment Authority announced in May 2016 that the current six month minimum term restriction on renting, leasing or subletting residential properties will remain in place, while the Authority takes more time to consider the issues involved (Yeo, 2016).

In early 2017, the Urban Redevelopment Authority announced that the creation of a new category of private homes, which would allow for short term rentals, is under consideration (Chuan, 2017).

**Figure 65** **Policy measures employed by Singapore**




Note: The table is an indication only and focuses on some certain aspects of particular relevance to the case study and does not purport to be complete.
Source: Own analysis, graphical optimization by EURAC (Ruben Bassani, Giorgio Bellante and Daniele Fadda).

## Selected approaches within Australia

In a recent report on the economic effects of Airbnb in Australia published by Deloitte Access Economics (2017) it is estimated that in 2015/16, based on tourism expenditure of Airbnb guests, Airbnb contributed AUD 1.6 Billion to Australia's GDP and supported almost 14,500 jobs (in addition to the hosts). It is also estimated that about 2.1 Mio guest stayed 3.7 Mio nights in Airbnb accommodations across Australia. According to the report, Airbnb hosts earned a median income of about AUD 5,000 in 2015/16.

In the following a brief snapshot of governance approaches from selected cases from Australia (New South Wales, Victoria, Tasmania and South Australia) is provided.

### *New South Wales and Sydney*

For New South Wales (NSW), Deloitte Access Economics (2017) estimated that in 2015/16 Airbnb contributed more than AUD 500 Mio to the NSW economy and supported almost 4,500 full-time jobs.

Sydney was one of the first eight cities to have an economic impact study published by Airbnb (n.d), undertaken by BIS Shrapnel using data from 2012-13. In this period, the average host earned $4,505 from an overall average rental period of 37 nights p.a., with 85 per cent of Airbnb hosts renting out the home they live in and with 80 per cent of properties being located in areas outside the central hotel districts. Approximately 30,000 visitors contributed a total of $214 million to the local economy, an average of $1,822 per capita.

One of the first reports on the collaborative economy in NSW was "Uber and Airbnb: the legal and policy debate in NSW" (Haylen, 2015; see also Australian Government, 2015). The report notes that regulations about renting out or sub-letting properties are the responsibility of local councils in NSW, and can vary considerably. Examples given of councils that appear to ban short-term renting without council approval include The City of Sydney, Randwick, and Waverley Councils. Others, such as Gosford and Shoalhaven Councils have indicated approval of short-term rentals, but different conditions may apply.

The City of Sydney's current planning laws do not allow for tourist and visitor accommodation in residential zones, unless registered as commercial self-contained apartments, or as a bed and breakfast. Even so, where tourist and private residential accommodation are in the same building, they must be on separate floors with separate lift access (City of Sydney, n.d.).

Haylen (2015) also noted that there are no hotel taxes in Australia, hence there is no need for Airbnb to collect such taxes. Given the average earnings of Airbnb hosts in Sydney, it is unlikely the $75,000 annual threshold that triggers the requirement to register for GST will be reached, and any income earned would be considered to be assessable for income tax purposes (Haylen, 2015). The Australian Tax Office has further clarified that GST is not payable on any rental income earned from renting out part or all of a residential home, but confirmed that income tax is payable (ATO, n.d.).

Various agencies of the New South Wales Government have investigated the impacts of the sharing economy, with a view to determining whether government intervention is required. The New South Wales (NSW) Department of Finance Services and Innovation (DFSI) commissioned Deloitte Access Economics to prepare a review of the collaborative economy in NSW, published in October 2015.

On 19 January 2016, the NSW Government released a position paper based on the above report. The NSW position paper identifies five principles to provide guidance to NSW agencies in identifying opportunities created by the sharing economy, and approaching regulatory and other challenges:

- Support a culture of innovation, and making it easier for start-ups to do business in NSW;
- ensure regulation is fit for purpose in the digital age, including that any government action should be needs-based, cost-effective and proportional;
- maintain consumer protection and safety;
- promote competition, including greater access to government purchasing; and
- adopt an agile approach to government procurement, with simplified processes and value for money outcomes.

In regard to specific regulatory and policy responses to short term rentals, the Environment and Planning Committee of the Parliament of New South Wales self-referred an inquiry on 9 September 2015 to consider the “Adequacy of the regulation of short-term holiday letting in NSW” (Parliament of New South Wales, 2016). The terms of reference of the inquiry included investigating the differences between traditional compared to online accommodation providers, regulatory, licensing and taxation issues, and the economic impact on both the local and state economy. The City of Sydney’s submission to this inquiry recommended a new, state-wide definition and regulatory approach to short-term rentals, including potentially limiting the number of people staying and the number of days allowed to be let each year (City of Sydney, 2015).

The report (#1/56) “Adequacy of the regulation of short-term holiday letting in NSW” was tabled in October 2016 and outlined 12 recommendations. The report emphasised that “short-term rental accommodation should be defined and permitted in New South Wales. It is a longstanding use which generates a comparatively low level of complaints, and with the right regulation and compliance regime, can be permitted in residential areas” (New South Wales Legislative Assembly, 2016: v; Needham, 2016). The NSW Government is scheduled to respond to the report by the first half of 2017.

***Victoria***

In Victoria in 2015/16, Airbnb guests’ expenditure added more than AUD 400 Mio to the state’s economy with an estimated associated employment of more than 4,000 full time equivalent (FTE) jobs (Deloitte Access Economics, 2017).

One of Airbnb’s first agreements with a government in Australia was announced in October 2014 when Emergency Management Victoria and Airbnb agreed to work together to facilitate short-term accommodation for both displaced people and emergency services personnel during significant fire and flood emergencies (Airbnb, 2014, State Government of Victoria, 2014).

Airbnb is also active in the traditional short term rental market in Victoria, with almost 20,000 listings and more than 500,000 visitors in the year to May 2016. In Victoira, the average Airbnb host rents their property for 33 nights per year and earns approximately $4,000 (Airbnb, 2016).

Regulatory responses in Victoria have focussed on the regulation of apartment buildings in the Central Business District (CBD), to maximise amenity for those people living in apartment buildings, and protecting property and residents from unruly parties. Following a report in June 2015 by the Independent Panel on Short Stay Accommodation in CBD Apartment Buildings, the Victorian Government has introduced new legislation to allow apartment owners to be held liable for damage or bad behaviour of short-term guests, including compensation to neighbours for loss of amenity and damage to common property. The *Owners Corporations Amendment (Short-stay Accommodation) Bill 2016* was introduced to the Victorian Parliament on 24 May 2016.

***Tasmania***

In 2015/16, Airbnb generated almost AUD 55 Mio to the Tasmanian economy and supported almost 600 jobs in the state (Deloitte Access Economics, 2017).

In October 2015, Tasmania's Premier Hill Hodgman announced the Government's intention to replace more than 30 planning schemes with a single state-wide planning scheme (Airbnb, 2015). Planning Minister Peter Gutwein subsequently flagged the intention to allow short-term rentals for up to 42 days per year without a permit (ABC News, 2016). The planning reforms are being progressed, overseen by a State Policies Interdepartmental Committee (Department of Justice, 2016).

In a recent policy statement, which includes new provisions and exemptions relating to accommodation sharing, the Tasmanian Government announced that the new policy will take effect state wide from the 1st of July 2017. Under the policy, a license is not required for a listing (on a platform) of one home with up to four bookable rooms, while listings with more than four bookable rooms in a home, or investment properties and shacks over a certain size (i.e. 300 square metres) have different requirements (Tasmanian Government, 2017).

***South Australia***

According to Deloitte Access Economics (2017), in South Australia Airbnb guests generated about AUD 38 Mio to the South Australian economy in 2015/16 with around 400 associated FTE jobs.

In early June 2016, Airbnb and South Australia's Deputy Premier John Rau announced new planning rules to clarify the government's support for short-term rentals (Airbnb, 2016; Rau, 2016). Specifically, the role short-term rental accommodation plays in supporting large scale events such as festivals was acknowledged. The changes are intended to provide certainty for existing and potential hosts that development approval is not required for short-term letting of their residential property. Both announcements provided statistics regarding the utilisation of Airbnb in South Australia. Accordingly, there were almost 3,000 Airbnb listings which had more than doubled in the preceding 12 months. More than 57,000 visitors booked accommodation via the Airbnb platform during that time generating an average host income of $4,100 over 25 nights p.a.

## Concluding remarks

Overall, the interpretation of the available information summarised in this report indicates that most of the case study cities try to deal with the sharing economy in terms of existing regulations in the fields of tourism and the rental property market. While these regulatative and legislative frameworks might need to be adapted in some instances, it is rather rare that cities consider the sharing economy, or Airbnb specifically, as phenomena in its own right. Most of the cities that have been reviewed for this report seem to adopt a middle ground in terms of restrictiveness by trying to avoid a complete prohibition of the phenomenon on the one hand and limiting potentially adverse effects (e.g. on the rental or property market as well as neighbourhood amenities) and unfair competition on the other. This is often done by defining a clear line between private and commercial realms of operation. This line is usually drawn by referring to caps on maximum time of short-term rental per year, maximum prices (linked to the long-term rental property market) and to the maximum number of sublet short-term units per owner. In more and more instances, Airbnb has agreed to automatically ban properties from their platform that do not obey a city's imposed limits (e.g. Amsterdam and London). In addition, cities that take a more restrictive approach limit permission to the type of properties, to licenced providers and/or to a owners in residence.

In terms of taxes, most surveyed cities avoid exceptions and rather make clear that the standard rules apply also to short-term rentals. Amongst others, if applicable, tourism taxes need to be paid. Concerning the third category, i.e. neighbourhood amenities, no clear patterns of action is apparent and the diversity in actions taken is significant. Whereas many analysed cities request a registration of short-term rental properties it is rather rare that they are required to register their guests as well. Similarly, neighbourhood complaint systems and obligations to take out insurance are required only in a minority of the case study cities. Whereas some cities try to hold the platform itself (airbnb.com) co-responsible for offenses, in all cases the onus is primarily on the private accommodation provider (lessor).

# Discussion

## and conclusion

# Discussion and conclusion

In line with developments around the world, Airbnb has also rapidly grown in Western Australia in recent years. In fact, with just under 50 Airbnb hosts in 2011 supply has increased 120-fold to almost 6,000 hosts and about 8,000 listed properties on the Airbnb platform in 2017 (March). It comes therefore as no surprise that these rapid developments have sparked controversy among various industry, government and community stakeholders.

As part of this study 12 key stakeholders from industry and government in Western Australia were interviewed to gain an in-depth understanding of perceptions of the Airbnb phenomenon. It became obvious that their views were not necessarily based on a common understanding but reflected a rather emotional debate between proponents and opponents who see in these developments either a potential to create new opportunities or a threat to traditional economic activities. In order to facilitate an informed debate the interviewees demanded more reliable information, to quantify Airbnb's scale and impact in WA. At the same time they also called for decisive leadership in governing the sharing economy, including Airbnb.

This study has significantly contributed to closing the existing knowledge gap on the Airbnb phenomenon in WA by addressing the following key research questions:

- What are key stakeholders' perceptions of the sharing economy and Airbnb in WA?
- What is the extent of Airbnb supply and demand in WA and what are its main attributes?
- To what degree does Airbnb demand differ from conventional demand?
- What policy responses have been employed in other tourism destinations worldwide in response to Airbnb?

To capture Airbnb's size and main attributes as well as the dynamics and development pattern of Airbnb supply in WA, a number of indicators were extracted from online data, such as the number, types and distribution of Airbnb properties in WA, as well as occupancy rate, price per night and the estimated income for hosts. This information allowed for a better understanding of the extent and impact of Airbnb offerings in WA.

Supply data indicate that with about 8,000 Airbnb listings and 6,000 hosts and a noticeable dynamic development pattern throughout 2016 and early 2017, with about a 4 per cent growth of supply per month Airbnb is becoming an increasingly visible reality for WA tourism. This means that currently, about 25 per cent of WA's room capacity is provided via the Airbnb platform, and about 6 per cent of WA's international overnight stays were generated by Airbnb in 2016.

In WA, Airbnb supply is dispersed across the entire state, however hotspots of activity can, for instance, be found in the Perth metropolitan area and Fremantle as well as the South West of WA, and here, in particular, in close proximity to Margaret River and Busselton. In comparison to single rooms, entire homes and apartments dominate Airbnb offerings in WA, with houses being clearly the more common type of accommodation compared to apartments.

Although monthly earnings of WA's Airbnb hosts exceed AUD 4.5 Million (2017), the research indicates that with more than 80 per cent single listings ("one listing per host") and occupancy rates at or below 20 per cent, on average Airbnb activities mainly take place within the "private" (occasional) realm in Western Australia.

The 'International Visitor Survey' (IVS) and the 'National Visitors Survey' (NVS) conducted by Tourism Research Australia (TRA) provided the data basis for the analysis of Airbnb demand in WA. The aim was to explore the characteristics of Airbnb users in WA compared to Airbnb non-users among the WA visitors, and to understand whether and how they differ from each other.

Data indicate that Airbnb demand in WA is growing at a rate of more than 100 per cent per year (2015-2016). Furthermore, the study's findings suggest that Airbnb guests to WA appear to differ from WA guests in general, as do Airbnb holidaymakers. Visitors who book accommodation via Airbnb also differ in their distribution across source markets. In 2015 tourists from Singapore and Malaysia accounted for nearly half of all Airbnb users in WA. Airbnb guests have also an above average tendency to visit wine regions such as Margaret River and the Swan Valley. Further, they appear to differ not only in their geographical distribution within WA but also tend to be younger, and travel more frequently as couples, families or together with friends and relatives.

Finally, to capture destination governance and tourism policy responses in destinations around the world, nine international case studies from London, New York, San Francisco, Barcelona, Rome, Berlin, Hong Kong, Amsterdam and Singapore were reviewed. Findings show that some destinations are deliberately refraining from proactive agency completely, or at least until a regulatory and governance framework has been established or public consultation has concluded. Amsterdam and London represent cities which have adopted a more proactive approach and some cities have even signed agreements with Airbnb (e.g. London). Others have banned short-term leasing of residential accommodation, or restricted the number of days allowed, with and without registration requirements. Berlin and New York for instance are examples of destinations which have implemented a more restrictive strategy.

Based on this analysis, a policy matrix has been developed that provides not only an overview over the different approaches taken to date (i.e. international and national case studies) but also provides a toolbox of potential policy instruments to respond to Airbnb. This policy matrix can assist governments in better understanding the different response strategies and might also guide decision makers in finding an appropriate approach to dealing with the Airbnb phenomenon in their respective jurisdiction (i.e. WA). It needs to be acknowledged, however, that any decision by governments to initiate policy or regulatory responses to the Airbnb phenomenon will be influenced by a magnitude of local factors.

In conclusion, this study critically explored the growth and impact of Airbnb's operations within the particular case context of WA, where tourism is increasingly seen as an alternative development perspective in the context of its slowing, resource dependent economy. Although the tourism sector currently performs strongly, the conventional accommodation sub-sector has experienced a more competitive environment due to a softening of business travel and a substantial increase in new hotel rooms in recent years. At the same time rapid growth in non-traditional accommodation bookings (e.g. via Airbnb) was noticed and sparked concerns in particular within the hotel sector, which increasingly perceives Airbnb as a threat.

Against the backdrop of such a challenging and dynamic environment the study has been an important initiative, which has contributed to a better understanding of the impact and influence of Airbnb on tourism in WA, and consumer preferences in relation to accommodation choice. Its findings therefore contribute significantly to closing an existing knowledge gap. The study offers, however, not only new empirical insights but also informs economic and policy debates in Western Australia towards an evidence-based response to the Airbnb phenomenon.

# Key recommendations

# Key recommendations

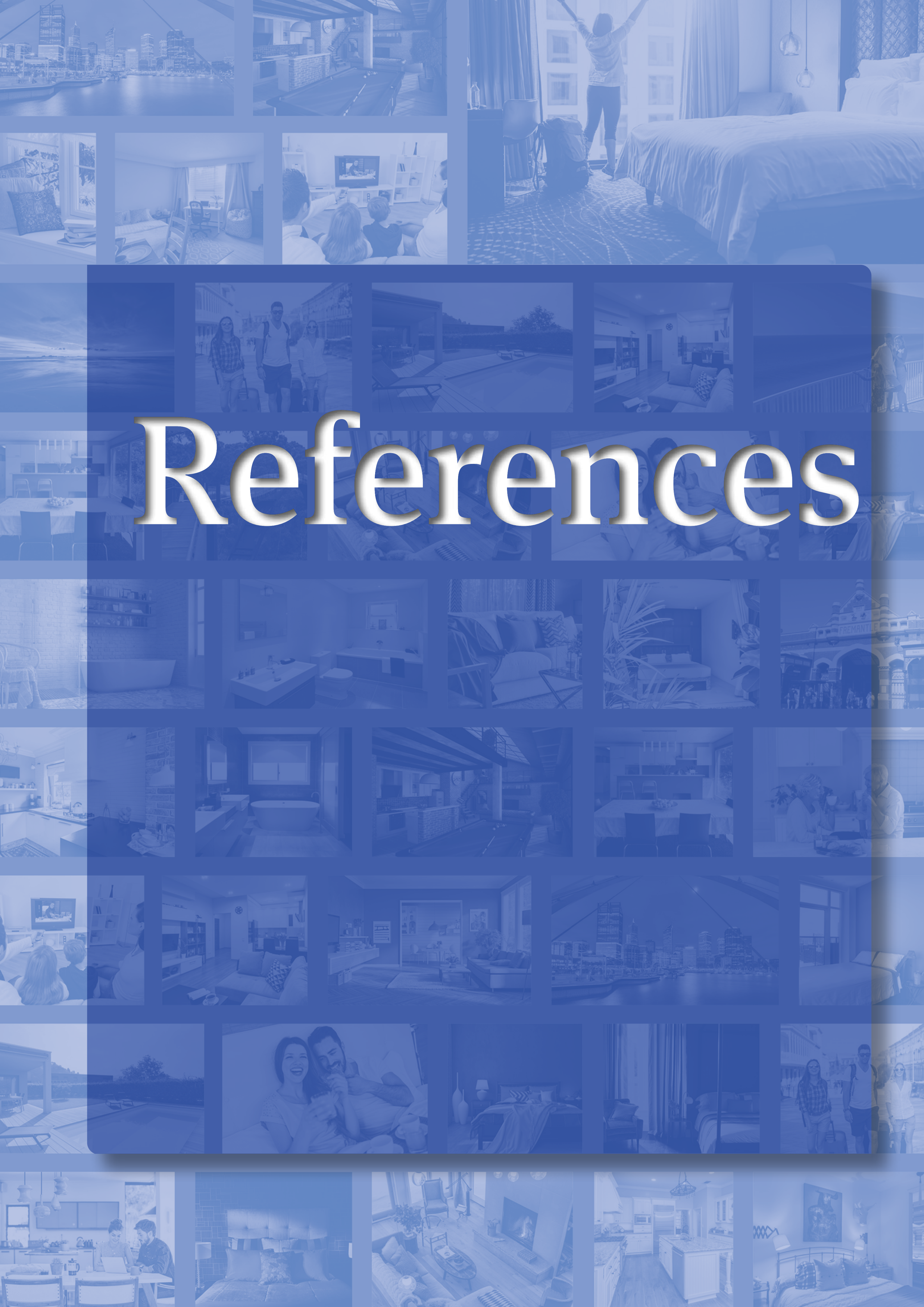
- **Options are manifold:** Interviewed WA tourism stakeholders mentioned most of the instruments covered in the policy framework, meaning that no convergent opinion on which policy instruments should be applied in response to Airbnb (and similar platforms) seems to exist;
- **Solutions need to be context-specific:** In detailing the policy response to Airbnb (and similar platforms), it is necessary to avoid boilerplate solutions and to consider the specific circumstances of WA's tourism and economy; amongst them are, for example, a recent increase in hotel rooms in Perth and the continued overall growth of international tourism demand;
- **Clear rules are necessary:** Given the networked nature of the tourism sector, it is paramount to take concerns of industry representatives seriously, especially those relating to perceived unlevel playing fields may require a proactive governance of the phenomenon;
- **Airbnb has a significant market:** The reality and future potential of the Airbnb platform in catering to a specific market segment should not be disregarded, and thus any adverse or decelerating effects of restricting responses need to be carefully considered;
- **Airbnb has a somewhat different territorial distribution compared to hotels:** Airbnb is not a metropolitan phenomenon only and leads to slightly different distributions of visitors in WA, which might both be welcomed or disliked, depending on the respective view point;
- **Responses need to be based on evidence and take an adaptive layout:** Given Airbnb's fast development and its inherent dynamics, it appears advisable to continue to monitor the evolution of the phenomenon and to adjust responses along the way.

## Future research

In the course of researching the Airbnb phenomenon in Western Australia, further issues emerged that deserve detailed investigation. Amongst them are:

- The role of Airbnb in temporary situations of high demand such as major events
- The impact of Airbnb on hotel prices and tourism jobs
- Reactions of traditional "Bed and Breakfasts" to the appearance of Airbnb
- Motivations of hosts to list on the Airbnb platform
- Impacts on the overall perception of Perth as a tourism destination
- Impact on the entrepreneurial attitude of tourism actors

# References



# References


ABC (2015). *Tasmania Airbnb sublets to be permit-free for six weeks a year under plan*, viewed 17 June 2016. Retrieved from http://www.abc.net.au/news/2016-03-09/tasmania-airbnb-sub-lets-permit-free-six-weeks-hobart-rentals/7233164

Airbnb (n.d). *Overview of the Airbnb community in Berlin*, viewed 18 June 2016. Retrieved from https://www.airbnbaction.com/data/berlin-2015/

Airbnb (2014). *Great news from Australia: Airbnb partners with Victorian Government prepare for emergencies*, viewed 18 January 2016. Retrieved from https://www.airbnbaction.com/great-news-australia-airbnb-partners-victorian-government-prepare-emergencies/

Airbnb (2015). *The Airbnb Community Compact*, viewed 22 March 2016. Retrieved from https://www.airbnbaction.com/community-compact/

Airbnb (2015). *Airbnb economic impact in San Francisco*, viewed 22 March 2016. Retrieved from https://www.airbnbaction.com/sfeconimpactreport/

Airbnb (2015). *Overview of the Airbnb community in Austin, Texas*, viewed 22 March 2016. Retrieved from https://www.airbnbaction.com/airbnb-community-austin-responsible-hosts-respectful-guests/

Airbnb 2015. *Good news from Tasmania*, viewed 22 March 2016. Retrieved from https://www.airbnbaction.com/good-news-tasmania/

Airbnb (2015). *First in class: An innovative partnership with San Francisco Travel Association*, viewed 22 March 2016. Retrieved from http://publicpolicy.airbnb.com/first-class-innovative-partnership-san-francisco-travel-association/

Airbnb (2016). *South Australia leads the way for home sharing down under*, viewed 15 June 2016. Retrieved from https://www.airbnbaction.com/south-australia-leads-the-way-for-home-sharing-down-under/

Airbnb (2016). *Airbnb community boosts Barcelona economy by €740 million*, viewed 1 June 2016. Retrieved from https://www.airbnbaction.com/airbnb-community-boosts-barcelona-economy-by-e740-million/

Airbnb (2016). *Catalonia works on plans to regulate sharing economy*, viewed 10 June 2016. Retrieved from https://www.airbnbaction.com/catalonia-working-on-plans-to-regulate-sharing-economy/

Airbnb (2016). *Overview of the Airbnb community in Italy*, viewed 18 June 2015. Retrieved from https://www.airbnbaction.com/new-study-airbnb-community-contributes-e3-4b-to-italian-economy/

Airbnb (2016). *Sharing data on the Airbnb community in Berlin*, viewed 18 June 2016. Retrieved from https://www.airbnbaction.com/data/berlin-2015/

Airbnb (2016). *One host, one home: New York City*, viewed 22 July 2016. Retrieved from https://www.airbnbaction.com/one-host-one-home-new-york-city/

Airbnb (2016). New York, NY, *Airbnb*, viewed 22 July 2016. Retrieved from https://www.airbnb.com.au/help/article/868/new-york--ny

Airbnb (2016). *Neighbours move forward, New York leaves money on the table*, viewed 22 July 2016. Retrieved from https://www.airbnbaction.com/neighbors-move-forward-new-york-leaves-money-on-the-table/

Airbnb (2016). *Airbnb welcomes new laws in Victoria to stamp out party houses*, viewed 22 June 2016. Retrieved from https://www.airbnbaction.com/airbnb-welcomes-new-rules-in-victoria-to-stamp-out-party-houses/

Amsterdam Marketing (2014). A*msterdam and Airbnb sign agreement on home sharing and tourist tax*, viewed 20 January 2017. Retrieved from http://www.iamsterdam.com/en/media-centre/city-hall/press-releases/2014-press-room/amsterdam-airbnb-agreement

Australian Bureau of Statistics (2017). *Statistical areas level 2 (SA2)*. Retrieved from http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/6b6e07234c98365aca25792d0010d730/$FILE/Statistical%20Area%20Level%202%20-%20Fact%20Sheet%20.pdf.

Australian Taxation Office (n.d.). *The sharing economy and tax, Australian Taxation Office*, viewed 5 April 2016. Retrieved from https://www.ato.gov.au/business/gst/in-detail/managing-gst-in-your-business/general-guides/the-sharing-economy-and-tax/

Australian Government - Productivity Commission (2015). *Business set-up, transfer and closure*, viewed on 20 September 2016. Retrieved from http://www.pc.gov.au/inquiries/completed/business#report

Badcock, J. (2016). Barcelona to fine Airbnb and HomeAway €600,000 each for offering 'illegal' accommodation, viewed on 15 March 2017. Retrieved from http://www.telegraph.co.uk/news/2016/11/24/barcelona-fine-airbnb-homeaway600000-offering-illegal-accommodation/

Belk, R. (2014). You are what you can access: Sharing and collaborative consumption online, *Journal of Business Research, 67*(8): 1595-1600.

Brueckner, M. and Pforr, C. (2011). Western Australia's short-lived 'sustainability revolution, *Environmental Politics*, 20(4), 585-589.

Brueckner, M., Durey, A., Mayes, R. and Pforr, C. (eds) (2014). *Resource curse or cure? On the sustainability of development in Western Australia*, Berlin, Heidelberg: Springer.

Cheng, M. (2016). Sharing economy: A review and agenda for future research, *International Journal of Hospitality Management*, 57, 60-70.

City of Amsterdam (2014). Particuliere vakantieverhuur, viewed on 20 February 2017. Retrieved from https://www.amsterdam.nl/wonen-leefomgeving/wonen/bijzondere-situaties/vakantieverhuur/

City of Amsterdam (2016). *Amsterdam and Airbnb announce new unique agreement*, viewed on 20 February 2017. Retrieved from https://www.amsterdam.nl/nieuwsarchief/persberichten/2016/persberichten-1/amsterdam-and-airbnb/

City of New York (2012). *Local Law No. 45 of 2012*, viewed 20 February 2017, 2 October 2012. Retrieved from https://www1.nyc.gov/assets/buildings/local_laws/ll45of2012.pdf

City of Perth (2017). *Tourism expenditure per Dollar (Perth- Economic Profile)*. Retrieved from http://www.economicprofile.com.au/perth/tourism/expenditure-per-dollar

City of Sydney (n.d.). *Visitor accommodation*, viewed 18 January 2016. Retrieved from http://www.cityofsydney.nsw.gov.au/vision/towards-2030/business-and-economy/visitor-accommodation

City of Sydney (2015). Submission No. 158 – Adequacy of the regulation of short-term holiday letting in New South Wales, viewed 18 January 2016. Retrieved from https://www.parliament.nsw.gov.au/committees/DBAssets/InquirySubmission/Summary/53836/Submission%20No%20158%20-%20City%20of%20Sydney.PDF

Chuan, T. Y. (2017). *Parliament: Short term home rental illegal under new law*, viewed on 15 March 2017. Retrieved from http://www.straitstimes.com/politics/parliament-short-term-home-rental-illegal-under-new-law

Clampet, J. (2016). *Airbnb loses a fight in New York as legislature passes strict advertising law*, viewed 22 July 2016. Retrieved from https://skift.com/2016/06/17/airbnb-loses-political-battle-in-new-york-as-legislature-passes-advertising-law/

Clarke, B. (2014). *Airbnb update: rules, tax and short-stay rentals*, viewed on 22 January 2017. Retrieved from http://www.iamexpat.nl/read-and-discuss/housing/news/airbnb-update-rules-tax-short-stay-rentals

Dalton, A. (2017). New York City starts cracking down on illegal Airbnb listings, viewed on 20 April 2017. Retrieved from https://www.engadget.com/2017/02/07/new-york-city-illegal-airbnb-listings-crackdown/

Daunoriene, A., Drakšaitė, A., Snieška, V. & Valodkienė, G. (2015). Evaluating sustainability of sharing economy business models, *Procedia - Social and Behavioral Sciences*, 213, 836-841.

Deloitte Access Economics (2016). *Tourism and hotel market outlook August 2016 (Summary)*, Retrieved from https://www2.deloitte.com/content/dam/Deloitte/au/Documents/consumer-business/deloitte-au-cb-tourism-hotel-market-outlook-executive-summary-august-250816.pdf

Deloitte Access Economics (2017). *Economic effects of Airbnb in Australia*, Retrieved from https://www2.deloitte.com/content/dam/Deloitte/au/Documents/Economics/deloitte-au-economics-effect-airbnb-in-australia-240317.pdf

Department of Business, Innovation and Skills (2015). Independent review of the sharing economy: Government response, March 2015,. Retrieved from https://www.gov.uk/government/publications/sharing-economy-government-response-to-the-independent-review

Department of Finance (n.d.). *Hotel room occupancy tax, New York City*, viewed 18 January 2016. Retrieved from http://www1.nyc.gov/site/finance/taxes/business-hotel-room-occupancy-tax.page

Department of Justice (2016). *Tasmania planning reform*, viewed 17 June 2016. Retrieved from http://www.justice.tas.gov.au/tasmanian_planning_reform>

Dredge, D., & Gyimóthy, S. (2015). The collaborative economy and tourism: Critical perspectives, questionable claims and silenced voices, *Tourism Recreation Research*, 40(3), 286-302.

Ert, E., Fleischer, A. and Magen, N. (2016). Trust and reputation in the sharing economy: The role of personal photos in Airbnb, *Tourism Management*, 55, 62-73

Gallagher, L. (2017). *The Airbnb story: How three ordinary guys disrupted an industry, made Billions . . . and created plenty of controversy*, New York, NY: Houghton Mifflin Harcourt.

Garrett, J. (2016). *New laws for short stay apartments*, viewed 22 June 2016. Retrieved from http://www.premier.vic.gov.au/new-laws-for-short-stay-apartments/>

Gephart, R. (2004). Qualitative research and the *Academy of Management Journal, Academy of Management Journal*, 47(4), 454-462.

Government of Catalonia (n.d.). *Dwellings for tourist use*, viewed 1 June 2016 in English. Retrieved from http://empresaiocupacio.gencat.cat/en/treb_departament/treb_preguntes_i_respostes/emo_turisme/emo_habitatges/index.html

Gowling, A. (2014). Amsterdam will now permit short-stay rentals, viewed on 22 January 2017. Retrieved from http://www.iamexpat.nl/read-and-discuss/housing/news/amsterdam-permit-short-stay-rentals

Guttentag, D. (2015). Airbnb: Disruptive innovation and the rise of an informal tourism accommodation sector, *Current Issues in Tourism*, 18(12), 1192-1217.

Hamari, J., Sjöklint, M. and Ukkonen, A. (2015). The sharing economy: Why people participate in collaborative consumption, *Journal of the Association for Information Science and Technology, 67* (9), 2047-2059.

Haylen, A. (2015). *Uber and Airbnb: the legal and policy debate in NSW*, viewed 30 November 2015. Retrieved from https://www.parliament.nsw.gov.au/researchpapers/Documents/uber-and-airbnb-the-legal-and-policy-debate-in-n/Regulation%20of%20airbnb%20and%20uber%20in%20NSW.pdf

Heo, C.Y. (2016). Sharing economy and prospects in tourism research, A*nnals of Tourism Research*, 58, 156-170.

Home Affairs Department (2014). *Review of the hotel and guesthouse accommodation ordinance - Consultation document*, viewed 14 January 2016. Retrieved from http://www.hadla.gov.hk/filemanager/en/docs/Consultation_document2(Eng).pdf>

Home Affairs Department (2015). *Guideline on New Licensing Requirements Under the Hotels and Guesthouse Accommodation Ordinance (Cap 349)*, viewed 14 January 2016. Retrieved from http://www.hadla.gov.hk/filemanager/en/docs/hotel_20151211b_eng.pdf

Hosmer, D. W. and Lemeshow, S. (2000). *Applied logistic regression* (2nd edition), New York, NY: John Wiley & Sons.

Housing and Development Board (n.d.). *Subletting regulations*, viewed 18 June 2015. Retrieved from http://www.hdb.gov.sg/cs/infoweb/residential/renting-out-a-flat-room/renting-out-your-flat/subletting-regulations

Independent Panel on Short-Stay Accommodation in CBD Apartment Buildings (2015). *Independent panel on short-stay accommodation in CBD apartment buildings - Final report*, Melbourne, VIC: Victorian Government.

Inland Revenue Authority of Singapore (n.d.). *Rental income and expenses, Singapore government*, viewed 18 January 2016. Retrieved from https://www.iras.gov.sg/irashome/Individuals/Locals/Working-Out-Your-Taxes/What-is-Taxable-What-is-Not/Rental-Income-and-Expenses/

Inland Revenue Department (2013). *Hotel accommodation tax*, viewed 18 January 2016. Retrieved from http://www.ird.gov.hk/eng/tax/hat.htm

Inside Airbnb (2017). *Inside Airbnb*. Retrieved from http://insideairbnb.com/paris/>

Investopedia (2015). *Top 10 cities where Airbnb is legal or illegal*, viewed 18 January 2016. Retrieved from http://www.investopedia.com/articles/investing/083115/top-cities-where-airbnb-legal-or-illegal.asp#ixzz3xZMIXLks

Karlsson, L. and Dolnicar, S. (2016). Someone's been sleeping in my bed. *Annals of Tourism Research, 58*, 159-162.

Kokalitcheva, K. (2016). *Airbnb is ready to work with S.F. in fight over illegal home rentals*, viewed 18 January 2017. Retrieved from http://fortune.com/2016/11/14/airbnb-sf-data-sharing/>

Lee, Y. N. (2015). *Airbnb in talks with URA for clearer rules on short-term leasing*, viewed 18 January. Retrieved from http://www.channelnewsasia.com/news/singapore/airbnb-in-talks-with-ura/2190752.html

Mackenzie, M. (2016). *Airbnb's McDonagh says service good for tourism*, viewed 15 August 2016. Retrieved from https://www.businessnews.com.au/article/Airbnb-s-McDonagh-says-service-good-for-tourism

Martin, C.J. (2016). The sharing economy: A pathway to sustainability or a nightmarish form of neoliberal capitalism?. *Ecological Economics*, 121, 149-159.

Needham, K. (2016). *Airbnb to get green light in NSW, report say*, viewed on 21 January 2017. Retrieved from http://www.smh.com.au/nsw/airbnb-to-get-green-light-in-nsw-report-says-20161015-gs31t1.html

New South Wales Legislative Assembly (2016). *Adequacy of the regulation of short-term holiday letting in New South Wales* (Report no. 1/56 Committee on Environment and Planning). Sydney: NSW Legislative Assembly.

Nozzoli, G. (2016). *Airbnb, siglato accordo con la Questura: gli ospiti da oggi si registrano on line*. Retrieved from http://www.romatoday.it/economia/airbnb-accordo-roma-registrazione-dati-ospiti-on-line.html

Office of Short Term Rentals (n.d.). *Office of Short Term Rental Registry and FAQs*, viewed 18 January 2016. Retrieved from http://sf-planning.org/office-short-term-rental-registry-faqs

Office of the Licencing Authority (2015). *Hotels / Guesthouses*, viewed 18 January 2016. Retrieved from http://www.hadla.gov.hk/en/hotels/index.html

Office of the Licencing Authority (2009). *Bedspace apartments*, viewed 18 January 2016. Retrieved from http://www.hadla.gov.hk/en/bedspace/index.html

Oskam, J. and Boswijk, A. (2016). Airbnb: The future of networked hospitality businesses. *Journal of Tourism Futures*, 2(1), 22-42.

O'Sullivan, F. (2016). *Berlin is banning most vacation apartment rentals*, viewed 18 June 2016. Retrieved from http://www.citylab.com/housing/2016/04/airbnb-rentals-berlin-vacation-apartment-law/480381/

Parliament of New South Wales (2016). *Adequacy of the regulation of short-term holiday letting in New South Wales*, viewed 12 December 2016. Retrieved from https://www.parliament.nsw.gov.au/committees/inquiries/Pages/inquiry-details.aspx?pk=1956

Parliament of Western Australia (2015). *Inquiry into technological and service innovation in Western Australia*, viewed 18 January 2016. Retrieved from http://www.parliament.wa.gov.au/Parliament/commit.nsf/(EvidenceOnly)/37453F63257FBE6B48257E7A0012B2F5?opendocument

Pechlaner, H. and Volgger, M. (2012). How to promote cooperation in the hospitality industry: Generating practitioner-relevant knowledge using the GABEK qualitative research strategy. *International Journal of Contemporary Hospitality Management*, 24(6), 925-945.

Pforr, C. (2007). Regional tourism planning and policy. In Dredge, D. and Jenkins, J. (Eds), *Tourism planning and policy*, Milton, QLD: John Wiley & Sons.

Purnell, N. (2015). Airbnb faces scrutiny in Singapore. New York, NY: *Wall Street Journal*

Rau, J. (2016). *Airbnb boost to SA tourism*, viewed 15 June 2016. Retrieved from http://www.premier.sa.gov.au/index.php/john-rau-news-releases/664-airbnb-boost-to-sa-tourism

Regione Lazio (2015). *Regolamento 7 agosto 2015, n. 8, Nuova disciplina delle strutture ricettive extralberghiere*. Retrieved from https://www.comune.roma.it/PCR/resources/cms/documents/nuovo_regolamento_EXTRALBERGH_07_8_2015.pdf

Richardson, L. (2015). Performing the Sharing Economy. *Geoforum*, 67, 121-129.

Rogers, E. M. (2003[1962]). *Diffusion of innovations* (5th ed.). New York, NY: Free Press.

Said, C. (2016). *As city lowers book, Airbnb and rivals thrive*, viewed 9 August 2016. Retrieved from http://projects.sfchronicle.com/2016/airbnb/

San Francisco Business Portal (2015). *Short term rental starter kit*, viewed 24 May 2016. Retrieved from http://businessportal.sfgov.org/start/starter-kits/short-term-rental

Schäfer, P. and Braun, N. (2016). Misuse through short-term rentals on the Berlin housing marke. *International Journal of Housing Markets and Analysis*, *9*(2), 287-311.

Schneiderman, E. (2014). Airbnb in the city. NY, New York: New York State Office of the Attorney General

Slee, T. (2017). *Airbnb data collection: Methodology and accuracy*. Retrieved from http://tomslee.net/airbnb-data-collection-methodology-and-accuracy

State Government of Victoria (2014). *Airbnb disaster response service agreement*, viewed 18 January 2016. Retrieved from http://www.vic.gov.au/news/airbnb-disaster-response-service-agreement.html

State of New York (2010). *Senate Bill S6873B: Clarifies provisions relating to occupancy of class A multiple dwellings*, viewed on 10 September 2016. Retrieved from https://www.nysenate.gov/legislation/bills/2009/S6873/amendment/B

State of New York (2016). *Senate Assembly Bill A8704C: Relates to prohibiting advertising for the use of dwelling units in a class A multiple dwelling*, viewed on 20 February 2017. Retrieved from https://www.nysenate.gov/legislation/bills/2015/A8704

Tasmanian Government (2017). *Policy Statement – Accommodation Sharing – Supporting Tasmania's Visitor Economy*, viewed 12 April 2017. Retrieved from http://www.premier.tas.gov.au/__data/assets/pdf_file/0004/318136/Accommodation_Sharing_Policy_Tas_3_2_16.pdf

Tadeo, M. (2017). *Airbnb wants a truce with Barcelona*, viewed on 15 March 2017. Retrieved from https://www.bloomberg.com/news/articles/2017-02-07/airbnb-eyes-truce-with-barcelona-as-tourist-hordes-spur-backlash

Tentori et al. (2016). *Camera dei deputati – Proposta di legge n. 3564*. Presented on 27 Jan 2016. Retrieved from http://www.camera.it/_dati/leg17/lavori/stampati/pdf/17PDL0039770.pdf

The Guardian (2016). *ÄBerlin's government legislates against Airbnb*, viewed 16 June 2016. Retrieved from https://www.theguardian.com/technology/2016/may/01/berlin-authorities-taking-stand-against-airbnb-rental-boom.

Tourism Accommodation Australia (TAA) (2016). *International tourism report: Overview of accommodation performance*. Sydney, NSW: TAA.

Tourism Accommodation Australia (TAA) (2017). *Massive new investment in hotel development highlights sustained strength of Australian tourism*. Canberra, ACT: TAA.

Tourism Council Western Australia (TCWA) (2016a). *TCWA analysis – WA labor tourism policy*, Perth, WA: TCWA.

Tourism Council Western Australia (TCWA) (2016b). *Perth hotel development report*, Perth, WA: TCWA

Tourism Council Western Australia (TCWA) (2016c). *The Western Australian tourism work atlas*, Perth, WA: TCWA.

Tourism Research Australia (TRA) (2016a). *International visitor survey methodology*, viewed on 31/03/2017. Retrieved from https://www.tra.gov.au/research/international-visitor-survey.html

Tourism Research Australia (TRA) (2016b). *National visitor survey methodology*, viewed on 31/03/2017. Retrieved from https://www.tra.gov.au/aboutus/national-visitor-survey.html

Tourism Research Australia (TRA) (2017). *International visitors in Australia: September 2016 quarterly results of the International Visitor Survey*, Canberra, ACT: TRA.

Tourism Western Australia (TWA) (2012). *State Government strategy for tourism in Western Australia 2020*, viewed on 01/02/2017. Retrieved from http://www.tourism.wa.gov.au/Publications%20Library/About%20Us/State%20Government%20Strategy%20for%20Tourism%20in%20WA%202020%20-%20Detailed.pdf

Tourism Western Australia (TWA) (2015). *Tourism satellite account – Western Australia 2014-2015* (fact sheet), Perth, WA: TWA.

Tourism Western Australia (TWA) (2016a). *Perth hotel performance & development pipeline summary*, Perth, WA: TWA.

Tourism Western Australia (TWA) (2016b). *Perth City – Two year annual average – YE December 2014 / 2015*, Perth, WA: TWA.

Tourism Western Australia (TWA) (2016c). *Tourism WA Corporate Plan 2016-17*, viewed on 01/02/2017. Retrieved from http://www.tourism.wa.gov.au/Publications%20Library/About%20Us/Corporate_Plan_2016-17.pdf

TULPS (1931). Testo unico delle Leggi di Pubblica Sicurezza, Regio decreto n. 773 of 18 June 1931. Retrieved from http://www.sanzioniamministrative.it/collegamenti/I%20Codici/TULPS/TULPS.htm>

Tussyadiah, I.P. (2016). Factors of satisfaction and intention to use peer-to-peer accommodation, *International Journal of Hospitality Management*, 55, 70-80.

UK Government (2016). *Rent a room in your home*, viewed 15 June 2016. Retrieved from https://www.gov.uk/rent-room-in-your-home/the-rent-a-room-scheme

Urban Redevelopment Authority (n.d.). *Renting out private residential properties*, viewed 18 January 2016. Retrieved from https://www.ura.gov.sg/uol/buy-property/about/leasing/residential.aspx

WA Government (2016). Broadening the State's economy through tourism (fact sheet), Perth: WA: Government.

Walter, J. (2017). *Something in the Airbnb: hosts anxious as New York begins crackdown*, viewed on 22 March 2017. Retrieved from https://www.theguardian.com/technology/2017/feb/12/airbnb-hosts-new-york-fines-government-illegal>

Woolf, N. (2016). *Airbnb regulation deal with London and Amsterdam marks dramatic policy shift*, viewed 2 January 2017. Retrieved from https://www.theguardian.com/technology/2016/dec/03/airbnb-regulation-london-amsterdam-housing>

Wosskow, D. (2014). *Unlocking the sharing economy: An independent review*, London, UK: Department of Business, Innovation and Skills

Yeo, S. J. (2016). URA needs more time to study short-term stays issue, *Straits Times*, 19 May, viewed 18 July 2016. Retrieved from http://www.straitstimes.com/singapore/housing/ura-needs-more-time-to-study-short-term-stays-issue

Zelger, J. (2000). *Twelve steps of GABEKWinRelan: A procedure for qualitative opinion research, knowledge organization and system development*. In: Buber, R. and Zelger, J. (Eds), *GABEK 2: Zur qualitativen Forschung. On qualitative research*. Innsbruck: Studien Verlag, 205-220.

**Disclaimer**

The research reported in this publication is funded by the Bankwest Curtin Economics Centre under a project entitled 'The impact of Airbnb on WA's tourism industry and economy'. While every effort has been made to ensure the accuracy of this document, the uncertain nature of economic data, forecasting and analysis means that the centre, Curtin University and/or Bankwest are unable to make any warranties in relation to the information contained herein. Any person who relies on the information contained in this document does so at their own risk. The centre, Curtin University, Bankwest, and/or their employees and agents disclaim liability for any loss or damage, which may arise as a consequence of any person relying on the information contained in this document. Except where liability under any statute cannot be excluded, the centre, Curtin University, Bankwest and/or their advisors, employees and officers do not accept any liability (whether under contract, tort or otherwise) for any resulting loss or damage suffered by the reader or by any other person.

The views in this publication are those of the authors and do not represent the views of Curtin University and/or Bankwest or any of their affiliates. This publication is provided as general information only and does not consider anyone's specific objectives, situation or needs. Neither the authors nor the centre accept any duty of care or liability to anyone regarding this publication or any loss suffered in connection with the use of this publication or any of its content.

**Authorised Use**


Bankwest Curtin Economics Centre Research Report No 6/17
ISBN: 978-1-925083-682

**This report was written by:** Christof Pforr and Michael Volgger from the School of Marketing (Tourism Research Cluster) at Curtin University and Kylie Coulson from the School of Accounting at Curtin University.

**It can be cited as:** Pforr C, Volgger M, Coulson K (2017), *The Impact of Airbnb on WA's Tourism Industry*, Bankwest Curtin Economics Centre, October 2017.

**The authors would like to thank:** Tourism Western Australia and the Department of the Premier and Cabinet of the Government of Western Australia for the overall support. Thanks go also to Eurac Research (Italy), which has supported the research with its expertise in tourism research and methodological issues; to Greta Erschbamer for support in qualitative data analysis, to Elisa Ravazzoli for support in GIS mapping and to Moritz Jäger for his preparatory work in quantitative data collection; to Murray Cox (Inside Airbnb) and Steve Matthews (Tourism Research Australia) for support in data collection; Ruben Bassani, Daniele Fadda and Giorgio Bellante for the support in data processing and data visualization. The authors would like to thank all interview partners and discussion partners for their availability and for sharing thoughts and ideas, including Airbnb and its representatives in Australia.

## Contact

**Bankwest Curtin Economics Centre (BCEC)**
Level 4, Building 408
Curtin University
GPO Box U1987
Perth WA 6845
Tel: +61 8 9266 2873
Email: bcec@curtin.edu.au

bcec.edu.au