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HĪKINA WHAKATUTUKI

1

Tourism infrastructure

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New Zealand Government

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Executive summary

Over 2015, the New Zealand tourism sector has experienced exceptional growth, with record levels of international visitors. Forecasts released by MBIE predict that visitor arrivals will grow 5.4 per cent a year going forward, reaching 4.5 million visitors in 2022, from 3.1 million in 2015 – assuming that there is appropriate infrastructure to support this growth.

New Zealand's tourism infrastructure is the platform on which the growth in tourism – and the resultant benefits to the New Zealand economy – is built. The quantity and quality of infrastructure available dictates the overall capacity of visitors, and contributes towards the experience of visitors who come here. Accommodation; road and rail; airport and cruise port; communication; and activities infrastructure all have a part to play in ensuring New Zealand's attractiveness as a visitor destination. Tourism Industry Aotearoa's Tourism 2025 acknowledges that, while New Zealand's natural environment provides the setting for a range of visitor experiences, quality infrastructure is needed to support the range of activities that visitors enjoy.

For international air transport, inbound seat capacity can be relatively quickly changed through adding and removing flights, assuming appropriate air service agreements are in place. However, ensuring that the appropriate airport infrastructure is in place requires long-term planning. New Zealand's international airports appear to be proactively working towards the expansion in airport infrastructure, though there could be short-term challenges before these large-scale developments come online.

One of the main challenges facing the cruise industry is ensuring that appropriate cruise infrastructure is provided for larger and longer cruise ships. Lack of appropriate facilities to dock and transfer passengers may discourage cruise companies coming here, and may negatively affect visitor experience.

Though demand for hotel accommodation has grown significantly over the past five years, there has not been a concomitant increase in hotel capacity. This has increased occupancy rates and room rates in peak seasons. This is most evident in Queenstown and Auckland. Hotel construction appears to be responding to demand in Auckland and Christchurch, but other regions are showing less investment. The vast majority of planned hotel development expenditure is for large, high-rise buildings in Auckland.

New Zealand does not score highly for its road infrastructure when compared to other developed nations. This may partly be due to geography and population size, which cannot support high levels of road investment. One measure of the quality of road infrastructure is its safety, and areas with a greater proportion of crashes involving overseas licence holders (such as Southland, Otago and the West Coast) have been targeted for improvement by government.

While most towns and cities around the country have adequate cellular coverage, some key tourist roads in the South Island have little or spotty coverage, largely due to mountainous or otherwise inhospitable terrain.

Some national parks are experiencing a strain on infrastructure during peak season. However, there is capacity in less popular sites and outside of the peak season.

Business events are becoming a larger part of New Zealand's international offering. The tourism industry and government have made a concerted effort in recent years to capture a larger part of this international conference market, led by significant investments in international-standard conference facilities in New Zealand.

1. Introduction

1.1 Context

Late last year, Tourism Ministers endorsed a government tourism strategy aimed at increasing the economic contribution made by tourism at a national and a regional level, by focusing and coordinating government efforts to support the sector.

The strategy is designed to help:

- › attract high-value visitors throughout the year and reinforce the strong linkages we need to get them here
- › ensure the sector has all the inputs it needs to deliver the components of a great visitor experience
- › ensure these inputs are used productively and well
- › ensure a range of regions benefit and economic development and employment opportunities are shared across multiple communities
- › ensure the sector retains its social license to operate and continues to be valued by New Zealanders for the social and economic opportunities it brings.

The strategy identified three focus areas where the government needs to work together with the sector to achieve these objectives and support the aspirations of the sector:

- › attracting the right mix of visitors to give us the biggest return on our marketing investment
- › ensuring the sector continues to provide high-quality experiences in the face of increasing visitor numbers and a changing visitor mix
- › supporting regions to be in a position to benefit from increasing visitor numbers.

The strategy identified a number of priority actions in each of these areas across a number of government agencies.

The provision of data and insight will be an essential component supporting work on the priority actions. In particular, this paper provides detailed information to help inform policy direction and future investment in tourism infrastructure. It is the first in a series of insight papers that MBIE will publish over the next 18 months.

Visitor growth has been strong over the 12 months to December, up 10 per cent overall, with Chinese arrivals up 34 per cent. Anecdotal evidence points towards an undersupply of accommodation in certain regions and a concern that this situation may worsen as arrivals continue to increase. These two factors have created the demand for government and the sector to have a coherent picture of the demand for and supply of tourism infrastructure.

This paper complements other work that has been completed or is underway to help build a better picture of the future supply of, and demand for, infrastructure.

A complementary piece of work¹, has been completed by New Zealand Trade and Enterprise, Tourism New Zealand and MBIE. It focuses on identifying future gaps in the supply of high-end hotels in New Zealand's key tourism regions of Auckland, Rotorua, Wellington, Christchurch and Queenstown.

Tourism Industry Aotearoa has recently started a research project exploring New Zealand's tourism infrastructure.

1.2 Purpose

This paper provides information on the supply and demand of tourism infrastructure in New Zealand, providing a base level of information to help inform policy direction and future investment.

1.3 Out of scope

The following areas are excluded from analysis in this paper:

- › estimating future supply and demand beyond MBIE's official forecasts
- › infrastructure in and demand for usage of national parks, and measuring concession numbers
- › supply of specific attractions/activities (eg, bungy jumps, mountain bike hire)
- › cycle trails (currently the subject of a separate MBIE evaluation)
- › public/tourism facilities and infrastructure (eg, restrooms, sewerage, items funded through local government).

1.4 Structure

Section 2 of this report provides an overview of tourism and tourism infrastructure in New Zealand. This report divides tourism infrastructure into seven main areas:

- › International air travel infrastructure (section 3)
- › Cruise infrastructure (section 4)
- › Tourism accommodation infrastructure (section 5)
- › Road infrastructure (section 6)
- › Rail infrastructure (section 7)
- › Cellular network infrastructure (section 8)
- › Events and activities infrastructure (section 9).

Appendices provide additional information on new international flights planned and large hotel developments.

¹ New Zealand Trade and Enterprise (2016). Regional Hotel Market Analysis and Forecasting – May 2016. Retrieved from <https://www.nzte.govt.nz/media/6495222/regional-hotel-market-analysis-and-forecasting-may-2016.pdf>

2 Tourism and tourism infrastructure in New Zealand

■ Key messages

- › Tourism expenditure and arrivals have both shown massive growth in the March 2016 year.
- › Forecasts for the sector show impressive growth in tourism spend, dominated by an increase in Chinese tourists. Overall, the number of visitors is expected to increase to over 4,000,000 by 2022, assuming there is appropriate infrastructure to support this growth.
- › The quality of tourism infrastructure is important, especially in relation to visitor experience.
- › While New Zealand performs relatively well in air transport infrastructure, road and rail infrastructure is viewed as relatively poorer on average than in other developed countries.

2.1 New Zealand tourism – state of play and forecasts

Tourism plays a significant role in the New Zealand economy in terms of generating export revenue and creating employment opportunities. Tourism expenditure includes spending by all travellers, whether they are international, resident householders, or business and government travellers. International tourism expenditure includes spending by foreign students studying in New Zealand for less than 12 months.

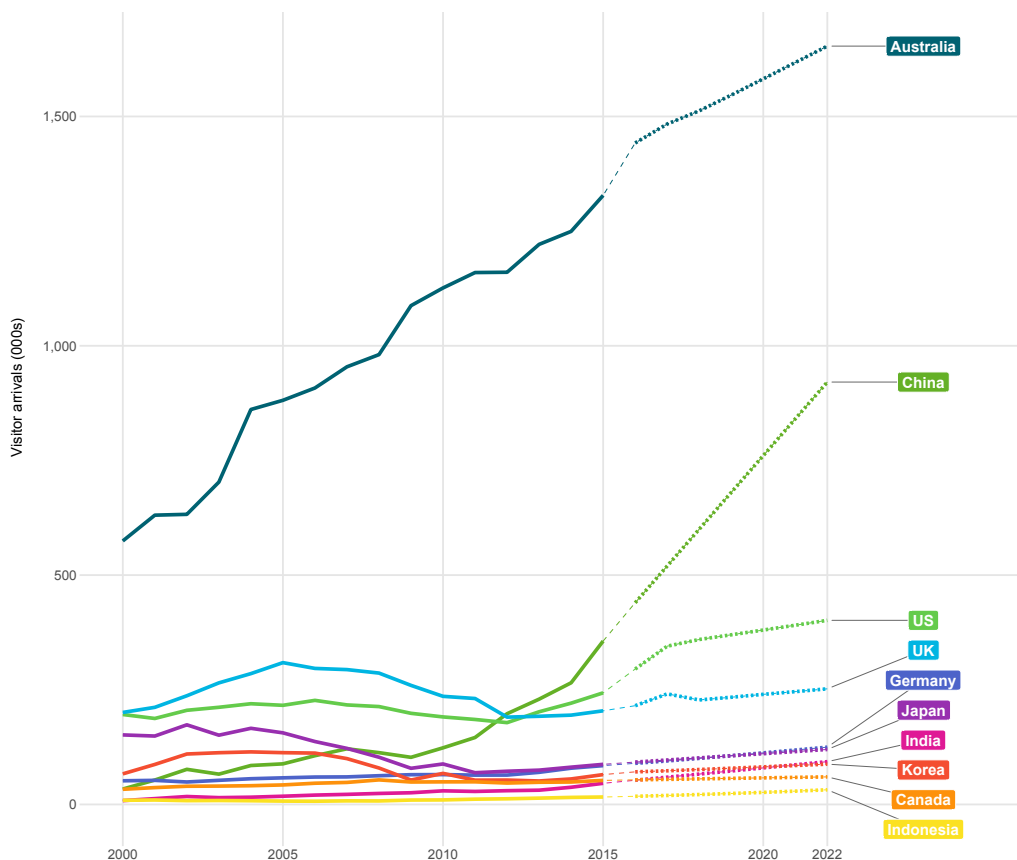
Total tourism expenditure was \$29.8 billion for the year ended March 2015, an increase of 10.3 per cent from the previous year. International tourism expenditure increased 17.1 per cent (\$1.7 billion) to \$11.8 billion, and contributed 17.4 per cent to New Zealand's total exports of goods and services in the March 2015 year. Over the same period, domestic tourism expenditure increased 6.3 per cent (\$1.1 billion) to \$18.1 billion.

Total annual overseas visitor arrivals passed 3 million for the first time in 2015 and have continued to increase, with arrivals reaching 3.3 million in the year ended March 2016.

Higher arrivals from Australia, China and the United States drove total international arrival growth over the last year. Australian arrivals grew at 7 per cent and made up 42 per cent of all arrivals in the year ended March 2016, while Chinese arrivals grew at 28 per cent and made up 12 per cent of all arrivals.

The growth is expected to continue, with arrivals forecast to reach 4.5 million by 2022 (from 3.1 million in 2015). The main contributors to this growth are expected to be China, Australia and the United States.

Figure 1: International visitor arrivals, annual average, 2016–2022 forecasts

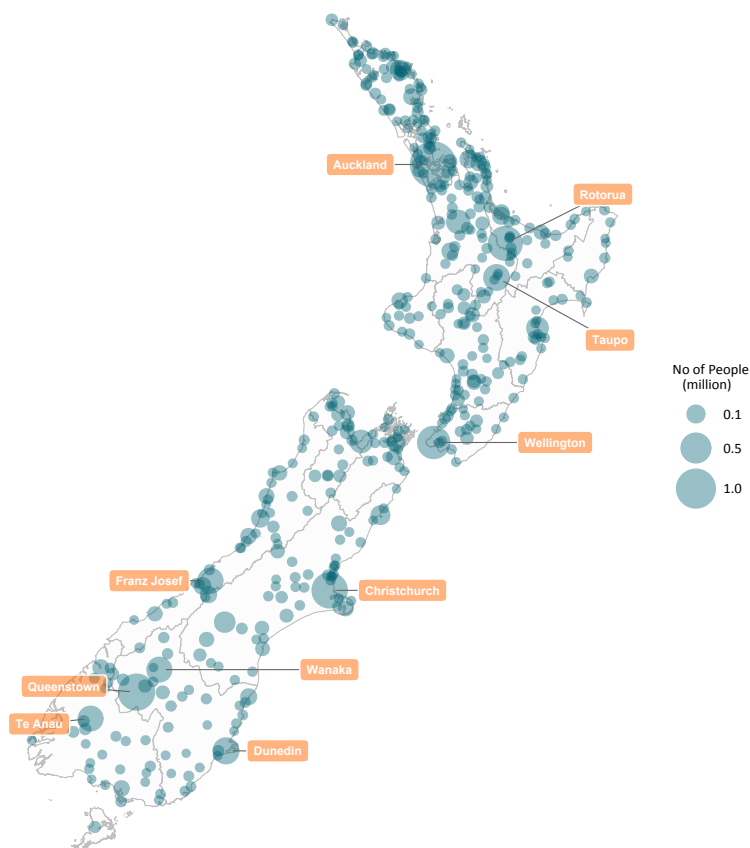


Source: MBIE, Tourism Forecasts

While Australia, China and United States are projected to remain the three largest source markets, all markets are growing, including the United Kingdom, Japan, and newer developing markets in Asia and South America.

These forecasts are purely demand-based. They assume there are no constraints in the supply of tourism infrastructure, such as air capacity, accommodation, or other factors. Therefore, inadequate investment in infrastructure will make a significant impact on realised demand growth.

For 2015, the largest tourist destination for international visitors was Auckland (Figure 2). Approximately 1.5 million tourists visited Auckland during their stay in New Zealand. This is followed by Queenstown (820,000), Christchurch (770,000), Rotorua (690,000) and Wellington (610,000). Other significant international tourism centres include Dunedin, Taupo, Franz Josef Glacier, Wanaka and Te Anau. These numbers are based on overnight visits only.

Figure 2: Locations visited by international tourists in 2015

Source: MBIE, International Visitor Survey

A total of 551,000 delegates attended 5,500 conferences/conventions in the year ended December 2015. This indicates more delegates attended a greater number of events compared to the year ended December 2014, where 500,000 delegates attended 5,200 conferences. The number of delegate days for conferences and conventions was unchanged between the two years, at around 1.1 million days.

Visitors cite many reasons to come to New Zealand.

- › The country is highly geographically diverse and contains a range of different scenery, including subtropical forests, beaches, glaciers, mountains and plains in a relatively small area.
- › New Zealand also has a reputation for outdoor adventures, including surfing, skiing, kayaking, tramping and sailing, among others.
- › The country has several endemic animal and plant species, such as the iconic kiwi, tuatara and ferns.
- › Travelling is seen to be relatively easy, with self-driving popular. The distances between towns and attractions are relatively short.
- › New Zealand is famous for its high quality wines, with Marlborough and the Hawke's Bay being the key grape-growing regions.

- › Māori culture is often a drawcard for tourists, with Māori-centred attractions throughout the country, especially in Auckland, Rotorua and many other tourist centres.
- › The population is relatively sparse. New Zealand has a land area the size of Great Britain but only 4.5 million inhabitants, so New Zealand feels less crowded than other countries.
- › New Zealand has a temperate climate, without extremes of hot or cold.
- › Visitors also view the country as being relatively safe, even for solo travellers.

2.2 Role of infrastructure in tourism destination competitiveness and visitor attraction

There are a variety of factors that determine why a particular location is attractive to tourists. One recent study² listed these as:

- › heritage and culture
- › social competitiveness (labour market factors, and staff training, TV stations, newspapers)
- › education (qualifications achieved)
- › communication facilities (ICT readiness)
- › tourism price competitiveness
- › environmental and sustainability record
- › infrastructure
- › openness (visas, trade).

2.2.1 Significance of infrastructure

The quality of a destination's infrastructure is a key part of its tourism offering – particularly in relation to the visitor experience at the destination. The availability and quality of hotel rooms and other accommodation is likely to be fundamental to a visitor's choice of the timing and the length of a visit to the destination. Road infrastructure enhances accessibility to different parts of the destination country, while sound airport infrastructure ensures that tourists experience a comfortable transition from the plane to destination. Good communication infrastructure allows quick and cheap communication between the origin and destination country and during the traveller's visit to the destination. Providing high-standard, online access to essential information about the destination, and for booking accommodation and tourism services (eg, theatre tickets), before embarking on travel reduces the traveller's feelings of uncertainty, fear and asymmetric information. Knowing that other infrastructure, such as wastewater and energy, is reliable also mitigates traveller concerns and enhances the attractiveness of the visit.

That said, while good infrastructure is an important factor in destination attractiveness, it is likely to be less of a drawcard than other factors, like the uniqueness of local heritage and culture.

In early models of destination attractiveness, infrastructure was described as an important supporting factor for the real drivers of destination competitiveness – namely, core resources and attractors, destination management, destination policy planning and development, and

² Mazanec, J. A., Wöber, K., & Zins, A. H. (2007). Tourism destination competitiveness: From definition to explanation? *Journal of Travel Research*, 46(1), 86–95.

amplifying determinants (eg, locations, security, market awareness).³ In other models, infrastructure has been characterised also as a critical part of the services that add up to the tourist destination experience.⁴

Researchers and planners⁵ studying tourism on the island of Mauritius in the Indian Ocean have undertaken a comprehensive and systematic measurement of the influence of infrastructure on tourism development. Their conclusions include:

The growth in tourism infrastructure (rooms and capital works) on Mauritius has contributed positively to the number of visitor arrivals (along with, but distinguishable from, relative prices, distance, and average incomes in the origin country).⁶

The transport capital stock of Mauritius contributed positively to the number of tourist arrivals between 1971 and 2000. It was perhaps not as important as a contributor to tourism development as the growth in the number of rooms available for tourists to rent, but it was more significant than the amount of capital investment in communications, energy, wastewater and defence during the same period.⁷

2.2.2 New Zealand's tourism infrastructure

Within the World Economic Forum's most recent *Travel and Tourism Competitiveness Report 2015*,⁸ infrastructure components account for 18 of the 90 competitiveness measures used to rank 141 countries on their competitiveness as tourist destinations.

In that report, New Zealand is ranked as the 16th most competitive destination in the world. However, it comes 21st on infrastructure (largely due to its 49th ranking for ground and port infrastructure, which includes measures of road and rail density and quality, on which it scores poorly).

The quality of New Zealand's tourism infrastructure was an issue in *Tourism Industry Aotearoa's Tourism 2025*,⁹ which acknowledges that, while New Zealand's natural environment provides the setting for a range of visitor experiences, quality infrastructure is needed to support the range of activities that visitors enjoy.

Tourism 2025 argues that:

- › Public investment in tourism infrastructure will encourage private sector investment. Government support for convention centres and upgraded port and airport facilities will lead to private sector investment in complementary assets like hotels, restaurants, activities and attractions. Therefore, it recommends:

3 Crouch, G. I. & Ritchie, J. R. B. (1999). Tourism, competitiveness and societal prosperity. *Journal of Business Research*, 44(3), 137–152.

4 Ritchie, J. R. B. & Crouch, G. I.. (2003). *The competitive destination: A sustainable tourism perspective*. Wallingford, UK: CABI.

5 For example, Khadaroo, J. & Boopen, S. (2008). The role of transport infrastructure in international tourism development: A gravity model approach. *Tourism Management*, 29(5), 831–840; Khadaroo, J. & Boopen, S. (2007). Transport infrastructure and tourism development. *Annals of Tourism Research*, 34(4), 1021–1032.

6 Seetanah, B., Juwaheer, T. D., Lamport, M. J., Rojid, S., Sannasse, R. V., & Subadar, A. U. (2011). Does infrastructure matter in tourism development? *University of Mauritius Research Journal*, 17, 105.

7 Boopen, S. (2006). Transport capital as a determinant of tourism development: A time series approach. *Tourismos: An International Multidisciplinary Journal of Tourism*, 1(1), 55–73. Retrieved from <http://mpa.ub.uni-muenchen.de/25402/>

8 World Economic Forum. (2015). *The travel and tourism competitiveness report 2015: Growth through shocks*. Retrieved from http://www3.weforum.org/docs/TT15/WEF_Global_Travel&Tourism_Report_2015.pdf

9 Tourism Industry Association of New Zealand. (n.d.). *Tourism 2025*. Retrieved from <http://tourism2025.org.nz/>

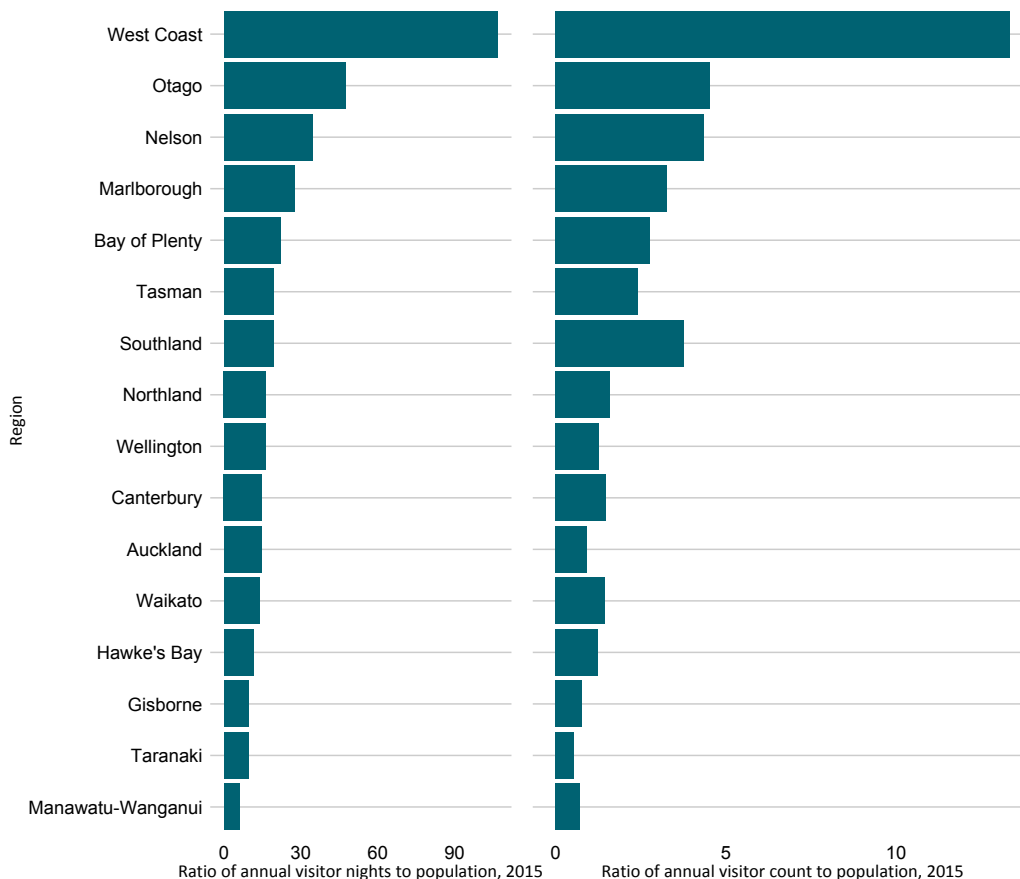
- continued government support for the International Convention Centre in Auckland and encouragement of a regional network of centres to further boost the important convention and incentive market
 - upgrading port infrastructure to handle the requirements of larger cruise ships visiting New Zealand more often
 - securing continued commitment from central and local government agencies for tourism to be prioritised as a critical contributor to Christchurch’s economic recovery.
- › Better Wi-Fi connectivity and broadband services will improve the visitor experience and raise New Zealand business capability, ensuring the tourism industry is internationally competitive. According to analysis by Tourism New Zealand¹⁰ on the International Visitor Survey microdata, the lack of free Wi-Fi is the main reason people rate accommodation poorly. Tourism 2025 recommends that New Zealand extend access to low cost Wi-Fi and broadband.
- › Local infrastructure that supports visitor activities also supports the people who live in the communities they visit. Roads that are safe and enjoyable and offer places to stop along the way enhance the holiday experience. Good signage, public toilets and dump stations, recycling and other local amenities are also integral to creating an outstanding visitor experience. Therefore Tourism 2025 recommends:
- through New Zealand Trade and Enterprise, promoting and encouraging international investment in tourism assets
 - supporting local infrastructure development, especially in popular visitor destinations
 - continuing the focus on improving visitor facilitation, including translation of public agency ‘visitor facing’ information
 - continuing investing in aviation infrastructure and technology, including Airways New Zealand’s navigation technology upgrades.

2.3 Tourism and population

Some regions are more affected by tourism than others. The ratio of visitor nights to population is a useful indicator of how tourism may affect the local infrastructure (Figure 3). A high ratio indicates that the relative number of tourists in relation to local residents is high, which means that the population in the region swells considerably during the high tourist season and there is an increased pressure on local infrastructure over that period. Among regions, the West Coast has the highest ratio, followed by Otago, Nelson, and Marlborough.

¹⁰ Tourism New Zealand. (2015). *Visitor experience*. Retrieved from <http://www.tourismnewzealand.com/markets-stats/research/infographics/visitor-experience/>

Figure 3: Ratio of annual visitor nights to population and visitor count to population, year ended December 2015



Source: MBIE, International Visitor Survey

2.4 State of the Industry Survey 2015

In a survey of 269 tourism industry businesses in 2015 by Tourism Industry Aotearoa, 37 per cent of respondents stated that (lack of) investment in infrastructure was a challenge for their business (3rd most popular response), and 21 per cent stated that it was the most significant challenge for their business (4th most popular response).¹¹ Conversely, 55 per cent of respondents stated that increased air capacity was an opportunity for their business (12 per cent considered it as their most significant opportunity), and 41 per cent stated that infrastructure improvements were an opportunity for their business (5 per cent considered it as their most significant opportunity).

¹¹ Tourism Industry Association New Zealand & Lincoln University. (2015). *State of the tourism industry 2015*. Retrieved from <http://tourism2025.org.nz/assets/Uploads/SOI-2015-Final.pdf>

The most significant challenge for tourism businesses in the survey was seasonality issues, which almost half of respondents stated as their most important challenge. In open survey answers the reason for the response was elaborated on with respondents describing issues such as accommodation capacity, overcrowding at tourist sites, and the result these have on tourist satisfaction.

In summary, the survey highlighted the importance of tourism infrastructure and its impact on businesses within the industry.

3 International air travel infrastructure

■ Summary

- › Current air travel infrastructure is not sufficient to meet the expected demand growth in tourists over the next seven years.
- › Inbound seat capacity can be relatively quickly changed through adding/removing flights, assuming appropriate air service agreements are in place. However, capacity of airport infrastructure requires long-term planning. New Zealand's international airports appear to be proactively working towards the expansion in airport infrastructure, though there could be short-term challenges before these large-scale developments come online.
- › The profitability of air routes (and therefore the likelihood of additional capacity coming online) depends on a combination of yield (return per passenger) and load factor (how full the airplane is). There are relatively few barriers to enter the market, so potential routes will be taken by an air carrier if they are profitable.

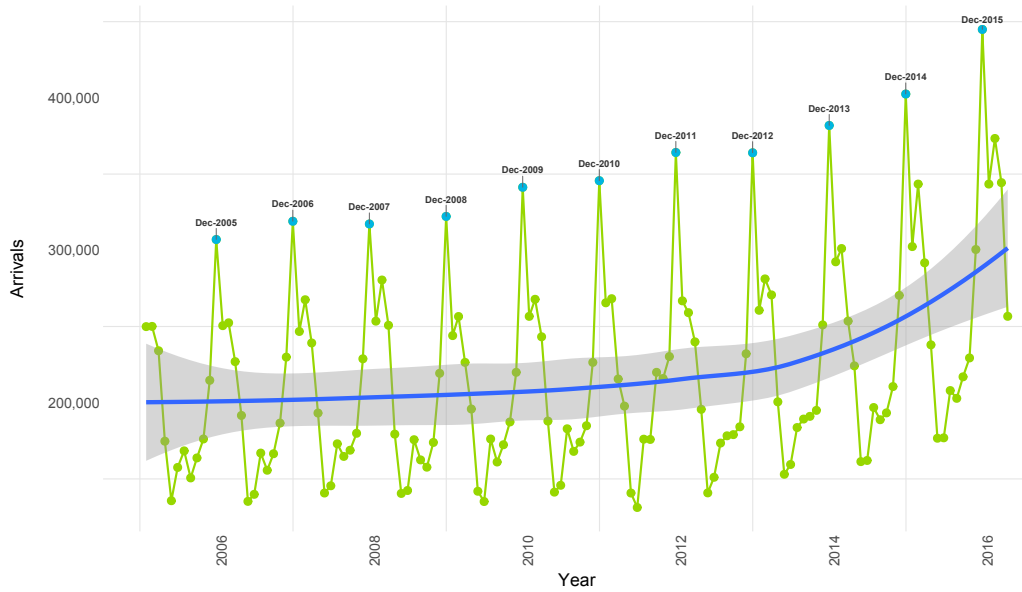
3.1 International air travel infrastructure demand

Of New Zealand's 3.5 million annual visitors, 99 per cent come by air. Regions with international airports are widely recognised as being 'gateways' for international tourists to New Zealand, and serve as hubs from which they disperse to the regions.

While domestic air travel is important for the regional dispersal of tourists from the main international airports, it is difficult to separate tourist trips from commuting or business trips in our data – therefore it is excluded from this analysis.

While international visitor arrivals were relatively steady over the period from 2007 to 2012, from 2013 onwards there has been consistent growth as demand has recovered since the global financial crisis. Large reductions in fuel prices have contributed to a significant improvement in airline profitability and, as a consequence, their appetite for pursuing capacity growth – especially in the delivery of long-haul international air services. From the January 2013 year to the January 2016 year, there has been a 24 per cent increase in the number of arrivals into New Zealand. A large proportion of this growth has happened recently, with 10 per cent growth occurring in the March 2016 year. Annual arrivals have hit a record number, with 3.3 million international visitors in the year ended March 2016.

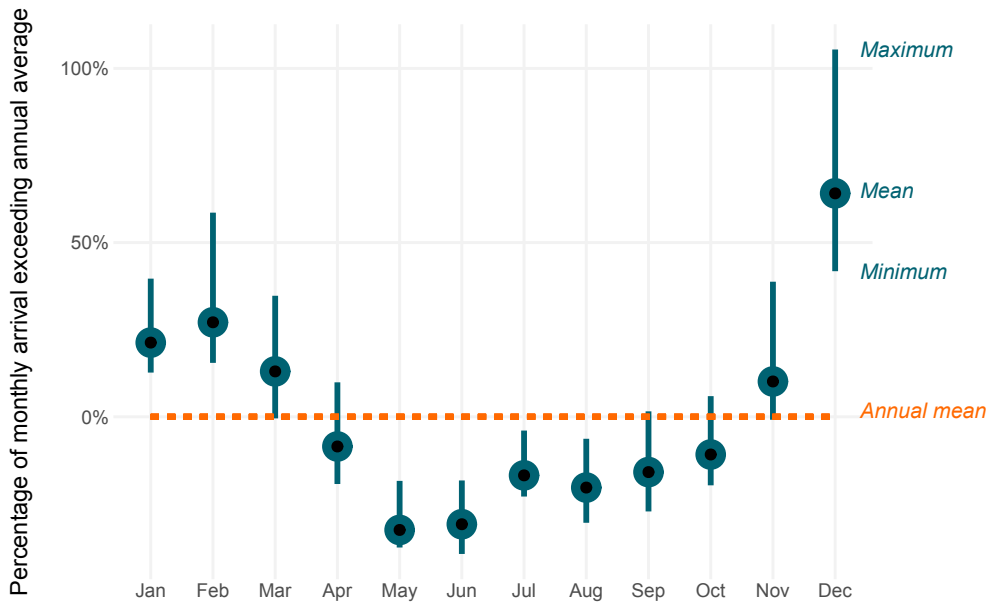
Figure 4: International visitor arrivals, monthly



Source: International Travel and Migration statistics, Statistics New Zealand

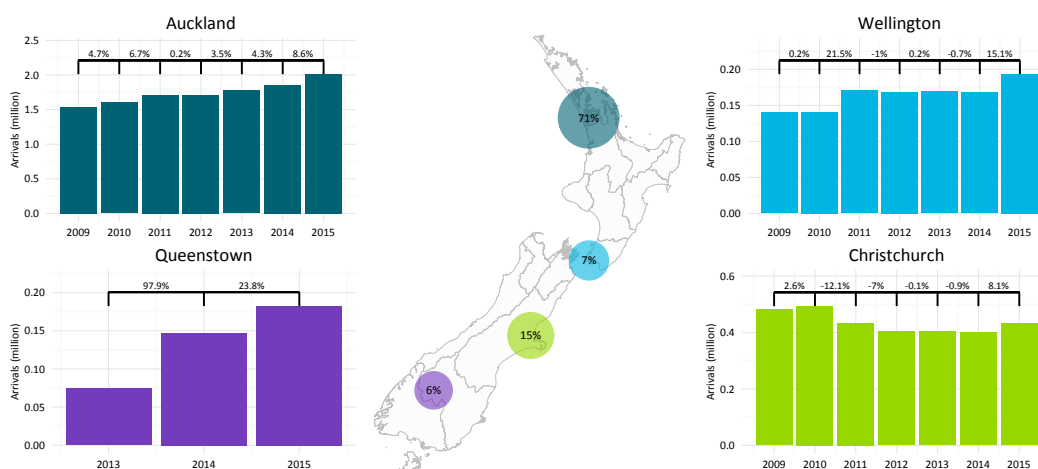
Monthly visitor arrivals are much higher in the summer, peaking in December each year. Considering the last 10 years (2005 to 2015), December arrivals are approximately 64 per cent higher than the annual average, while June is approximately 30 per cent lower than the annual average (Figure 5). Air travel infrastructure, therefore, must be versatile enough to accommodate this level of variation throughout the year. Given the fact that airports must also deal with visitors departing after their trip, this translates into around 6 million passenger transfers each year. When considering inbound and outbound trips of New Zealanders each year, the total passenger movements for the year ended March 2016 were over 11.6 million.

Figure 5: Seasonality of international visitor arrivals



Source: International Travel and Migration statistics, Statistics New Zealand

The majority of the international visitors arrive at Auckland Airport (71 per cent in 2015) (Figure 6). Auckland has seen steady growth in arrivals, up 8.6 per cent in 2015. However, Queenstown and Wellington airports have seen stronger percentage growth over the last year (at 24 per cent and 15 per cent, respectively). The increase in Queenstown Airport arrivals is partly due to a reduction in volume through Christchurch, where infrastructure problems related to the 2010 and 2011 earthquakes (especially available accommodation and travel congestion difficulties), as well as the earthquakes themselves, may have discouraged some tourists. In June 2016, night operations will start in Queenstown, which is expected to attract more weekend tourists from Australia. Wellington Airport has seen growth due to new routes starting in the last year, but the potential for future growth may be muted. Arrivals to Christchurch Airport increased in 2015, but are still below pre-earthquake levels.

Figure 6: International visitor arrivals, annual average, by port

Source: International Travel and Migration statistics, Statistics New Zealand

Work undertaken by Auckland Airport suggests that there are opportunities to grow air capacity to a number of parts of the world, most notably Germany, Canada and Australia. Additional flights to these countries could potentially lead to higher visitor arrivals, as long as airport infrastructure is sufficient to support this growth.

3.2 International air travel infrastructure supply

Air transport infrastructure for tourism comprises airports, airplanes and the air navigation system. The quality and capacity of this infrastructure can have significant impact on the quality of a tourist's experience.¹²

The supply of air transport infrastructure can be broken down into two main groupings:

- › infrastructure of airports
- › number and capacity of flights.

Sufficient capacity of both are needed to support the high growth in visitor arrivals forecast. While new air services involve substantial commitments from airlines in terms of capital and operating costs, the primary assets (aircraft) are ultimately mobile and can be redeployed between markets with relatively short lead times. The number of flights to a particular destination can adjust quickly, provided there is sufficient aircraft available and sufficient demand at appropriate yields for airlines to operate profitably. In contrast, investment in airport infrastructure typically involves longer lead times and financial commitments to immobile, largely specialised assets with high fixed costs.

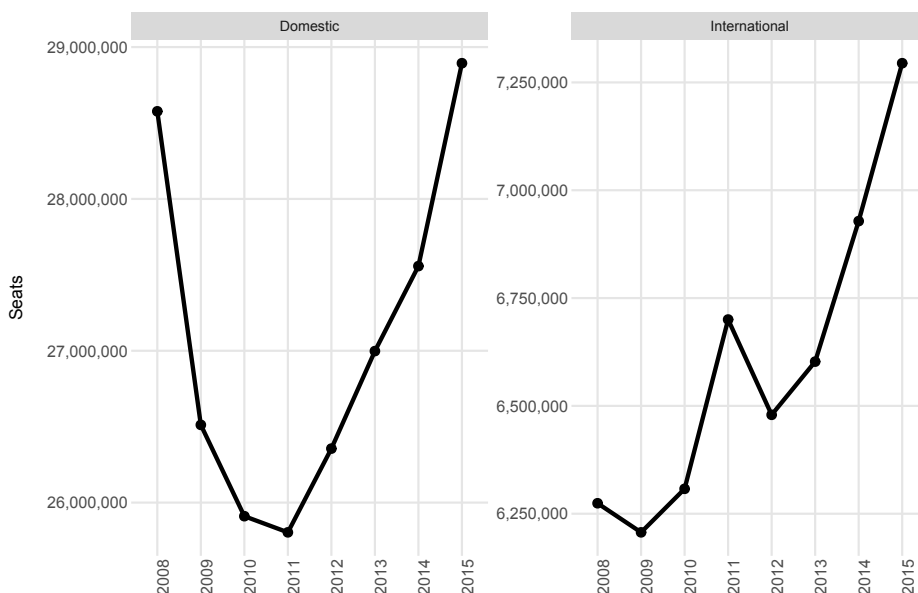
It is difficult to measure the available supply of airport infrastructure. However, it is relatively straightforward to identify capacity and the number of seats occupied of flights into New Zealand.

12 National Infrastructure Unit. (2015). *Infrastructure evidence base – 2015 refresh: Transport sector*. Retrieved from <http://www.infrastructure.govt.nz/plan/evidencebase/2015-nip-evidence-transport.pdf>

New Zealand has five airports with scheduled international services: Auckland, Wellington, Christchurch, Dunedin and Queenstown. Twenty-six airports receive scheduled domestic services from operators of aircraft of 19 seats or more. Two airports (Auckland and Christchurch) are capable of supporting long-haul international air services. Christchurch Airport has a significant amount of under-utilised capacity in this regard. Most airports are owned by local government, though some are partly owned by central government or private investors. Airways New Zealand, a state-owned enterprise, provides air navigational infrastructure.

Aviation capacity is provided by the two domestic and 24 international passenger carriers which operate in New Zealand. This infrastructure is for the most part privately provided. The total air capacity is shown in Figure 7, with 28.9 million domestic seats and 7.3 million inbound international seats in 2015.

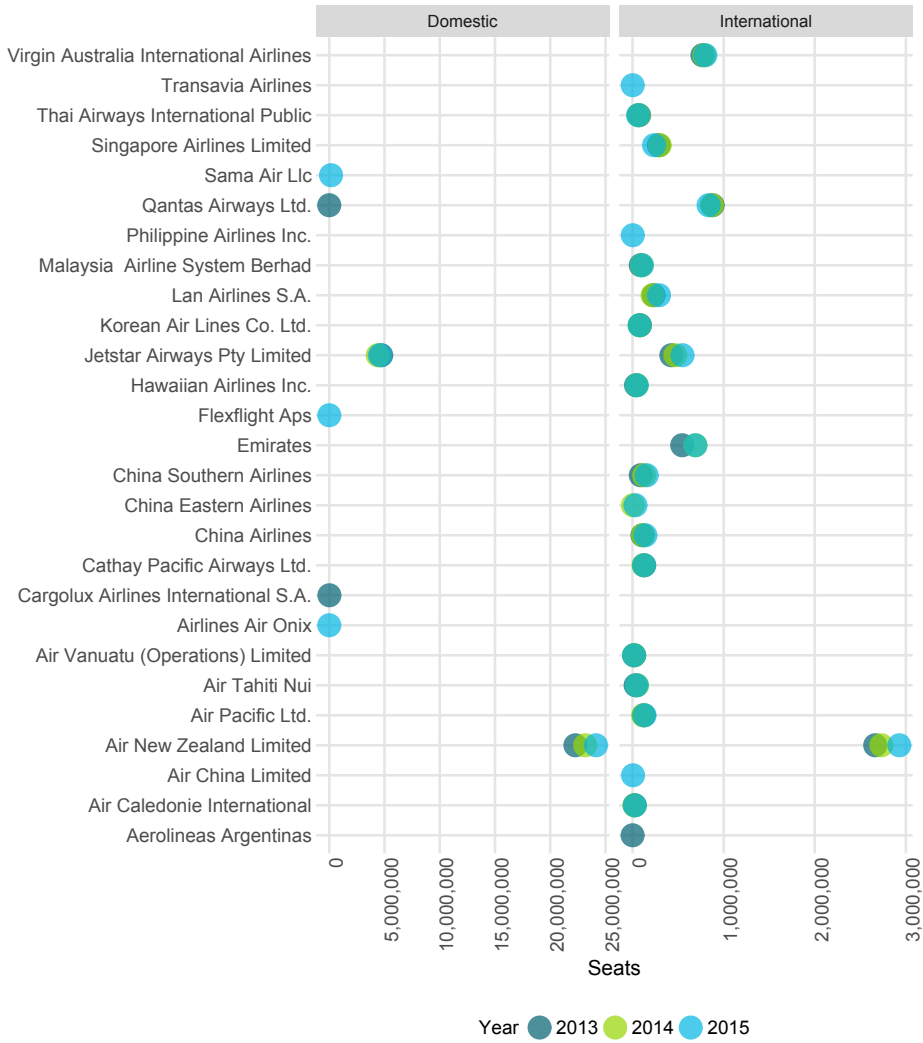
Figure 7: Seat capacity by origin



Source: Sabre

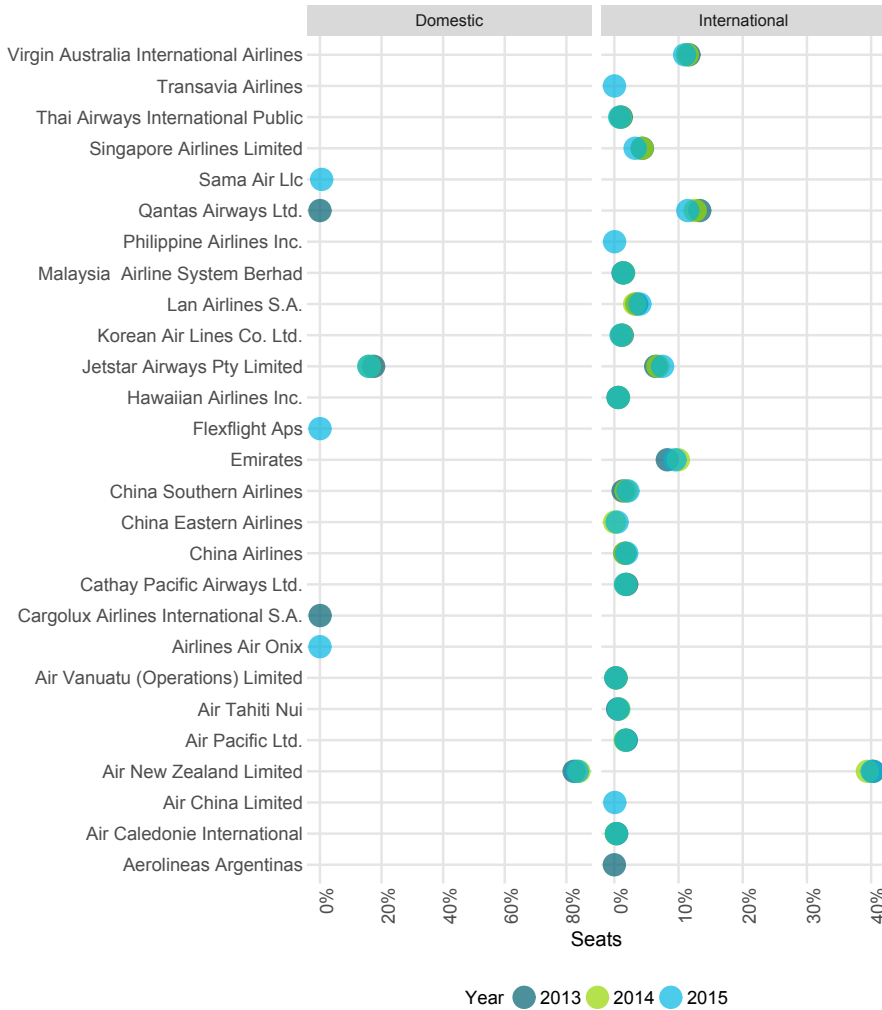
Air New Zealand carries approximately 80 per cent of domestic traffic and, together with their alliance partners, operates 40 per cent of international capacity into and out of New Zealand. About 95.6 per cent of passenger seat hours are flown on large planes (greater than 30 seats).

Figure 8: Flight capacity of international and national flights per operator



Source: Sabre

Figure 9: Percentage of flight capacity of international and domestic flights, by operator



Source: Sabre

3.2.1 Air service agreements

The pool of air routes available to carriers is governed by air service agreements. These agreements are required before an international flight can operate between two countries. New Zealand has 59 agreements in place, 18 agreements approved by Cabinet are awaiting signature, one code-share arrangement is awaiting signature, and two agreements are under negotiation.

Table 1: New Zealand air service agreements

COUNTRY	AGREEMENT TYPE	STATUS
Argentina, Australia, Austria, Belgium, Brazil, Cambodia, Canada, China, Denmark, Fiji, Finland, France, Germany, Greece, Hong Kong, Indonesia, Ireland, Italy, Jamaica, Japan, Korea, Kuwait, Luxembourg, Macau, Malaysia, Mexico, Nauru, Niue, Norway, Papua New Guinea, Philippines, Qatar, Russia, Saudi Arabia, Seychelles, Solomon Islands, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Taiwan, Thailand, Turkey, United Arab Emirates, United Kingdom, Uruguay, Vanuatu, Viet Nam	Bilateral air services	In place
Brunei, Chile, Cook Islands, Mongolia (cargo-only), Singapore, Tonga and the United States of America	Multilateral Agreement on the Liberalization of International Air Transportation (MALIAT)	In place
Curacao, Czech Republic	Code-share only air services arrangement	In place
Bahrain, Colombia, Egypt, Ethiopia, Iceland, Israel, Mauritius, Nepal, Netherlands, Nigeria, Pakistan, Panama, Portugal, Oman, Paraguay Serbia, Togo, Zambia	Air services	Approved by Cabinet but awaiting signature
The Bahamas	Code-share only	Awaiting signature
Laos, Peru	Air services	Under negotiation

Air service agreements specify:

- › routes that can be flown
- › capacity (frequency and aircraft types) that may be offered
- › how many airlines may operate
- › how tariffs are regulated.

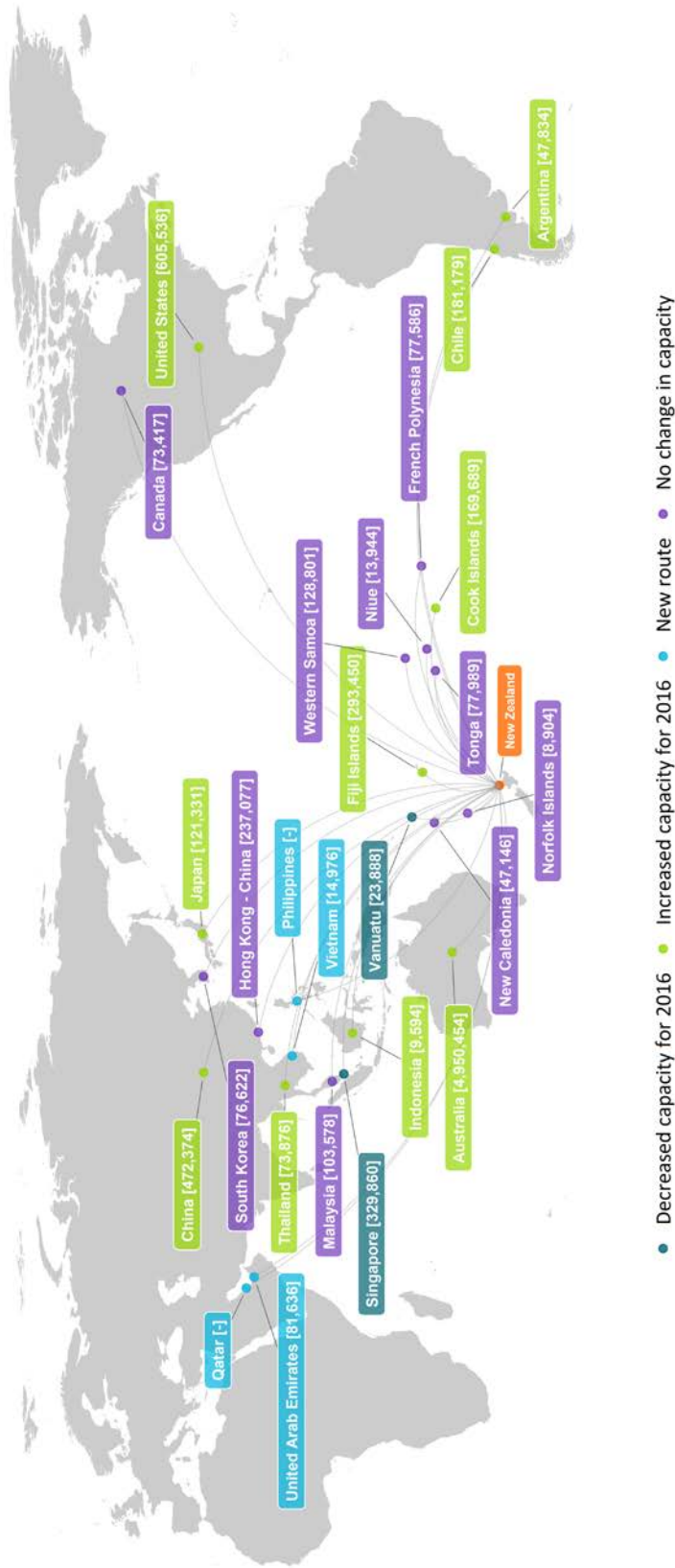
Open skies agreements are a subset of air service agreements that place little or no restrictions on available routes, number of flights or flight prices. New Zealand currently has more than 40 agreements that could be classified as open skies agreements, depending on the definition of open skies used by different jurisdictions. These agreements set New Zealand as one of the most open commercial aviation markets in the world, with relatively few barriers that could restrict air carriers flying to the country.

3.2.2 International air connections

Air connectivity is critical to the tourism industry and to the New Zealand economy as a whole. Figure 10 shows all the countries flying directly to New Zealand, while Figures 42 to 45 in Appendix 3 of this report show the cities with direct flights to New Zealand by port, along with new routes and planned expansions. Please note that in the graphs, due to fluctuations in capacity across years, a change in capacity is only considered if it grows or falls by more than 5 per cent. Capacity changes of less than 5 per cent are considered to be unchanged.

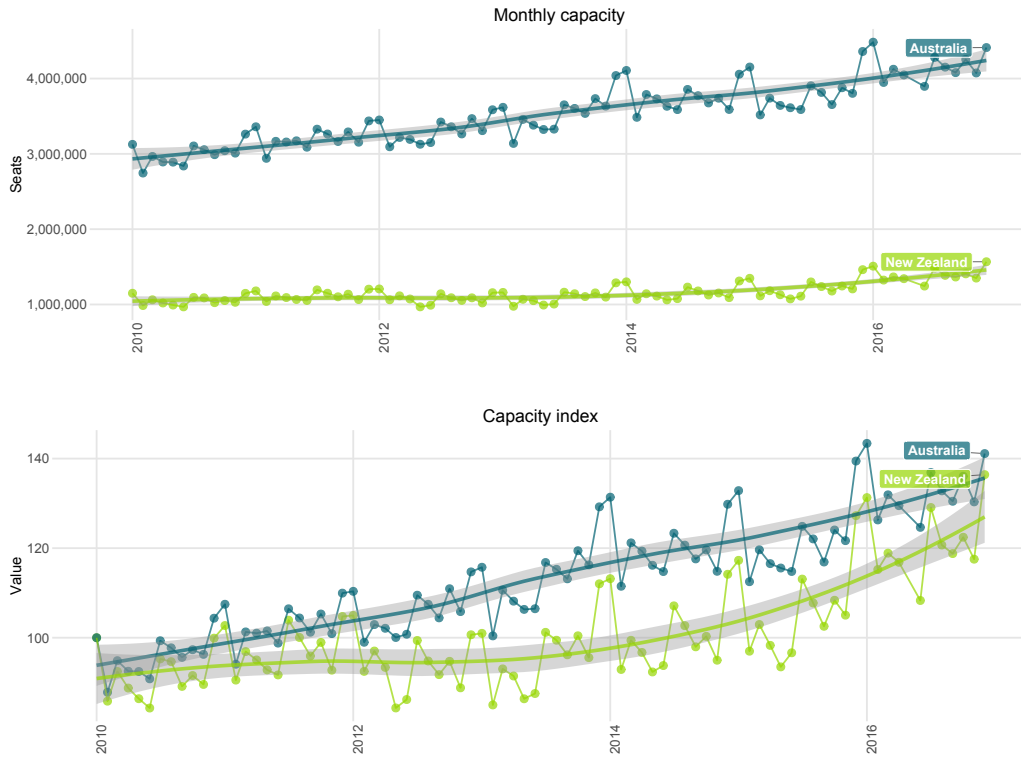
New air routes provide increased capacity and this can influence demand. After an extended period of little growth in annual capacity (number of seats), New Zealand saw a significant increase in inbound flight capacity from late 2013, with this expected to continue in 2016 and 2017 (refer Figure 7). In contrast, growth in inbound capacity to Australia has been more consistent over the period. Given its relatively small size and distance from a number of international markets, long-haul international air services to New Zealand involved significant commercial risks, especially in the very high fuel price environment that existed between 2009 and 2013. These risks have reduced as demand has continued to grow and the cost of fuel has decreased significantly.

Figure 10: Inbound capacity to New Zealand, 2016



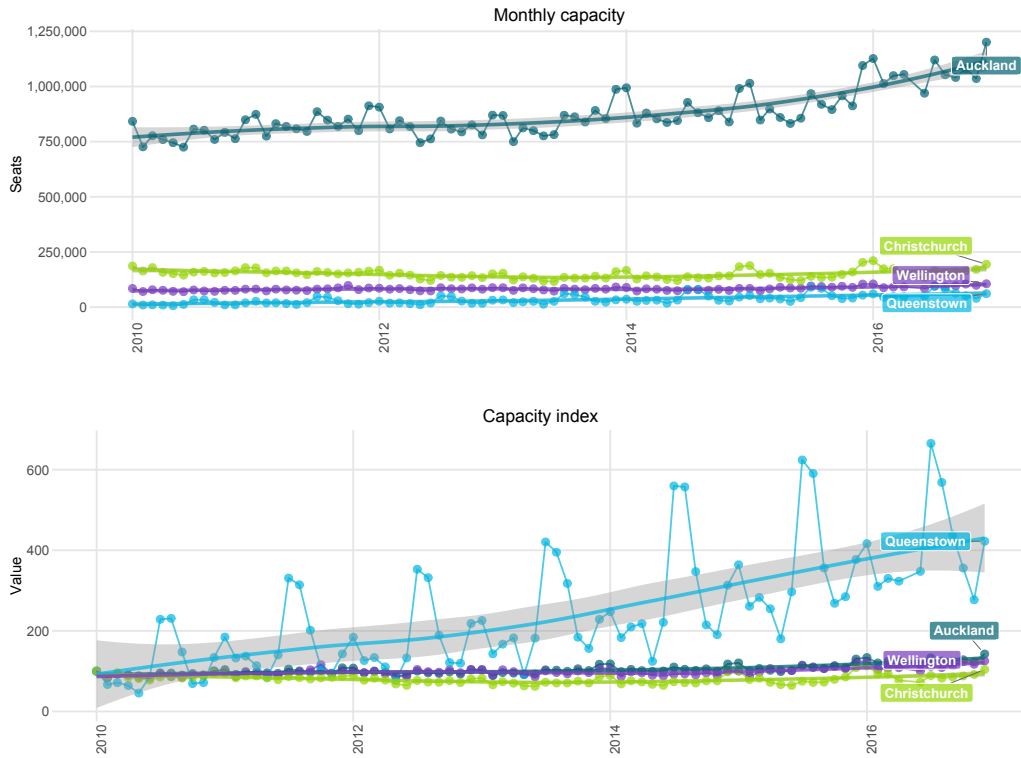
Note: data for the Philippines and Qatar are currently unavailable.

Figure 11: Inbound capacity – New Zealand vs Australia



The recent growth in capacity has been shared across New Zealand’s four main international airports. Capacity growth has been exceptional in Queenstown, up 97.9 per cent from 2013 to 2014, and 23.8 per cent from 2014 to 2015. The number of international arrivals in Queenstown in 2013 was very low when compared to the other airports in New Zealand. That said, Queenstown’s capacity is now just approaching Wellington’s. In terms of actual seats, 58.5 per cent of the growth has occurred in Auckland, with much smaller absolute growth in capacity for the other airports.

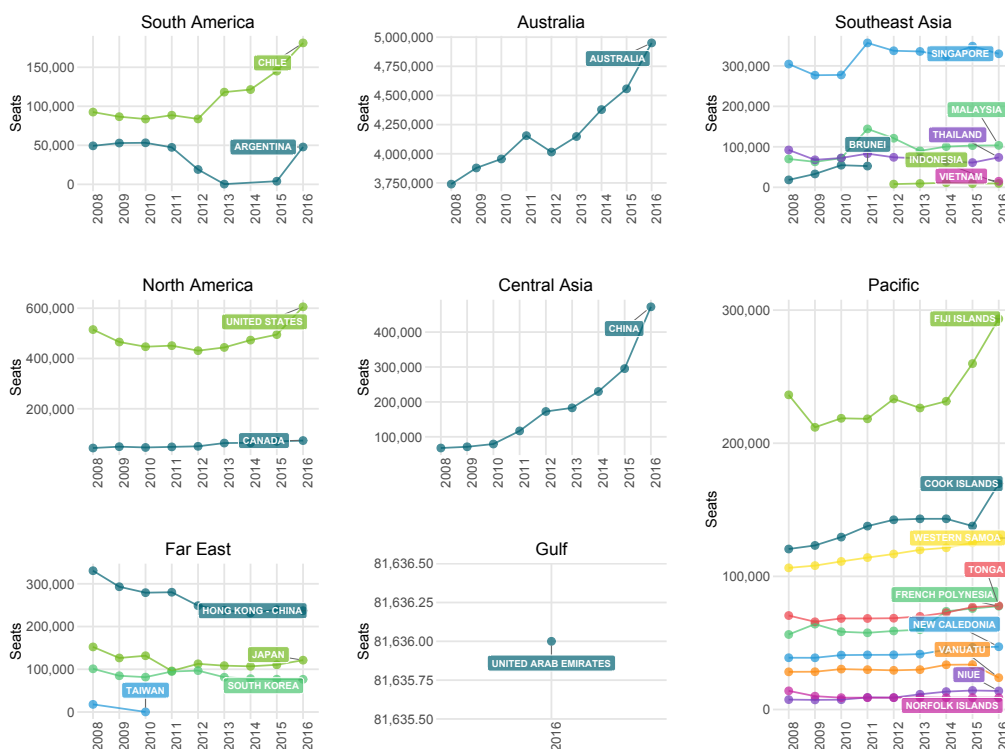
Figure 12: Annual inbound capacity to New Zealand’s main international airports



Source: Sabre

Approximately a million more seats have been made available from Australia over the last four years, increasing capacity by 25 per cent. Capacity to China remains at a much lower level than Australia, but has seen a meteoric rise, from less than 50,000 in 2008 to almost 500,000 in 2016. The capacity of flights to the United States fell over the global financial crisis period, but has since recovered, growing above the previous high in capacity due to new flights to Houston and San Francisco, and growth in the number of existing flights to Los Angeles. Other growth areas include the Middle East, where a new flight from Qatar Airways from Doha to Auckland is planned in February 2017 (which will break records for being the longest commercial long-haul flight in the world).

Figure 13: Annual inbound capacity to New Zealand by origin country



Source: Sabre

3.2.3 Planned/New growth in capacity

New Zealand airports have announced a number of new flights across 2016 that should increase capacity in the short-to-medium term. A full list of these flights is presented in Appendix 1.

3.2.4 Airport infrastructure

Several construction projects are in the pipeline to expand international airport capacity. These projects are required to support the growth in tourist numbers that additional flights will bring.

As part of its 30-year plan, Auckland International Airport plans to build a new terminal, a new northern runway and a new taxi apron, at an estimated cost of \$2.4 billion.¹³ The new terminal will be built in stages, with the plan to be able to accommodate up to 40 million domestic and international passengers annually,¹⁴ and have 94 spaces for aircraft to park. The first stage of the plan, to be completed by 2019, is to merge the domestic and international terminals. More car parking will be in place by 2022. Space has been allocated for a rail corridor and underground station as part of the plan.

13 Auckland Airport. (2014). *Airport of the future: Our vision for the next 30 years*. Retrieved from <http://www.aucklandairport.co.nz/downloads/aial-masterplan.pdf>

14 The existing airport terminal accommodated 16.5 million passengers in 2015.

Construction of a new 10-storey, 1,000-space car park at Wellington Airport is underway. This \$70 million project should be completed by the end of 2017. Work is also underway on a new control tower, estimated to cost around \$18 million, to be completed late 2016. Wellington Airport lodged a resource consent application to extend Wellington's runway on 28 April 2016. The proposed \$300 million extension, if successful, will increase the runway south by 354 metres, allowing direct long-haul flights to Asia. A resource consent hearing on the proposal is expected to occur in February 2017.

Queenstown Airport's \$18 million expansion was completed in April 2016. This was an 18-week construction project, including widening the airport's runway from 15 metres to 45 metres, installing runway, taxiway, apron and approach lights, and trenching for electrical cabling. The investment is designed to increase the capacity of the airport by allowing aircraft operations to be extended beyond a 'daylight hours only' limitation.

In all, around \$2.8 billion of work is in the pipeline for New Zealand's international airports, the lion's share (85 per cent) being for Auckland's long-term terminal development.

3.2.5 Sustainability of air services

Load factors measure the percentage of total seats on a flight being used by passengers. They are one of the few readily available measures to assess how an air service might be performing financially for an airline and whether there may be incentives to grow or reduce capacity on a particular route. However, for airline operators, a number of other important questions are involved in such a decision. These factors include, but are not limited to:

- a. Revenue quality – a function of not only the volume of passengers but also the price at which a given level of volume exists. This influences whether the resultant revenue is derived at an economically sustainable level.
- b. Opportunity cost/prioritisation – Given finite capital, is growth in an existing service or the introduction of a new service the best possible option for deploying that capital in terms of risk and return?

Both of the above factors necessarily include some consideration by an airline of how successfully a new service is expected to compete against other airline offerings in a particular market.

New Zealand has one of the most open air services markets in the world. There are relatively few, if any, barriers to entry other than the commercial risks inherent in operating international flights themselves. Air services are capital intensive, labour intensive and sensitive to both fuel price fluctuations and sudden changes in the demand environment.

Subject to an airline's assessment of those commercial risks, opportunities for growth are typically seized upon quickly. This is evidenced by the pace and scale of the growth seen in the number of international air services that have either started and/or been announced over the past 18 months across each of New Zealand's key tourism markets, including Australia, China, the United States, the United Kingdom/Europe, South East Asia and Japan.

From the Australia market, annual average load factors are generally growing across all airports (apart from Queenstown). The load factor into Auckland has been increasing since 2013 from 70 per cent up to 75 per cent.

The Auckland load factor is lower than both Wellington and Dunedin. Dunedin, as a relatively niche international airport serving only Australia, has a load factor over 80 per cent. Outside of the Australian market, some clear patterns emerge. Pacific Island countries, including New Caledonia, Tonga, French Polynesia and Western Samoa, have seen strong increases in load factors over the last two to three years.

Given these countries are more likely tourist destinations rather than tourist sources, and given New Zealand's close ties with the Pacific, it suggests that these flights are catering for either New Zealand tourists and international tourists using New Zealand as a base, or for visiting friends and relatives in these islands.

In conclusion, it looks likely that New Zealand will continue to attract more airlines eager to expand existing routes and grow new ones. Conversely, there is little fear that existing routes will close within the current environment.

4 Cruise infrastructure

■ Summary

- › New Zealand's cruise industry plays a small but growing role in bringing visitors to New Zealand, with the number of cruise passenger arrivals growing five-fold over the last 10 years.
- › Current infrastructure seems to be suiting current demands (with the exception of Christchurch, where earthquake damage will take a long time to repair). One of the main challenges facing the industry going forward is ensuring that appropriate cruise infrastructure is provided for larger and longer cruise ships. Lack of appropriate facilities to dock and transfer passengers may discourage cruise companies coming here, and may negatively affect visitor experience.
- › One way to overcome this challenge would be to invest into additional capacity for docks, such as expanding wharves in order to accommodate longer vessels.

4.1 Cruise infrastructure demand

The number of cruise ships coming to New Zealand and the number of passengers per ship have grown considerably from a decade ago,¹⁵ increasing five-fold in the 10 years to the 2014/15 year. A forecast produced by Cruise New Zealand indicates that these numbers are expected to keep growing. The number of passengers has grown 48 per cent from 2010/11 (136,200) to 2014/15 (201,400), and they are expected to grow another 29 per cent by 2016/17 (to 259,200). The average number of passengers per cruise is projected to grow significantly over the 2015/16 and 2016/17 years, going from 1,590 in 2014/15 to 1,920 in 2016/17, suggesting that the average size of cruise ships will increase over that period.

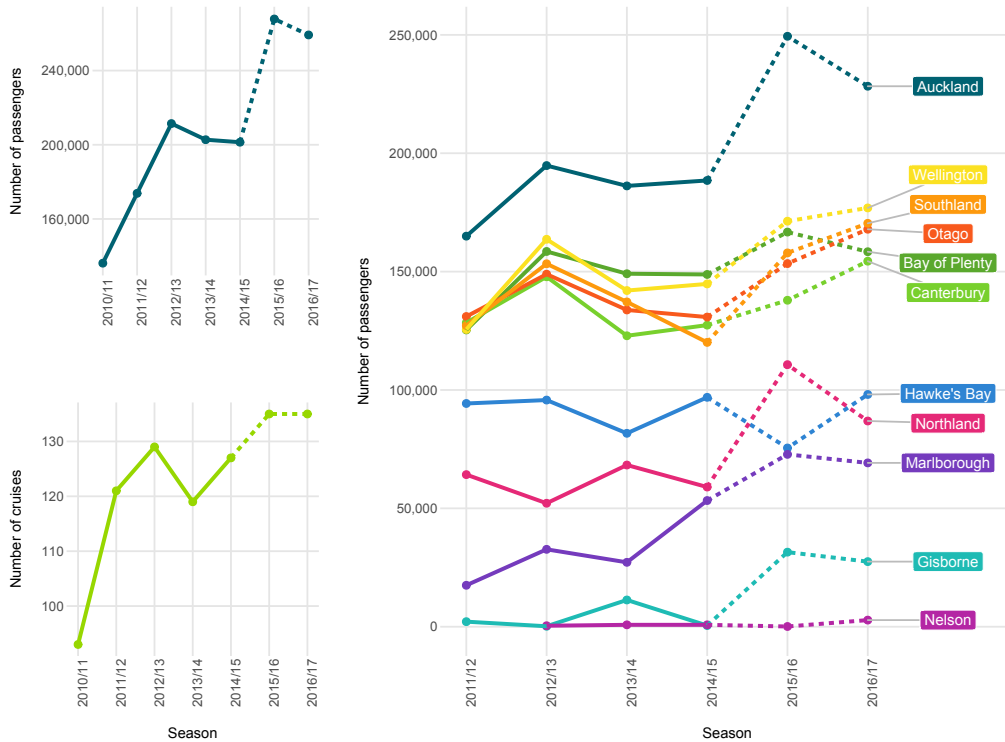
The cruise industry is anticipating that larger ships (of around 350 metres) will visit Auckland during the next five years with increasing frequency, according to Auckland Tourism, Events and Economic Development's Cruise Action Plan for Auckland.¹⁶ A significant number of new cruise ships on order are larger than those currently visiting New Zealand (4,000–6,000 passengers). As these larger ships enter service, existing ships are being redeployed to the Oceania region.

Two 4,000+ and a number of 3,000+ passenger ships will be based in Asia by 2018 and *Ovation of the Seas* (4,200 passengers) will be in New Zealand for the 2016/17 season.

¹⁵ Tourism New Zealand. (2015). *Cruise sector*. Retrieved from <http://www.tourismnewzealand.com/markets-stats/sectors/cruise-sector/>

¹⁶ Auckland Tourism, Events and Economic Development. (2015). *Cruise action plan for Auckland*. Retrieved from http://www.aucklandnz.com/downloads/ATEED_Cruise_Action_Plan_110515.pdf

Figure 14: Number of historical and projected passengers and cruises to New Zealand



Note: Forecasted values presented using dashed lines.
Source: Cruise NZ

Most growth historically has been driven by passengers from Australia and the United States, and this is projected to continue across 2015/16 and 2016/17 interestingly with a large growth in New Zealander passengers as well. Australians make up half of the growth in passengers in these periods, while New Zealanders make up 17 per cent, and Americans make up 12 per cent.

New Zealand as a cruise destination is highly dependent on Australia as a source market. Australia as a source market has been recording considerable growth. Consequently, more cruise lines are increasing their capacity in Australia and New Zealand, which will potentially increase the number of ships choosing New Zealand as destination.

Table 2: Forecast growth in cruise passengers by nationality

NATIONALITY	FORECAST GROWTH IN PASSENGERS BETWEEN 2014/15 AND 2016/17	% OF TOTAL
Australia	27,600	48%
Canada	2,400	4%
China	-1,000	-2%
Germany	2,400	4%
Spain	100	0%
France	-300	-1%
Great Britain	5,100	9%
India	0	0%
Italy	0	0%
Japan	-800	-1%
New Zealand	9,900	17%
Singapore	-100	0%
United States	7,000	12%
Others	5,600	10%
Total	57,900	100%

Source: Cruise New Zealand

Key forecast growth areas (in terms of absolute growth in unique passengers) include Southland, where passengers are forecast to increase by 50,000 by 2016/17, and Auckland, where passengers are forecast to increase by 40,000. Proportionately, Gisborne is forecast to have the fastest growth, increasing from very little in 2014/15 to around 30,000 passengers in 2016/17.

4.2 Cruise infrastructure supply

In New Zealand there are 17 ports that cruise ships can call into. However, 85 per cent of cruise activity is concentrated in six ports: Auckland, Tauranga, Wellington, Akaroa, Port Chalmers and Fiordland. Most ports are owned by local government, with some partly privately owned.

The number of cruise ships visiting New Zealand has grown from 96 in 2008 to a forecast of 124 in 2015. Over the same period, days in port have increased from 491 to 712 days.

There are a number of aspects to cruise infrastructure.

- › The number of cruise ships able to be in port at any one time is restricted by the number of berths. Scheduling cruise ships on different days within the season can alleviate this problem, to a point.
- › The length and depth of available berths is also a factor, with length being a more important factor than depth for cruise ships. As the size of cruise ships increases, some ports will require the lengthening of wharves before cruise ships can dock. In cases where ships are not able to dock, tenders (small boats) are used to transport passengers to the shore (though this is a less satisfactory experience for passengers).

- › Processing facilities for passenger arrivals are also required at ports if the passengers start or finish their cruise there. For very large cruises, these facilities must be capable of processing thousands of people in a short amount of time (both those exiting the voyage and those joining it). In New Zealand, the processing occurs in Auckland.

In addition to processing facilities, supply of accommodation and transportation are essential for passengers starting or finishing their trip in a specific port.

A location will only be considered by cruise operators if there are sufficient on-shore attractions with suitable carrying capacities for passengers to visit.

4.2.1 Port cruise ship capacity

Table 3 summarises key statistics on cruise ports in New Zealand.

Table 3: Key New Zealand cruise ports and berths

PORT	AVAILABLE BERTHS	MAXIMUM BERTH LENGTH	MAXIMUM BERTH DEPTH
Bay of Islands	3	330m	10m
Auckland	3	320m	10m
Tauranga	1	300m	9.8m
Napier	1	317m (longer may be possible)	12m
Wellington	2	Unlimited	9.2m
Picton	2	320m	14.5m
Christchurch (Lyttelton)	1	200m (longer may be possible)	12.4m
Akaroa	1	350m	10.3m
Dunedin	2	320m	12.2m

Note: Some ports may be able to accommodate additional ships depending on the circumstances.

Source: Cruise New Zealand

In terms of the current overall number of cruises planned, New Zealand as a whole has the capacity to handle them. For example, in the peak cruise season in February, one of the busiest ports, Auckland, has nine days of the month (31 per cent) without a cruise ship in dock. Potentially, with additional effort to synchronise dock availability and cruise ship scheduling, there may be a possibility to expand overall cruise ship arrivals, and also to expand the season.

The main issue identified is the current limited infrastructure for supporting large cruise ships, an example being Ovation of the Seas.

■ Case study: Ovation of the Seas

The 348-metre Ovation of the Seas, which can carry 4,900 passengers, is the newest and largest cruise ship scheduled to visit New Zealand. Historically, the 'average' cruise ship to New Zealand is the Sun-class ship, at 261 metres.

Auckland is New Zealand's main cruise port, with over 90 per cent of cruise itineraries stopping there. Ovation of the Seas is too long to berth at Auckland's two main cruise ship terminals, as these terminals can only take ships up to around 320 metres. This means that when Ovation of the Seas arrives at Auckland in December 2016, it will berth in Waitemata Harbour rather than Auckland Harbour. Ovation of the Seas will use tenders at Auckland and the Bay of Islands, while it will berth alongside wharves in Dunedin, Wellington, Picton, Napier and Tauranga. According to Cruise New Zealand Chairman Kevin O'Sullivan, using tenders can impact negatively on the visitor experience, including limiting the amount of time they spend on shore.

Auckland's inability to accommodate Ovation of the Seas may impact its (and New Zealand's) ability to attract that ship here again.

Auckland, as New Zealand's only exchange port (where passengers get on or off cruises), requires a terminal suitable for passenger processing. Cruise New Zealand¹⁷ states that the current facility is not fit-for-purpose, with inadequate shelter, insufficient space and seating, and congestion. The terminal itself is basic and this may impact the overall visitor experience.

Handling and processing activities reach their limit on Auckland's secondary cruise wharf, Princes Wharf, during cruise season. Auckland's primary cruise wharf, Queens Wharf East, may have greater capacity.

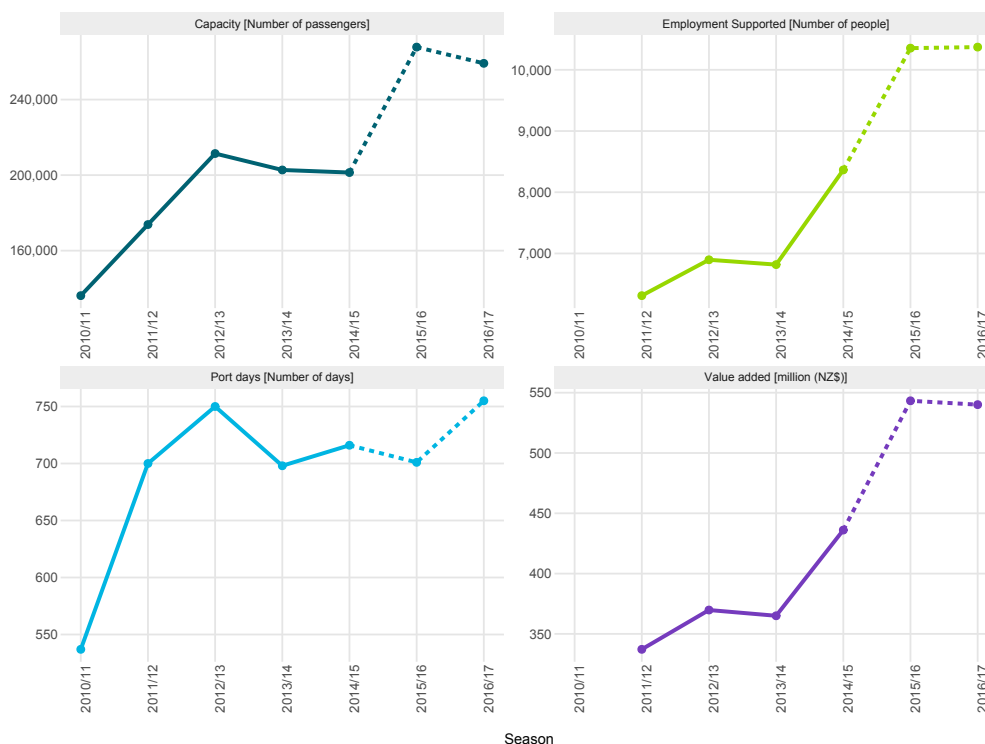
4.2.2 Cruise ship passenger capacity and occupancy

We provide some indicative statistics on the capacity of cruise ships in New Zealand. The capacity of cruise ships is defined in the industry as 'double occupancy' (ie, two people staying in each cabin). As a result, most cruise ships operate at an occupancy level above supposed capacity, as more than two people may stay in each cabin (for instance, children staying with their parents). Occupancy is over 100 per cent for all seasons analysed, which suggests that all cruise ships are full. This means that the only real method of increasing overall capacity is through an increase in the number or size of cruise ships.

The capacity of cruise ships visiting New Zealand has increased through the 2010/11 to 2012/13 seasons, but has flattened since then. Forecasts suggest that the 2015/16 season should see a boost in capacity as more cruise ships put New Zealand on their itinerary. The highest visitation is in February, which makes up around a quarter of all capacity for the season.

¹⁷ Cruise New Zealand. (2016). *Infrastructure constraints and factors that influence the New Zealand cruise industry* (unpublished).

Figure 15: Cruise ship passenger capacity



Note: Forecasted values presented using dashed lines.

Source: Cruise New Zealand

4.2.3 Port infrastructure

Both Auckland and Canterbury are investigating improvements of port infrastructure to accommodate cruise ships.

Auckland Council has initiated a 12-month study looking at the long-term options for meeting Auckland’s port needs and will consider a wide range of options for the port’s future development, including for larger cruise ships. In addition, Auckland Tourism, Events and Economic Development has released a cruise plan which outlines the need for future investment into cruise infrastructure in Auckland – not just port-side infrastructure, but also supporting infrastructure (such as hotel beds, transport, attractions, activities and beds).

Auckland Council’s Waterfront Plan (released in 2012) suggested several options for development, each resulting in an extension of one of Auckland’s main wharves (Queens Wharf, Bledisloe Wharf, or Captain Cook Wharf).

Compared to other ports in New Zealand, Lyttelton Port in Canterbury has very limited capacity in terms of berth length. The port was badly damaged in the Christchurch earthquakes, with many ports and jetties no longer serviceable. Only smaller ships can currently berth there, while larger ships must tender in their passengers (which is time-consuming and less comfortable). This has led to a reduction in the number of cruises and passengers stopping there. The alternative port, Akaroa, has sufficient facilities for large cruise ships, but is a small town 1.5 hours’ drive from Christchurch.

Revamping the port and improving the cruise infrastructure is part of the Lyttelton Port Recovery Plan.¹⁸ The plan includes the development of a dedicated, estimated \$1 billion cruise ship facility away from the operational area of the port. Work on the port will start mid-2016 with a target end date of 2024.

In preparation for *Ovation of the Seas*, Napier, Picton and Dunedin have also announced improvements of their ports.

¹⁸ Canterbury Earthquake Recovery Authority Christchurch. (2015). *The Lyttelton Port recovery plan*. Retrieved from <http://www.lpc.co.nz/port-development/lprp/>

5 Tourism accommodation infrastructure

■ Summary

Available, high-quality, and affordable accommodation is very important for building positive visitor experiences.

Though demand for hotel accommodation has grown significantly over the past five years, there has not been a concomitant increase in hotel capacity. This has increased occupancy rates in peak seasons. This is most evident in Queenstown and Auckland.

The pressure on the Queenstown commercial accommodation stock is also spilling over to private non-commercial accommodation. In the holiday home booking website analysed, the number of private non-commercial rooms available in the Queenstown/Wanaka region is similar to the number available in Auckland, and offered prices are on average higher.

Hotel construction appears to be responding to demand in Auckland, with planned developments estimated to increase the number of hotel rooms by 20 per cent. Earthquake-damaged Christchurch has a similar percentage of growth planned, but other regions are significantly less than that. The vast majority of planned hotel development expenditure is in Auckland, and is for large high-rise buildings.

5.1 Accommodation infrastructure demand

5.1.1 Guest nights

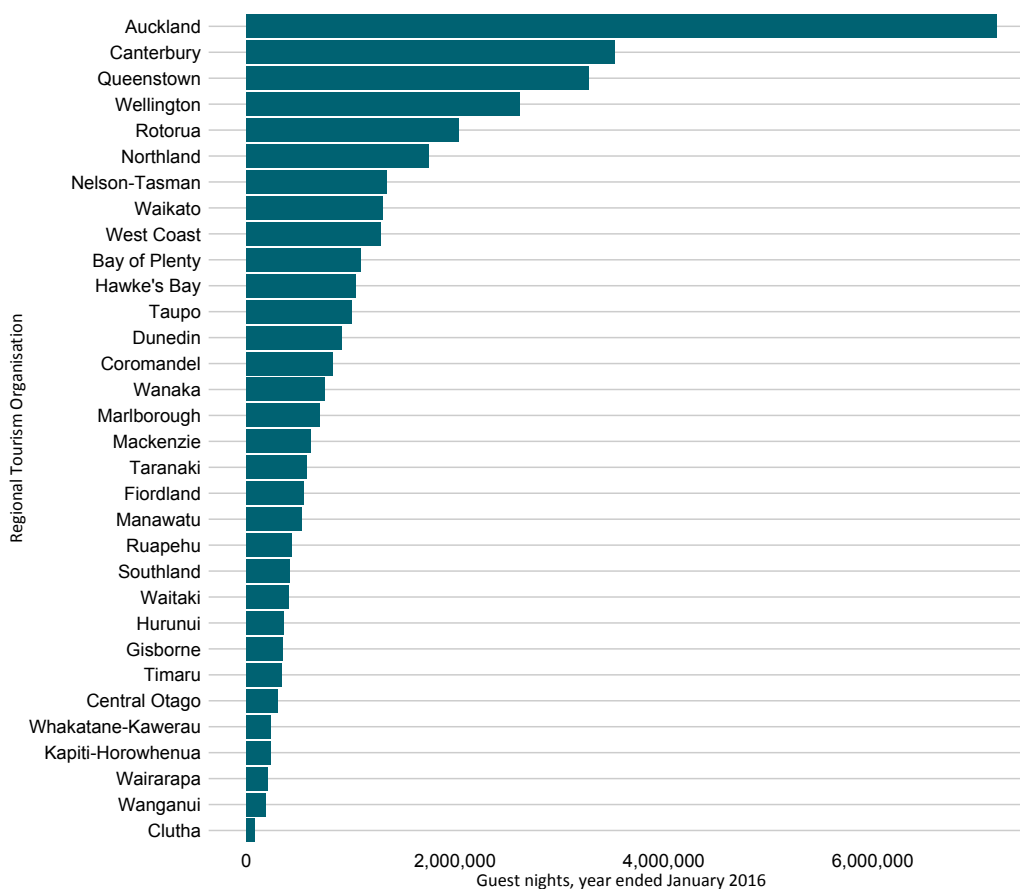
Hotels make up only a small proportion of the overall number of accommodation operators in the country, but they make up the significant proportion of all guest nights. Visitors who stay in hotels also tend to spend more, having a larger economic impact.

For commercial accommodation, hotels made up approximately 35.5 per cent of all guest nights in New Zealand in the January 2016 year. When looked at by Regional Tourism Organisation (RTO), hotels are concentrated in the urban tourism centres of Auckland, Canterbury, Queenstown, Wellington and Rotorua. Around 59.7 per cent of Auckland guest nights (4.3 million) are for hotels. In terms of magnitude, however, 33 per cent of all hotel guest nights are based in Auckland.

In smaller cities and regions, motels make up a major part of tourist accommodation. In overall magnitude, Auckland remains the largest motel guest night provider in the country (with 1.6 million guest nights). Canterbury is not far behind with 1.3 million guest nights. In Waikato, Hawke's Bay and Taupo, motels are the most popular, with 46, 51.7 and 47.8 per cent of total guest nights, respectively.

Holiday parks are important in some parts of the country. Northland is the largest provider of holiday park guest nights, at 695,000, while in Canterbury and Nelson-Tasman, holiday parks are significant (at 720,000 and 530,000, respectively). In the Coromandel, holiday parks make up over half of all guest nights (at 57 per cent).

Figure 16: Guest nights in commercial accommodation by region

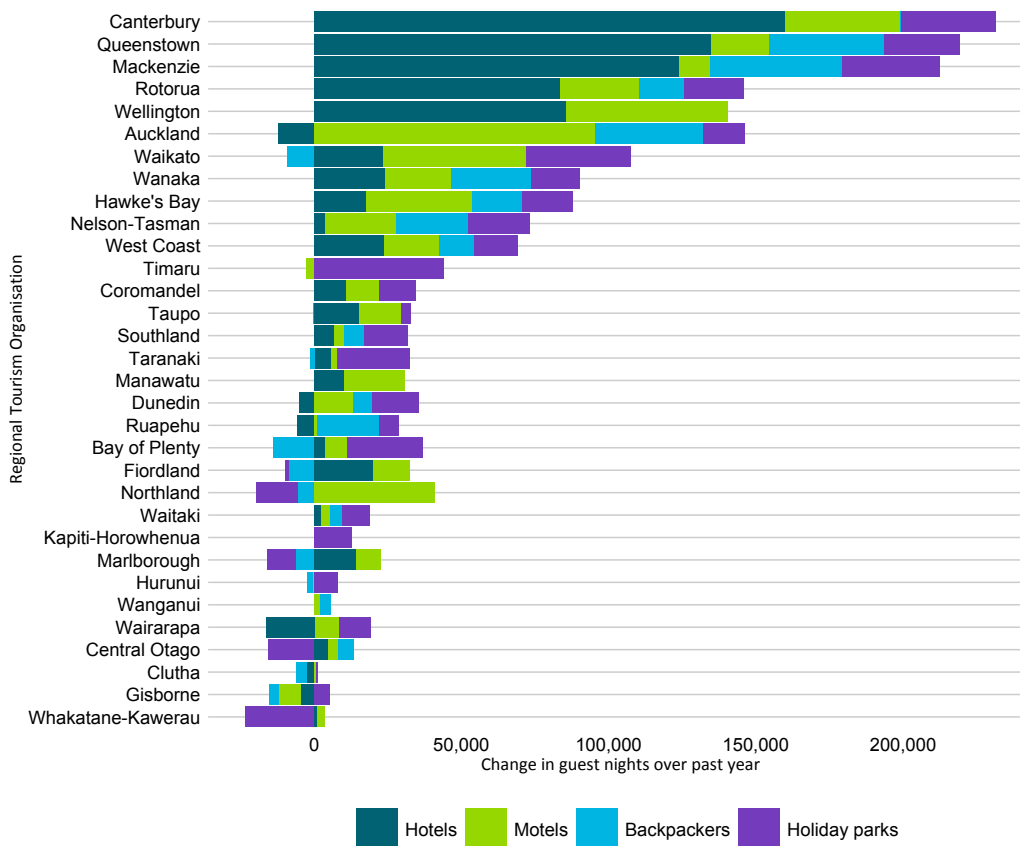


Source: Accommodation Survey

Figure 17 shows the change in guest nights in different regions over the year ended January 2016.¹⁹ Canterbury has seen the most growth in guest nights over the past year – largely due to repaired and rebuilt hotel accommodation coming back online. Queenstown has also seen a surge in tourist accommodation stays over the January 2016 year, with more than half of that growth in hotel guest nights. Interestingly, the number of hotel guest nights in Auckland has fallen slightly over that period, while motel use has increased by 95,000 nights. This could be due to either capacity or price. Prices may be pushing visitors to stay in cheaper alternative accommodation, while a lack of available desired accommodation may be pushing visitors to alternative accommodation.

¹⁹ Information for certain accommodation types are not shown in regions where there are few competing establishments. This is done to protect the privacy of these businesses.

Figure 17: Change in guest nights of commercial accommodation by region and type, year ended January 2016



Source: Accommodation Survey

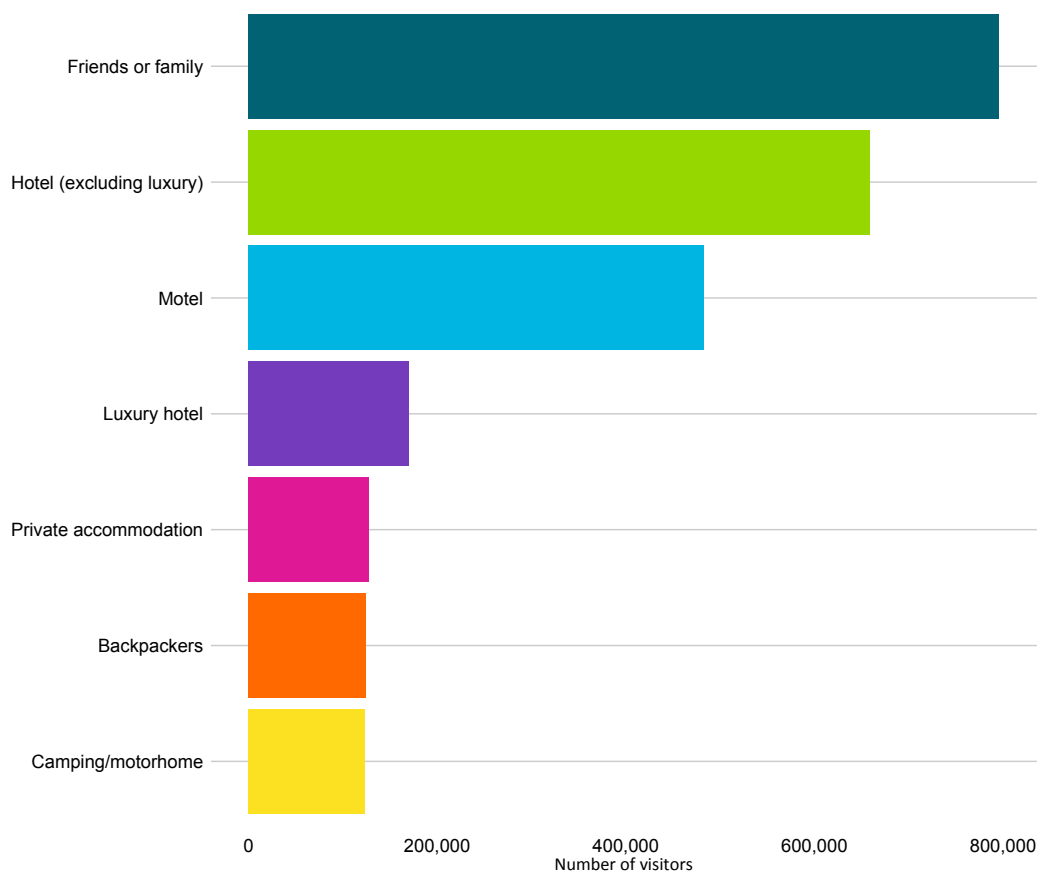
However, this picture only covers commercial accommodation. Non-commercial accommodation is covered in more detail in section 5.2.5.

5.1.2 International Visitor Survey

The International Visitor Survey provides a picture of accommodation used by international tourists. It shows that private rentals were used as the main form of accommodation by approximately 4.6 per cent of all international visitors in 2015. The relatively small amount suggests that, at the moment, private non-commercial accommodation may be more popular among domestic tourists. However, internationally recognised booking systems, such as Airbnb, are becoming more popular and are changing the trends in how people holiday. Therefore, the percentage of international tourists using private rental accommodation appears likely to increase.

Luxury hotels²⁰ were the main accommodation used by 170,000 international visitors in 2015, compared with 660,000 who stayed in regular hotels.

20 'Luxury hotel', the option in the International Visitor Survey, has no further explanation, so it is up to the respondent to interpret what it means. Therefore, it could include 3–5-star hotels, lodges, boutique hotels, or any other type of hotel that the respondent views as being 'luxury'.

Figure 18: Number of visitors, by main type of accommodation used, 2015

Source: International Visitor Survey

5.2 Accommodation infrastructure supply

There are two main ways to measure the supply of accommodation infrastructure. First, the number of accommodation establishments gives an idea of the size of the sector, and the relative importance of different types of accommodation on regional economies. Secondly, the number of 'stay nights' provides a measure of capacity of these establishments.

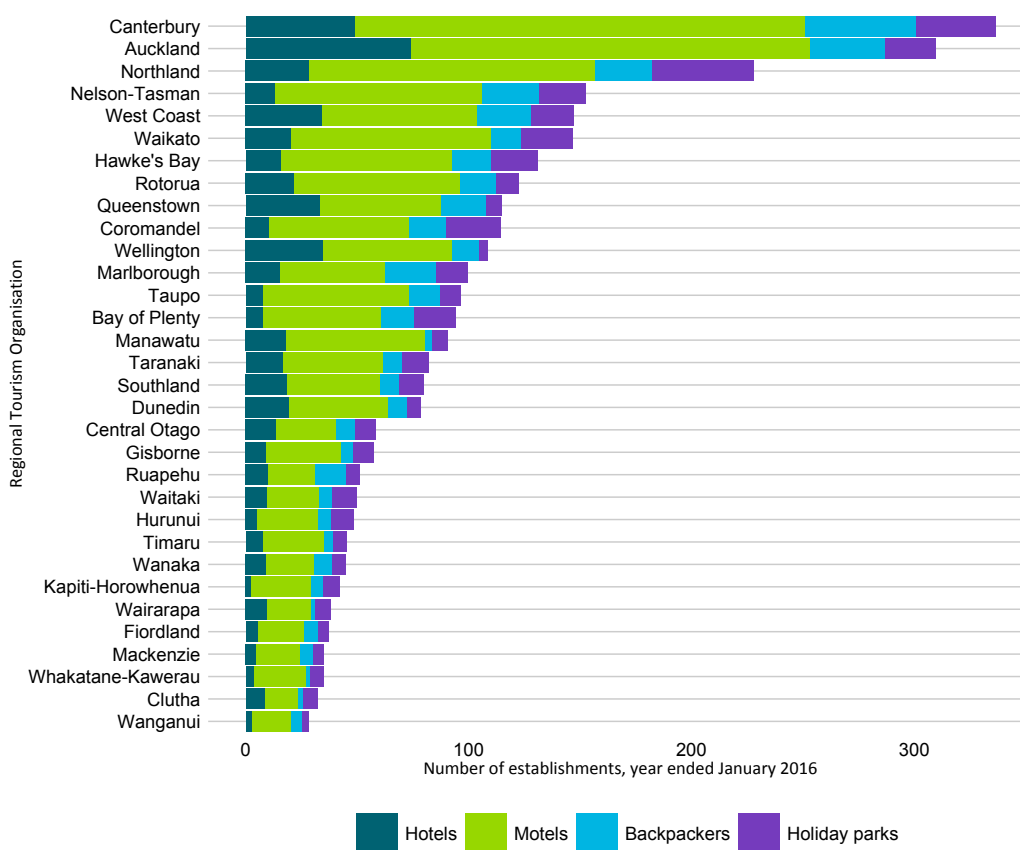
5.2.1 Establishments

Overall, motels make up the lion's share of commercial accommodation establishments in New Zealand – 56 per cent of total businesses. More rural areas tend to have an even higher proportion of motels – for example, motels make up 68 per cent of accommodation businesses in Manawatu and 67.5 per cent in Taupo. Since motels account for a much smaller share of guest nights or capacity, this suggests that most motels are relatively small. Of the 531 motel members of AccommodationNZ, who have a combination of 9,030 rooms available per night, the average size of a motel is around 17–20 units. By contrast, hotels account for a small share of the number of establishments, but a large share of guest nights – particularly in large urban areas. For example, around 75 hotels in Auckland accounted for over 4 million guest nights in the year ended January 2016.

In overall terms, Canterbury has the largest number of commercial accommodation establishments in the country (more than Auckland, which dominates the overall number of guest nights). This is due to the Canterbury region being significantly larger in area in Auckland, with smaller commercial establishments scattered throughout the region.

Northland, despite having the sixth-largest number of guest nights in the country, has the third-largest number of tourism accommodation businesses. This suggests the region is characterised by a large number of small operators.

Figure 19: Number of commercial accommodation establishments by region and type



Source: Accommodation Survey

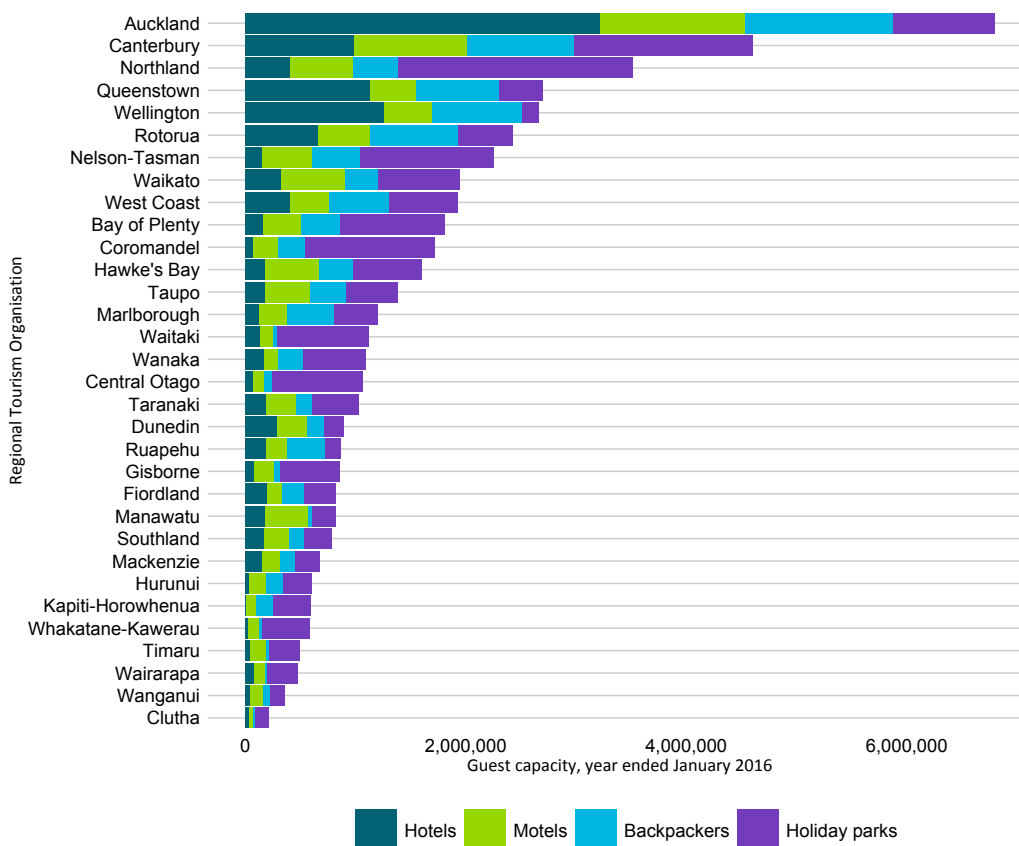
5.2.2 Stay nights

Guest capacity, defined by 'stay nights' (or number of nights for rooms available to be occupied), is a useful measure of accommodation supply.²¹ Stay nights by region has a similar shape to the number of guest nights, but as there are generally low occupancy rates of holiday parks, there are much higher stay nights for this form of accommodation.

²¹ It does not measure the number of beds, so the actual capacity of commercial accommodation in number of people will be higher.

While guest nights for Auckland make up around 20.2 per cent of total guest nights, only 13.7 per cent of capacity is in Auckland. This implies that Auckland accommodation infrastructure is more highly used than other parts of the country.

Figure 20: Capacity ('stay nights') of commercial accommodation by region and type

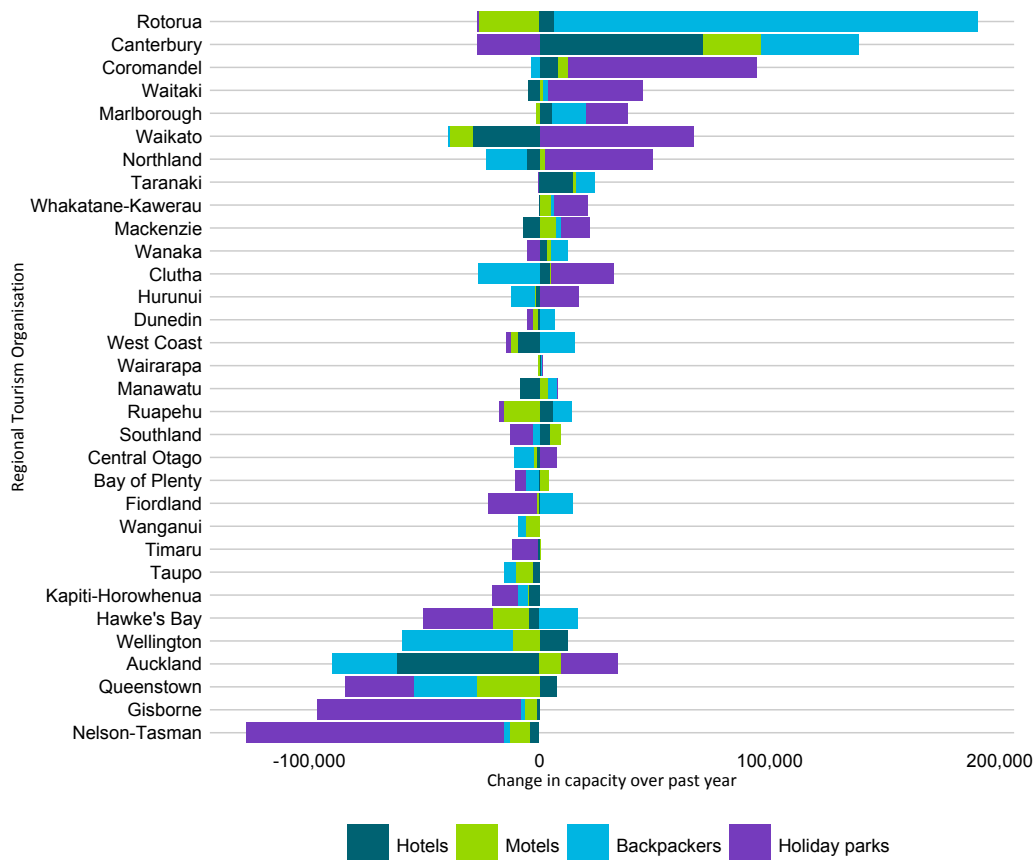


Source: Accommodation Survey

Looking at growth of capacity over the past year shows that Rotorua has seen a large increase in the capacity for backpackers. Canterbury, still recovering from the earthquakes, has also had a large amount of capacity come online. A large amount of capacity from holiday parks has been lost in Nelson-Tasman and Gisborne. This may be due to the sale of holiday park land for other purposes.

There has been a general fall in capacity of all accommodation types in Queenstown apart from hotels. This will lead to further pressure in an area that is seeing unprecedented numbers of visitors. Auckland hotel capacity also appears to have dropped, which is another pressure-point (this may be partly due to the renovation of the Copthorne Hotel, which means that 187 rooms are temporarily lost).

Figure 21: Change in capacity of commercial accommodation by region and type, year ended January 2016



Source: Accommodation Survey

5.2.3 Hotel investment

According to MBIE’s analysis of the hotel construction sector, there is currently an estimated \$1.1 billion worth of hotel projects either commencing work or in the planning stages in New Zealand (though some of these developments are mixed-use). The majority of projects are to be completed by 2018.²²

Based on current plans, these projects constitute an estimated increase of 2,500 rooms. Auckland accounts for 50 per cent of new rooms from these projects, but 80 per cent of the total spend (due to large-scale high-rise hotel towers). Given a current estimate of 8,900 stay units, the stock of hotel rooms in Auckland is projected to increase by almost 20 per cent once all current developments have been completed, including the New Zealand International Conference Centre.

Table 4 shows the identified number of planned hotel rooms in the pipeline compared with average hotel stay nights for the January 2016 year. It provides some context in terms of

²² The Ritz-Carlton in Auckland, part of a larger residential and commercial tower development, is expected to be completed in 2020.

relative growth in capacity. Using this fairly simplistic measure, it suggests that there may be under-investment in the development of Queenstown hotels compared with other parts of the country.

Table 4: Stay units vs the number of hotel rooms in construction and planning stages, by key hotel region

	STAY UNITS JANUARY 2016 YEAR	PLANNED INCREASE IN ROOMS	ESTIMATED INCREASE IN CAPACITY
Auckland	8,934	1,693	19%
Wellington	3,487	360	10%
Canterbury	2,739	498	18%
Queenstown	3,145	216	7%

Source: MBIE, Accommodation Survey

Appendix 2 provides a list of key (over \$10 million) hotel projects identified that are currently in the construction pipeline.

5.2.4 Hotel capacity and response to demand

Though demand for hotel accommodation has grown significantly over the past five years, the increase in hotel capacity has been more muted. A number of factors could explain this delayed response:

- › Hotel construction often requires scarce land in urban central business districts (CBDs). Hotel construction is in competition with other potential uses of this land, such as commercial offices, retail stores or apartments.
- › Though forecasts predict strong growth in international visitor arrivals, there is still uncertainty in the market about the level and persistence of this growth.
- › There is a large amount of activity in the overall construction sector, which is driving up the cost of labour and building materials.
- › Building and resource consent processes can delay construction projects, slowing how quickly supply responds to demand.

This situation is most obviously identified in Queenstown. Queenstown is recognised by both international and domestic tourists as a premium destination in New Zealand. With higher visitor numbers to the region during the peak seasons, there are elevated occupancy rates in commercial accommodation. Hotel construction has not yet responded to this increase in demand, with no new hotel built since 2011, which may be a consequence of the lack of land around the Queenstown CBD.

The cost of entering the market is high for hotels. Hotel construction is costly and time-consuming, and often requires the use of scarce land in and around CBDs. Potential entrants in to the hotel accommodation market may require a strong incentive to cover these higher entry costs, such as sustained high occupancy rates and projections. In addition, these investments are irreversible, so investors face the risk of their investments being stranded if high demand ends up being temporary.

High average daily room rates combined with high occupancy levels results in a high revenue per available room, and contributes towards the overall return on investment.

Commercial accommodation providers need to take account of costs that do not apply for private non-commercial accommodation. In addition to larger management costs, commercial accommodation must comply with specific rules and government requirements that are claimed to be considerably more costly than rules applying to non-commercial operations. Considering what has been described above, this may be a reason why the hotel industry appears to be showing a slower response to changes in demand than other forms of commercial accommodation. Therefore, more and earlier planning is required if expanding the hotel capacity is the strategy chosen to meet an increasing demand.

5.2.5 Private non-commercial accommodation

Private non-commercial accommodation, such as holiday home rentals, has become increasingly more popular as an alternative to staying in commercial accommodation. Though it remains a relatively small part of the accommodation sector, non-commercial accommodation helps to alleviate demand pressure when commercial providers are close to capacity. This area of the accommodation market is not covered by official tourism statistics, so the supply and use of this form of accommodation is not well understood. According to Airbnb, the number of listings in New Zealand has doubled to more than 15,000 over the last year, with around 4,000 listings in Auckland. Hosts rent out rooms or houses for an average of 26 to 27 nights per year, evenly split between entire houses and single rooms. The top five international cities where Airbnb travellers originate are Sydney, Melbourne, London, Singapore and Brisbane.

Table 5 summarises the number of properties and rooms available on the website www.holidayhouses.co.nz accessed on 15 March 2016. The area classification in the table is that used by the website and does not necessarily match the RTO used in other parts of the report.

Queenstown/Wanaka has the highest average price per night by a substantial margin, 77 per cent higher than the New Zealand average. This may be a symptom of the accommodation shortfall occurring in the region, and it may also reflect the fact that Queenstown is a traditional spot to have a family bach or house rather than a permanent residence. The high flux of tourists represents an opportunity to make a return on holiday home investments.

Auckland has the most properties available, but by a smaller margin than expected given the region's high population. Auckland properties are the smallest in terms of number of rooms and maximum guests per property, possibly due to more of these properties being apartments. Auckland also shows a high average price per night, which reflects both high housing costs and high demand in the region.

On average, the cheapest properties are available in Manawatu-Wanganui, the West Coast and Taranaki. Each of these areas also has relatively lower numbers of properties available.

Table 5: Holidayhouses.co.nz properties, March 2016

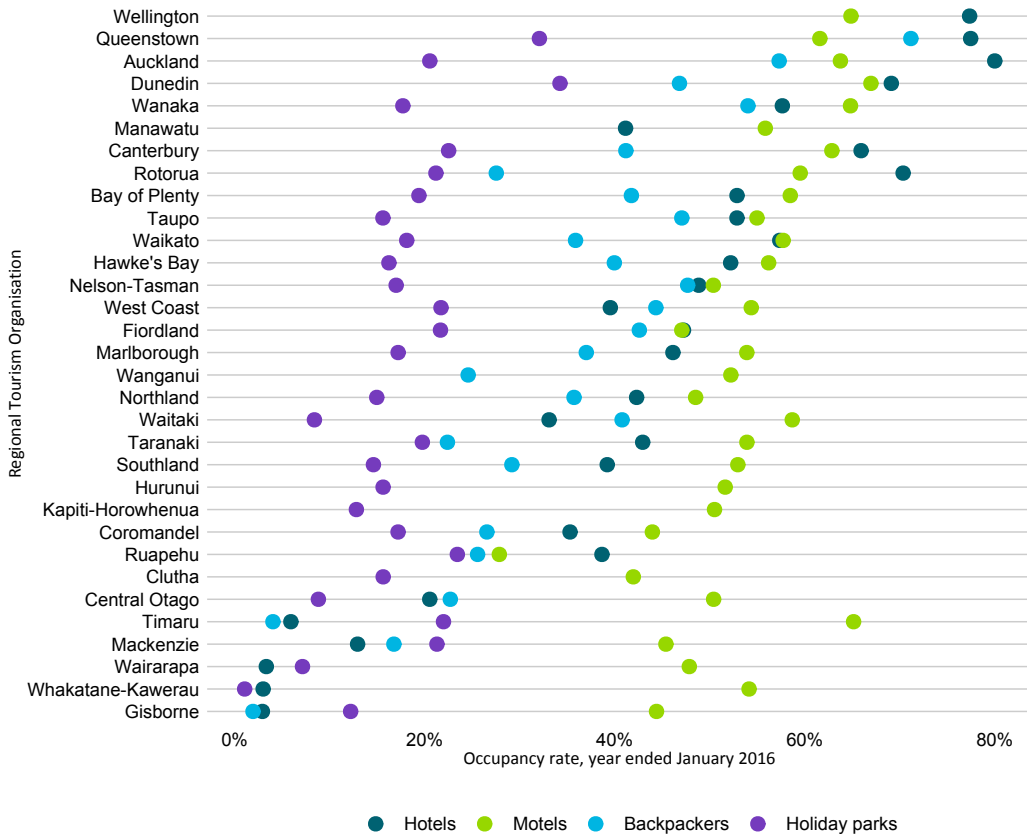
REGION	NO. OF PROPERTIES	TOTAL NO. OF ROOMS	AVERAGE ROOMS PER PROPERTY	AVERAGE MAXIMUM GUESTS PER PROPERTY	AVERAGE PRICE PER NIGHT	% OF NEW ZEALAND AVERAGE
Auckland	1130	2987	2.6	6	\$282	133%
Bay of Plenty/ Rotorua	859	2654	3.1	7.4	\$207	98%
Canterbury	852	2451	2.9	6.7	\$165	78%
Central North Island	769	2429	3.2	7.9	\$179	84%
Coromandel	947	2827	3	7.3	\$190	90%
Eastland	124	369	3	7.6	\$174	82%
Hawke's Bay	359	1008	2.8	6.7	\$203	96%
Marlborough/ Kaikoura	352	1054	3	7.3	\$171	81%
Nelson/ Golden Bay	797	2218	2.8	6.3	\$180	85%
Northland	967	2733	2.8	6.9	\$216	102%
Otago	338	902	2.7	6.5	\$149	70%
Queenstown/ Wanaka	905	2990	3.3	7.4	\$374	177%
Southland	164	473	2.9	6.5	\$152	72%
Taranaki	104	283	2.7	6.8	\$142	67%
Waikato	198	531	2.7	6.6	\$164	77%
Wanganui/ Manawatu	108	304	2.8	7.5	\$125	59%
Wellington/ Wairarapa	568	1508	2.7	6.5	\$175	83%
West Coast	177	489	2.8	7	\$132	62%
Total	9718	28210	2.9	6.9	\$212	100%

5.3 Occupancy rates

Occupancy rates show the percentage of available rooms used by tourists. High occupancy rates are generally a good thing, indicating a region is successfully attracting visitors and making effective use of accommodation infrastructure. However, occupancy rates significantly above 80 per cent can lead to higher room rates and may make it difficult for tourists to find accommodation at all. This occurs most commonly in peak seasons. It may be an indicator of inadequate infrastructure investment in regions, or a lack of planning and/or development of alternative strategies.

Figure 22 shows occupancy rates for different types of accommodation, across RTO regions. Occupancy rates tend to be higher in large urban areas, such as Wellington and Auckland, and in tourist centres like Queenstown and Wanaka. The accommodation type showing the highest average occupancy rate is hotels in Wellington, Queenstown and Auckland. Occupancy rates will be highest in peak tourism months, suggesting strong pressure on hotel infrastructure in these areas. Occupancy rates for holiday parks are relatively low across the whole country. Capacity for this type of accommodation is more than sufficient to meet demand.

Figure 22: Occupancy rates of commercial accommodation by region and type, year ended January 2016



Source: Accommodation Survey

Figure 23 shows the monthly capacity and occupancy for hotels in the four main tourist destinations. Figure 24 shows this data in the form of an occupancy rate with a monthly rate in green and a seasonally adjusted rate in blue.

Hotel capacity in Canterbury declined significantly following the 2011 earthquake. Though there has been some recovery in capacity since then, capacity still remains below its pre-earthquake level. Hotel demand has recovered at a similar pace.

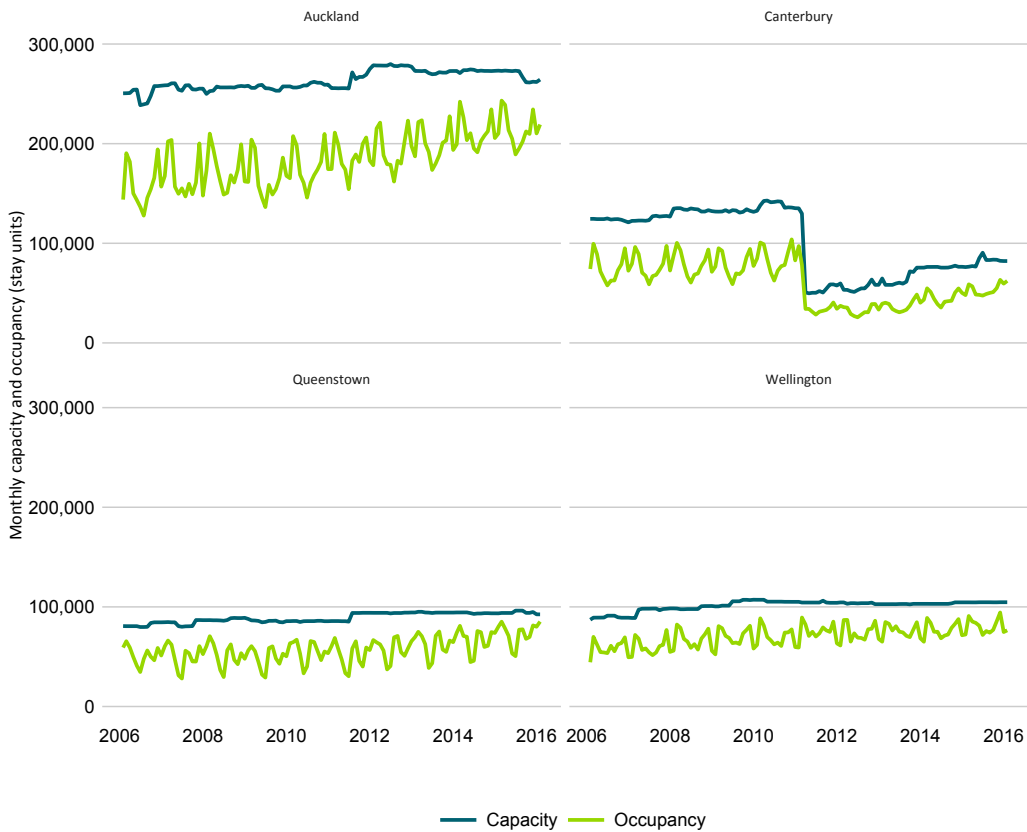
Hotel demand has been rising in Auckland, Queenstown and Wellington over a number of years, but hotel capacity has been relatively flat. This has led to increases of occupancy rates in these regions. After seasonal adjustment, occupancy rates are above 80 per cent in all three regions. During peak seasons, occupancy rates reach around 90 per cent. Over these

periods there were few available rooms, which would have impacted on room availability and pricing for visitors.

Capacity appears to be responding to increasing demand with a lag, potentially because investment in capacity for hotels is costly and takes time.

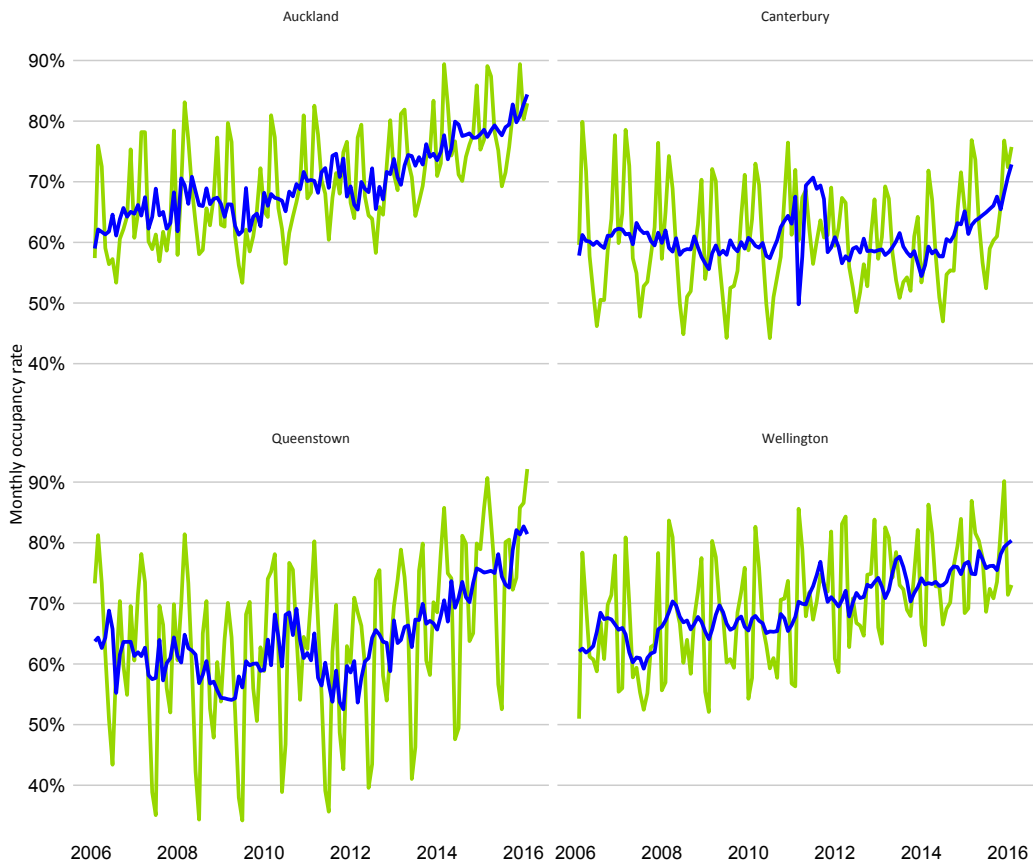
If occupancy rates continue to grow at their current rate, hotels will be full in Queenstown and Auckland by 2020. This shows that a sustained pipeline of added hotel capacity is needed to meet increasing projected demand.

Figure 23: Capacity and occupancy of hotels, four main centres



Source: Accommodation Survey

Figure 24: Occupancy rate of hotels, four main centres



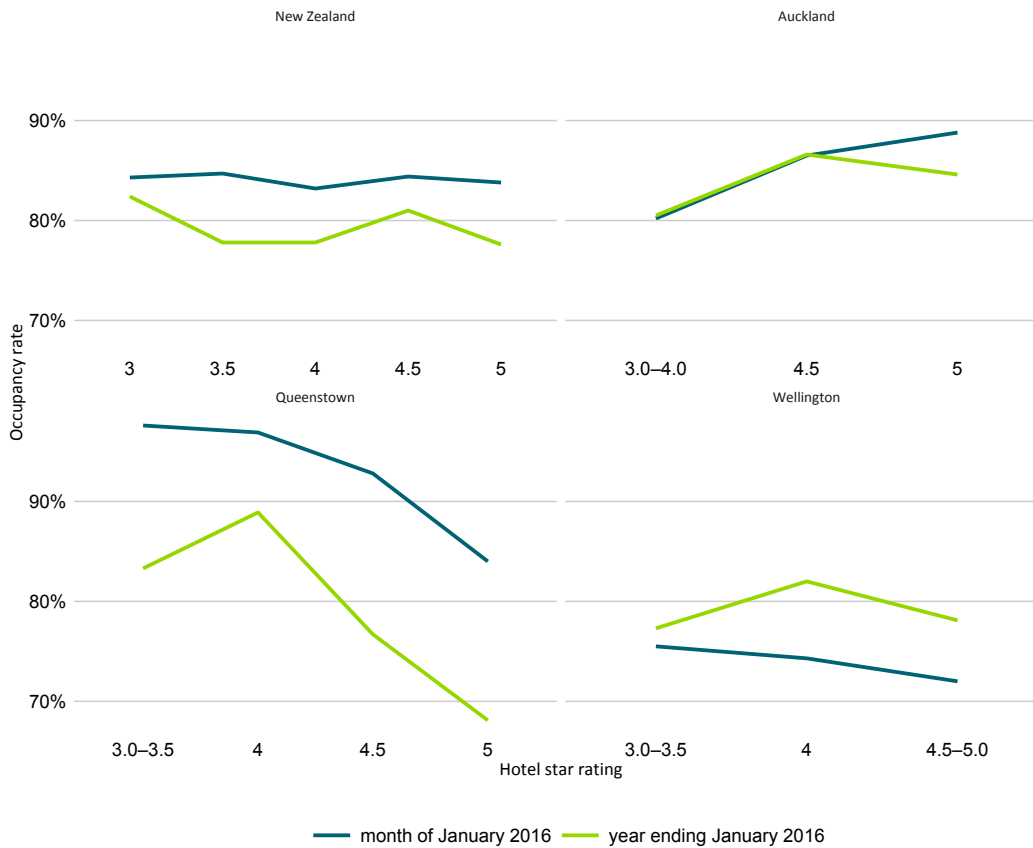
Note: Green lines represents occupancy rates; blue lines represent seasonally adjusted occupancy rates.
Source: Accommodation Survey

5.3.1 Occupancy by star rating

Using information provided by the Tourism Industry Association of New Zealand, we’re able to further break down occupancy rates by the star rating (or quality) of a hotel. Figure 25 shows this breakdown nationally and for the Auckland, Queenstown and Wellington regions. Occupancy can be broken down to each individual star rating at the national level, but some grouping is needed at the regional level to protect the confidentiality of individual hotels. The dark blue line shows the occupancy rate for the month of January 2016, and the light green line shows occupancy rates for the year ended January 2016.

In Queenstown, 3–4-star hotels are effectively full during the month of January, Queenstown’s peak tourism month. Averaging over the whole year, lower star hotels still have higher occupancy rates. Nationally, and for the Auckland and Wellington regions, occupancy rates are fairly even across different hotel types.

Figure 25: Occupancy rate of 3–5-star hotels, three key regions and nationally



Source: Tourism Industry Association

5.4 Visitor experience

One measure of whether the quality of accommodation is perceived to be adequate for tourists comes from the visitor experience module in the International Visitor Survey. International visitors are surveyed about their experience of accommodation in New Zealand as part of the International Visitor Survey. Overall, New Zealand scores very highly on accommodation satisfaction. In 2015 around 90 per cent of respondents had a satisfaction rating of 7 out of 10 or higher. Just 2 per cent had a rating of 4 or lower. This suggests that New Zealand accommodation is largely suiting the needs of current tourists.

Figure 26: International visitor experience: accommodation



Source: International Visitor Survey

6 Road infrastructure

■ Summary

- › New Zealand does not score highly for its road infrastructure when compared to other developed nations. This may partly be due to geography and population size, which cannot support high levels of road investment.
- › The majority of land travel by tourists is via rental or owned cars. It is difficult to measure specific use of roads by tourists because they are generally dwarfed by local commuters, and there is no clear way of separating them from overall vehicle use. That said, there are some roads around the country that largely cater for tourists travelling between key tourism destinations.
- › One measure of the quality of road infrastructure is its safety, and areas with high numbers of tourist road crashes (such as Southland, Otago and the West Coast) have been targeted for improvement by government.

New Zealand does not score highly in road infrastructure when compared to other developed nations, according to the World Economic Forum's Global Competitiveness Report 2015–2016.²³ The New Zealand road quality is rated as 4.7 out of 7, which places New Zealand in position 43. The perceived comparatively poor quality of our infrastructure may partly be due to our geography and population size.

6.1 Road infrastructure demand

6.1.1 Road use

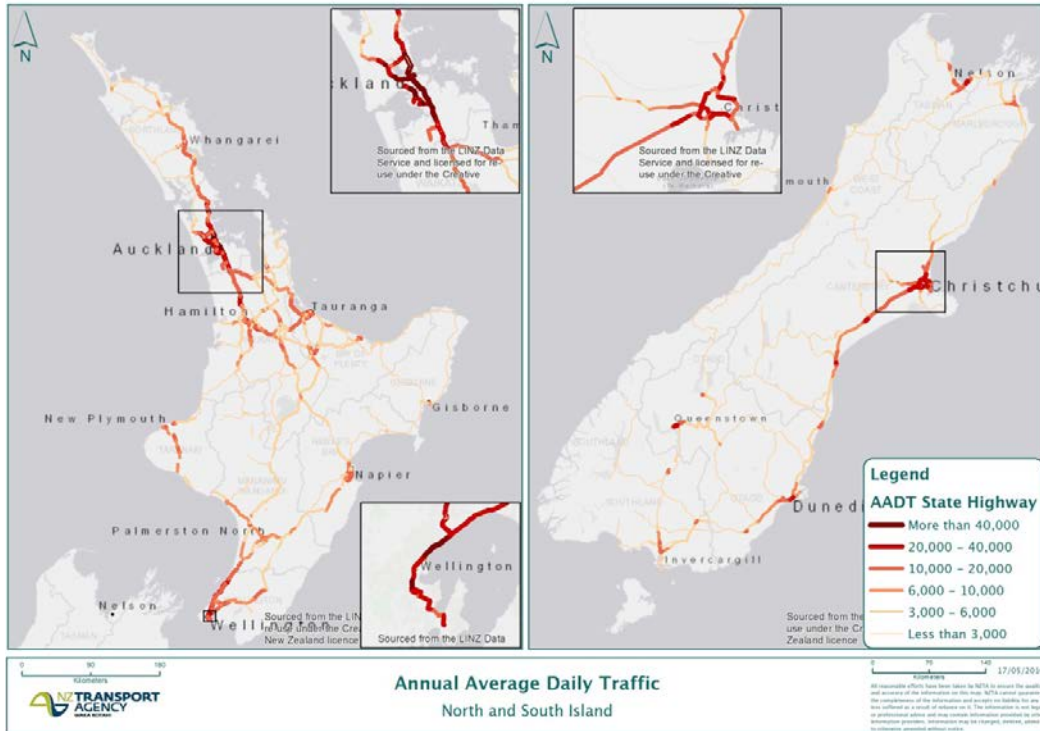
The majority of land travel by tourists is via rental or owned cars, which includes vans but not motorhomes. Less than 5 per cent of visitors use rental motorhomes. It is difficult to measure specific use of roads by tourists because there is no clear way of separating them from overall vehicle use. Tourism makes up a relatively small proportion of traffic using the network. That said, there are regional variations, with areas of Otago, Southland and the West Coast where tourist travel makes up a larger proportion of road users.

Figures 27, 28 and 29 show the average number of vehicles travelling across NZTA measuring sites by region. The NZTA measures traffic at 1,536 sites, of which 117 are permanent sites along state highways across the country. Because only certain points of the state highway network are measured, data is not available for all regions. In regions where data is available, this data may not reflect the total level of traffic because most of the road network is not measured. Also, no breakdown is available for the amount of purely tourist traffic. Nevertheless, this data gives an indication of how intensively road networks are being used across the country.

As expected, traffic volume is highest in the main centres: Auckland, Wellington and Christchurch. Waikato and Bay of Plenty also have significant traffic volumes. The regions which have lower traffic volume tend to be more rural and have smaller urban centres.

²³ World Economic Forum. (2016). *The global competitiveness report 2015–2016*. Retrieved from <http://reports.weforum.org/global-competitiveness-report-2015-2016/>

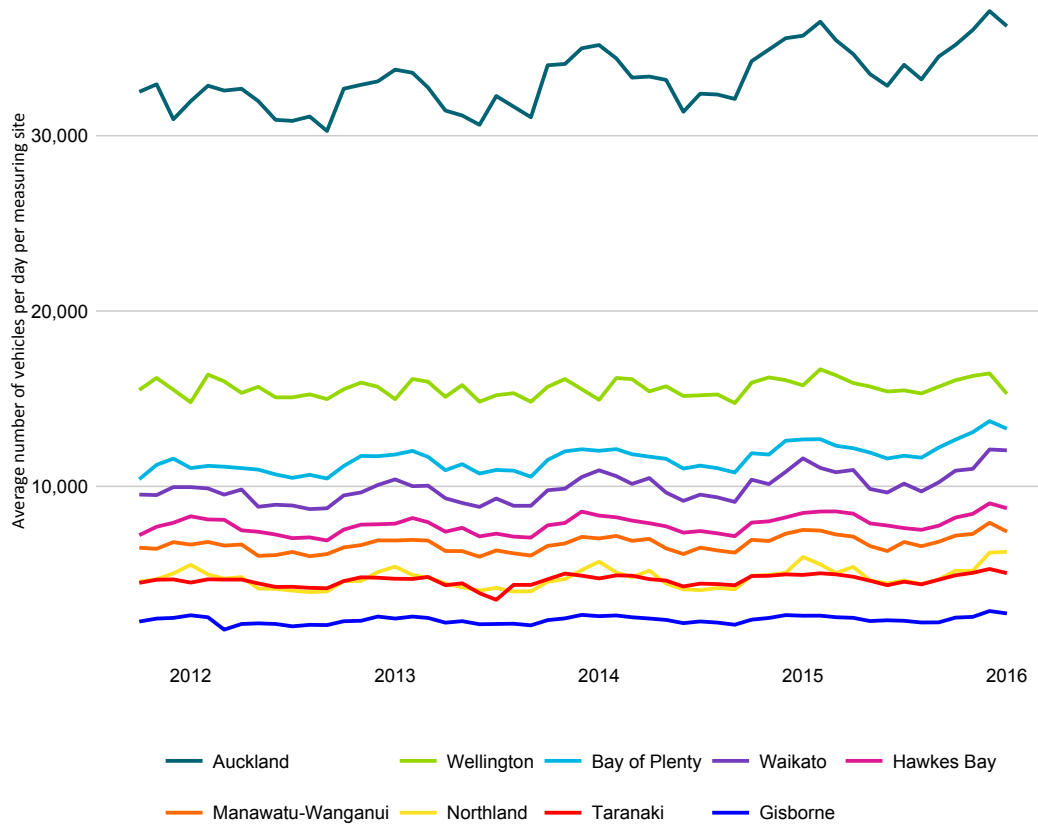
Figure 27: Annual average traffic volume, 2015



Source: NZTA

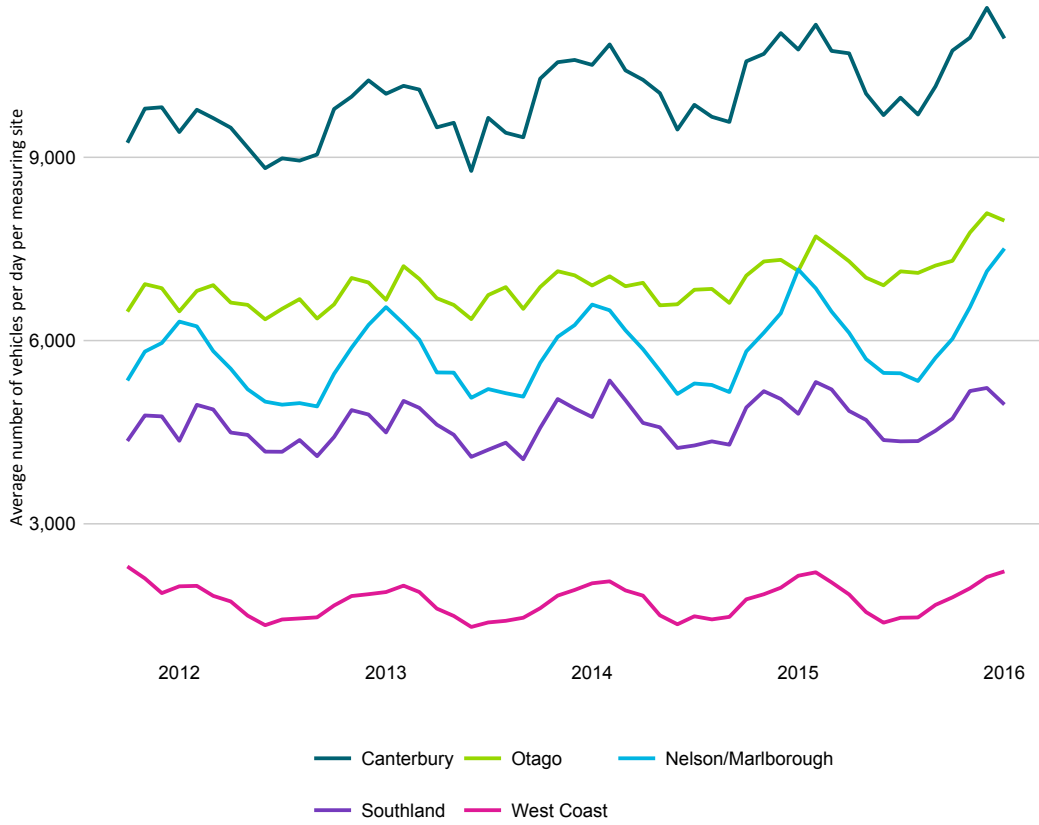
Over time, the average number of vehicles per day has a clear seasonal pattern. Auckland has seen steady growth in vehicles per day over the last three years, moving from a monthly average of 32,000 in 2013 to an average of 35,000 in 2015. This growth in vehicles has put pressure on Auckland’s road network. The Auckland region also has the most vehicle-intensive roads, and the greatest difference between the ‘low season’ in the middle of the year and the ‘high season’ at the Christmas/New Year period. Other areas that have seen significant growth in vehicles include Bay of Plenty and Waikato, two regions with close connections with Auckland.

Figure 28: Average number of vehicles per day travelling across NZTA measuring sites by region (North Island)



Source: NZTA

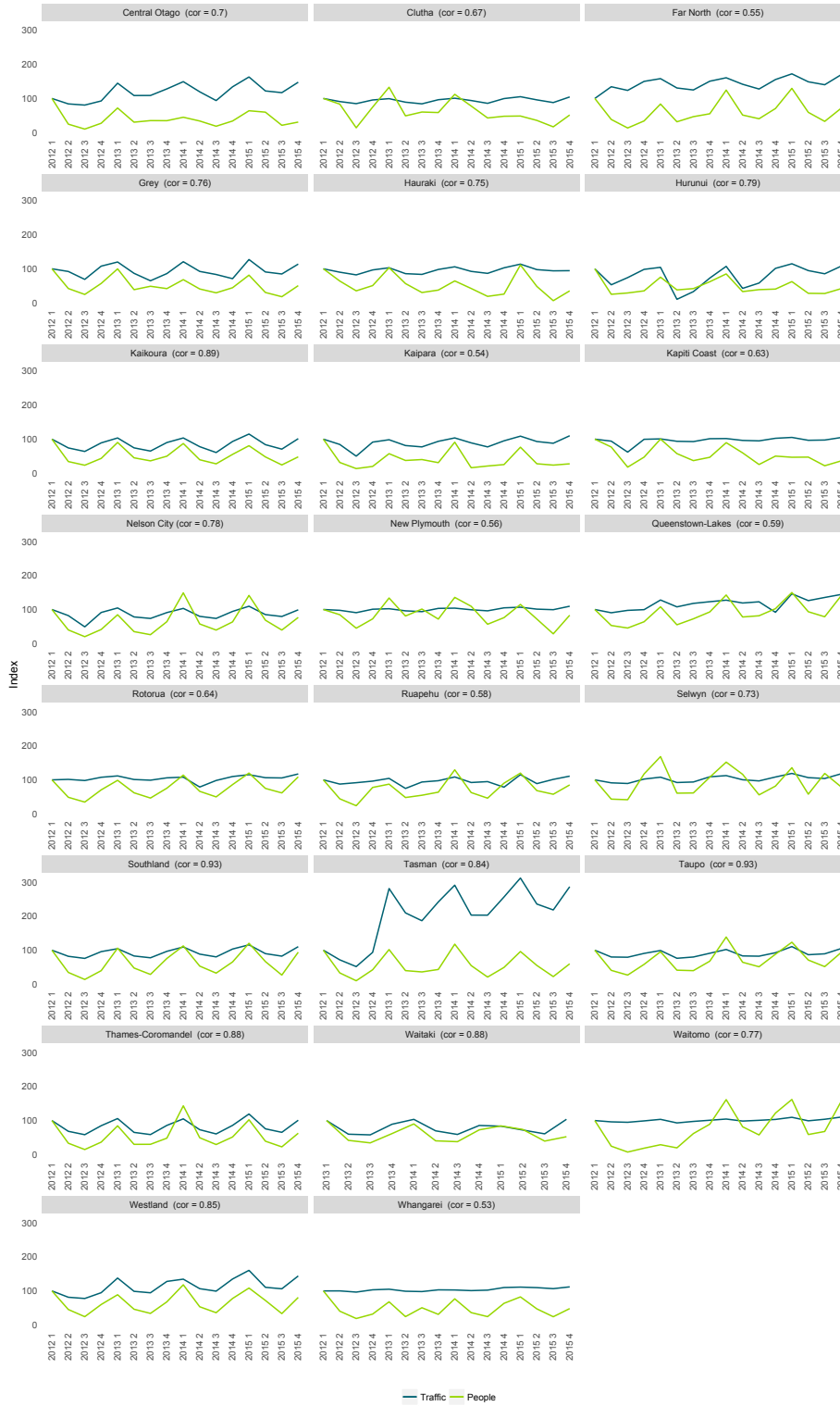
Figure 29: Average number of vehicles per day travelling across NZTA measuring sites by region (South Island)



Source: NZTA

One way to identify the areas where tourists' traffic volumes make a significant impact is to correlate the change in traffic with the volumes of people visiting over the year. Smaller regional areas with high levels of tourism (such as Kaikoura, Westland, Tasman, Southland and Thames-Coromandel) are highly correlated. In these areas, roads are quite clearly more heavily used during peak tourism season.

Figure 30: Correlation between change in traffic and the number of visitors, selected territorial authorities

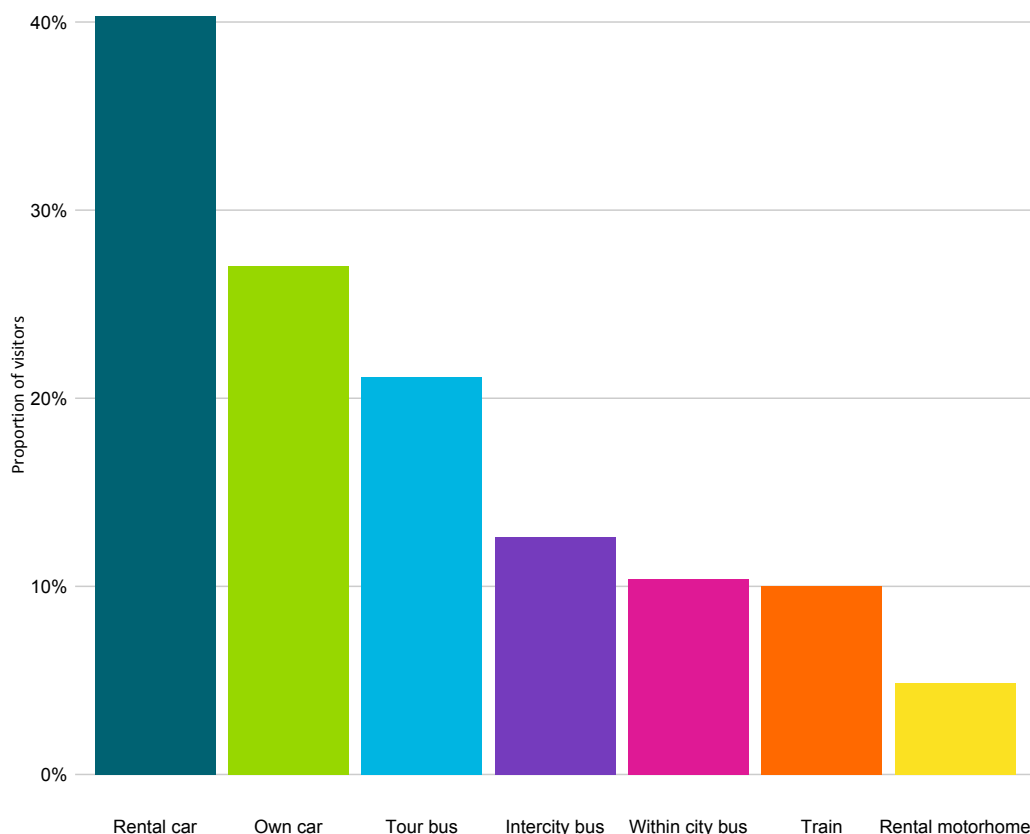


Source: NZTA, International Visitor Survey

6.1.2 Vehicle use

The International Visitor Survey provides a breakdown of vehicle types used by international visitors. Overall, around 40 per cent of visitors used rental cars, while another 27 per cent used their own car (whether bought during their trip or borrowed from friends or family). A fifth of international visitors travelled across New Zealand on tour buses. Just under five per cent of visitors used a rental motorhome.²⁴

Figure 31: Vehicle use by international visitors, 2015



Source: International Visitor Survey

6.2 Road infrastructure supply

New Zealand has approximately 63,000 kilometres of sealed and 32,000 kilometres of unsealed roads, owned by both local and central government.

The state highway network links New Zealand's towns and cities and provides access to key transport hubs such as ports and airports. It is managed by the NZTA and consists of 11,000 kilometres of state highways and over 4,000 bridges. The current state highway network is valued at approximately \$29.2 billion.

²⁴ Note that a single visitor may have used multiple forms of transport in their time in New Zealand, so the percentages do not sum to 100.

The local roading network consists of 66,000 kilometres of rural routes and 18,000 kilometres of urban routes. This network is valued at \$50 billion, excluding land values (based on an estimate by the Office of the Auditor General).

While the state highway network accounts for only 11.6 per cent of the total road network, almost half of all kilometres driven each year are on state highways. As state highways tend to connect areas of high tourism interest, a higher proportion of kilometres driven by tourists are likely to be on state highways.

6.2.1 Road capacity

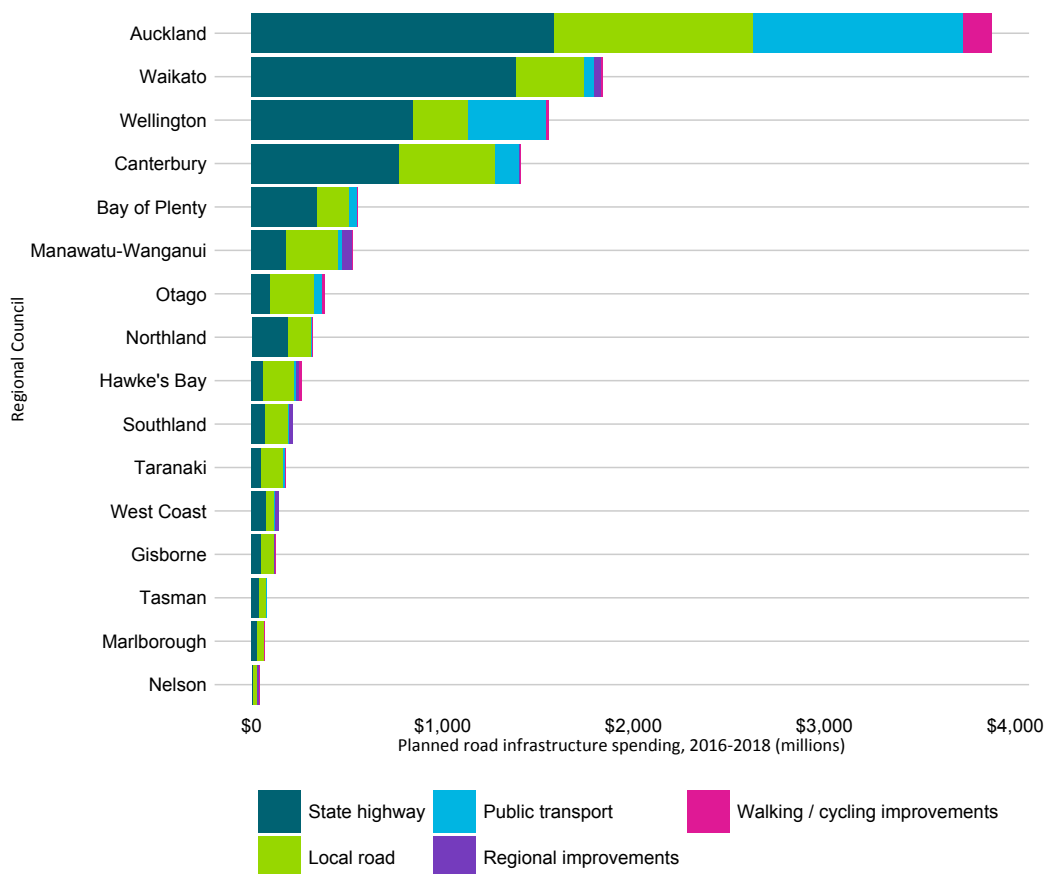
According to the NZTA, highway capacity is a function of lane width, lateral clearance, whether there is a median barrier or not, horizontal and vertical alignment, and number of side accesses. It also varies from location to location. Capacity of the national roading network is difficult to determine, with few objective measures available.

Anecdotally, many parts of the roading network are at capacity, according to the NZTA. It is, however, hard to attribute this to a single cause. There are many drivers of demand for roads – while tourism will be a factor, other factors such as a strong economy, migration, lower fuel prices and others will also play a part.

6.2.2 Road infrastructure spending

Spending on road infrastructure is planned as part of the National Land Transport Programme. Figure 32 presents planned spending over the 2016 to 2018 period, broken down by region. Due to its high population, Auckland is the region with the highest planned spend, with large shares being spent on local roads and public transport. The Wellington, Waikato and Canterbury regions also receive significant levels of investment. In Waikato, the majority of spending is on the state highway network, but in many other areas (such as Otago and Hawke's Bay) spending on local roads is larger. Auckland, Wellington and Christchurch are the main receivers of public transport expenditure, with \$1 billion spend planned in Auckland.

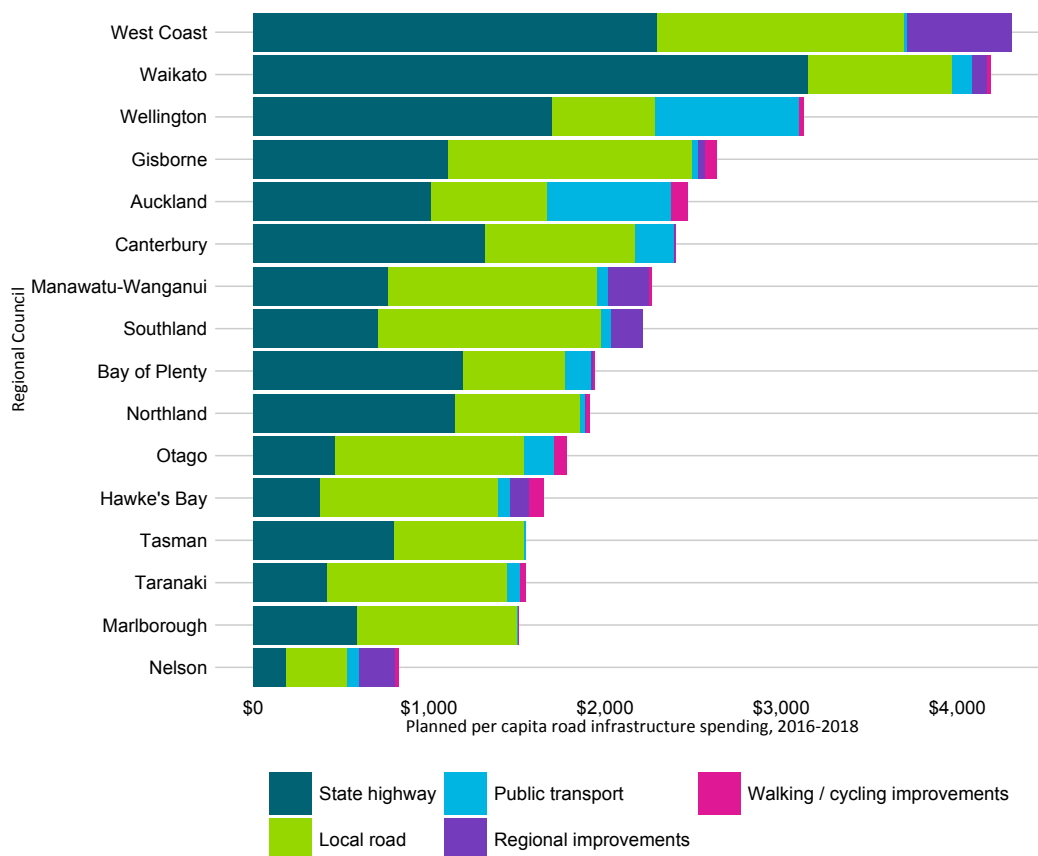
Figure 32: Planned road infrastructure spending, National Land Transport Programme, 2016–2018



Source: NZTA

On a per-capita basis, Auckland is no longer an outlier in road investment – suggesting that its higher level of investment mainly reflects its larger population. The West Coast, Waikato and Wellington regions have the highest per capita level of spend. In the case of the West Coast, this reflects its low population density. State highway and regional improvements may allow tourists to more easily visit the region. Similarly, state highway investment in the Waikato region should make it easier for tourists arriving in Auckland to travel south into other regions.

Figure 33: Planned road infrastructure spending per capita, National Land Transport Programme, 2016–2018



Source: NZTA

6.3 Road safety

One way to measure the quality of road infrastructure is to look at crash statistics. The NZTA (using data provided by NZ Police) has a database of crashes on New Zealand roads. Overseas licence holder crashes may be caused by a range of things, such as driver error or speeding, and may not necessarily have a direct correlation with the quality of the roading infrastructure. However, it is an indicator. Large numbers of tourist crashes could also suggest inadequate investment into new infrastructure, strain on existing infrastructure, inadequate information or training about New Zealand roads for visitors, or some other reason.

The Ministry of Transport produces a report on overseas licence holders involved in crashes.²⁵ Over the period of 2010 to 2014, 5.7 per cent of fatal and injury crashes involved an overseas licence holder. At the local level, the proportion of crashes involving an overseas licence holder varied markedly. In Southland and Queenstown-Lakes districts, around a quarter of all crashes involved an overseas driver. These areas are tourism centres and also have long roads across difficult terrain.

²⁵ Ministry of Transport. (2015). *Overseas driver crashes*. Retrieved from <http://www.transport.govt.nz/assets/Uploads/Research/Documents/Overseas-drivers2015-15Jun15.pdf>

Table 6: Top 22 local bodies by fatal and injury crashes involving overseas drivers (2010–2014)

LOCAL BODY	CRASHES INVOLVING OVERSEAS DRIVERS	PERCENTAGE OF CRASHES THAT INVOLVED AN OVERSEAS DRIVER
Westland	68	38%
Mackenzie	30	27%
Queenstown-Lakes	107	25%
Southland	153	24%
Kaikoura	22	21%
Central Otago	39	16%
Buller	26	15%
Hurunui	39	13%
Waitaki	47	12%
Ashburton	36	12%
Tasman	52	11%
Clutha	45	11%
Thames-Coromandel	40	11%
Waitomo	26	11%
Marlborough	51	10%
Ruapehu	31	10%
Far North	80	9%
Grey	20	9%
Selwyn	42	8%
Taupo	44	8%
Western Bay of Plenty	48	8%
Otorohanga	12	8%

Source: NZTA

The Visiting Drivers Project, led by the NZTA, aims to ensure all visitors have a safe and enjoyable visitor experience. The project involves a range of organisations including central and local government, the tourism industry, and others. A range of initiatives are in place to reach visitors at each stage of their holiday – planning, booking, in-flight, arriving in New Zealand, and when actually driving on the road.

The NZTA has made a \$25 million investment to improve safety for visiting drivers through the 2015–2018 National Land Transport Programme. The \$25 million has been targeted across three broad categories:

- › a road safety engineering programme on the state highway network targeting key visitor journeys in Otago, Southland and the West Coast – \$15 million
- › co-investment with local government to support initiatives for key visitor journeys on local roads in Otago, Southland and the West Coast – \$8.75 million
- › a marketing programme (through an education plan) targeted at providing information to visitors – \$1 million.

6.4 Visitor experience

International visitors are asked to rate their experience of commercial transportation in New Zealand as part of the International Visitor Survey. Commercial transportation includes rental cars and bus, rail and ferry services. Overall, New Zealand scores very highly on commercial transportation satisfaction. In 2015, 90 per cent of respondents had a satisfaction rating of 7 out of 10 or higher. Just two per cent had a rating of 4 or lower. This suggests that New Zealand commercial transportation is largely suiting the needs of tourists. However, there are no direct comparisons with other countries in order to determine how New Zealand may compare internationally.

Figure 34: International visitor experience: commercial transportation



Source: International Visitor Survey

7 Rail infrastructure

■ Summary

- › Rail services largely cater for local commuting in New Zealand. On these services, tourists make up a small minority of users. There are, however, three 'Scenic Journeys' throughout New Zealand that attract tourists in larger numbers.
- › Utilisation rates for these routes are very high during the 'high season' of February to March. It is uncertain how much additional capacity can be provided, even if demand were to continue to increase.

7.1 Rail infrastructure demand

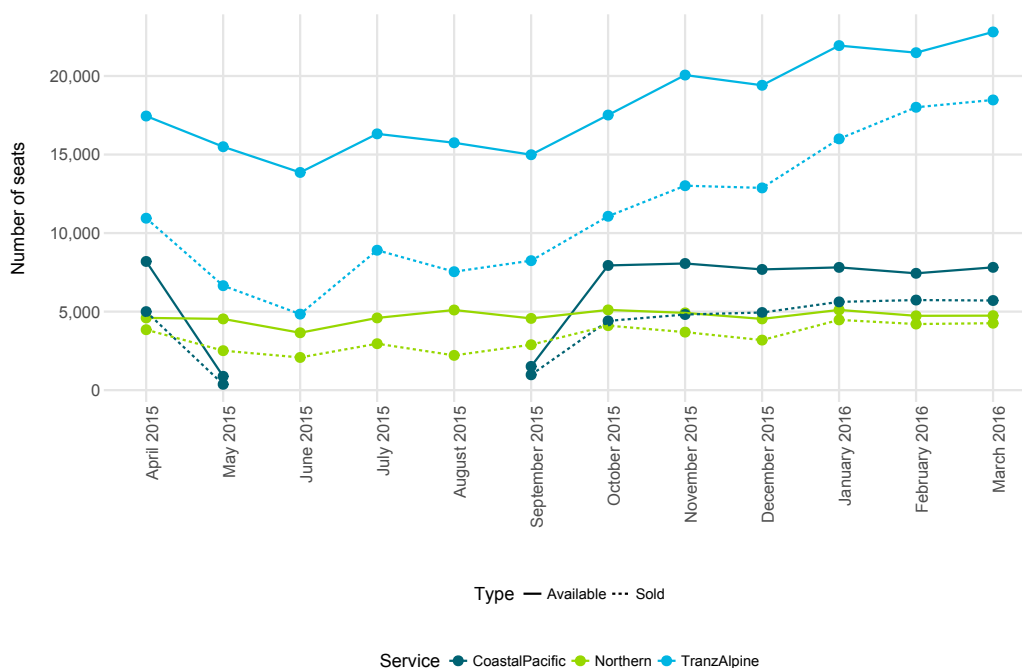
KiwiRail operates the rail network and freight fleet, while local governments contract metro services and own the metro fleet. Because local city rail networks have an extremely high proportion of commuters on board, it is not easy to identify demand there, as tourists are a small component.

KiwiRail operates three 'Scenic Journeys' throughout New Zealand, of which tourists are a large proportion of passengers. These journeys are as follows:

- › The Northern Explorer travels from Wellington through Palmerston North, Ohakune, the Tongariro National Park, and Hamilton, to Auckland. The Northern Explorer runs southbound three days a week, and northbound three days a week.
- › The Coastal Pacific connects Christchurch through Kaikoura to Picton. The Coastal Pacific operates daily between September and May.
- › The TranzAlpine connects Christchurch with Greymouth, through Arthur's Pass. The TranzAlpine runs daily throughout the year.

The demand across the year is highly seasonal across all KiwiRail Scenic Journeys, in line with tourism seasonal trends. The TranzAlpine, with a higher percentage of international passengers, is the most seasonal of the KiwiRail Scenic Journeys, and in addition has more capacity to cater to the extra demand during these months. For example, last year, there were 5,000 passengers on the TranzAlpine in June, whereas there were 18,000 passengers in March.

Figure 35: Scenic Journeys capacity and demand



Source: PriceTech

7.2 Rail infrastructure supply

New Zealand has approximately 4,000 kilometres of rail track, 1,656 bridges, and 1,400 public road level crossings. KiwiRail owns 189 mainline locomotives and 4,820 freight wagons. The rail network and operations are valued at \$922 million, excluding the land beneath the rails, which is valued at \$3.2 billion.²⁶

7.2.1 Scenic Journeys capacity

The capacity of Scenic Journeys is affected by the number of carriages attached to trains. When demand is low, carriages are left behind at the depots. With that in mind:

- › For the Northern Explorer, capacity of seats varied between 4,500 and 5,100 per month across the March 2016 year, apart from June, where capacity fell to 3,600.
- › The Coastal Pacific service has 7,500 to 8,000 seats across its season, with the exception of the ‘shoulder months’, where trains only ran a part of that month.
- › The TranzAlpine service has many more seats than the other two, growing steadily from the low of 13,800 in June 2015 to a high of 22,800 in March 2016.

The higher percentage of international passengers utilising TranzAlpine during the peak season is driven by two main factors. First, there is a higher number of international tourists visiting New Zealand during these months, which, as expected, increases the demand on this

²⁶ National Infrastructure Unit. (2015). *Infrastructure evidence base 2015 refresh: Transport sector*. Retrieved from <http://www.infrastructure.govt.nz/plan/evidencebase/2015-nip-evidence-transport.pdf>

service. Second, the Northern Explorer and Coastal Pacific have no space to cater to the extra demand during these months. Consequently, tourists wishing to take a train may have to settle for using TranzAlpine instead.

Utilisation rates for the three scenic rail journeys are highest in February, March and April. Utilisation for the Northern Explorer approaches 90 per cent, suggesting trains are well-patronised during that period.

Across the year, it is clear that rail services can adjust capacity by adding/removing passenger cars from daily train services. However, it appears that some services are reaching their limit during high seasons.

7.2.2 Rail infrastructure investment

Auckland Transport is investigating adding light rail or heavy rail lines to replace some of the most heavily used bus lines in the region. The study is considering replacing the bus routes on Dominion Road, Manukau Road, Mt Eden Road, Symonds Street and Queen St with light rail routes, and providing a link to the existing airport rail network. The cost of this expansion is estimated to be approximately \$1 billion. The network could improve access for tourists to Auckland who don't use the road network, and reduce congestion for those who do. It will also be important for business events. The estimated time to travel from Aotea to the airport would be 41 minutes, while travelling from Britomart to the airport would take between 39 and 44 minutes.

Figure 36: Suggested Auckland light rail expansion



Source: Auckland Transport

8 Cellular network infrastructure

■ Summary

- › While all main cities and towns are covered by New Zealand's cellular network, large parts of rural, and some tourism-specific, areas are not.
- › It can be difficult and expensive to provide cellular coverage to uneven terrain. The Government's \$50 million Mobile Black Spot Fund's aim is to address key black spots in the network.

8.1 Cellular network infrastructure demand

Information on tourist use of the New Zealand cellular network is currently limited. However, overseas visitors are increasingly using mobile devices. About 63 per cent of overseas holidaymakers surveyed in 2015 carried a smart phone while visiting New Zealand. The number of tourists carrying smart phones has tripled since 2010/11.²⁷

Some recent technologies which allow the tracking of locations of mobile phones may be useful in the future. Algorithms can be used to identify tourists through movement and user behaviour, but more work is required. Also, information would not be available for areas without coverage of the cellular network.

8.2 Cellular network infrastructure supply

The cellular network in New Zealand is largely operated by two providers – Chorus and Vodafone.

Figure 37 shows the estimated level of cellular coverage across the country. This coverage is indicative and in some cases may not reflect actual coverage available.

The prediction of cellular coverage in New Zealand indicates that urban areas of the country are covered by at least 3G technology. While all main cities and towns are covered by the cellular network, large parts of rural New Zealand, including key highways and some tourism-specific areas, are not.

A key black spot in the network is a 200-kilometre stretch between Fox Glacier and Makaroa through the Haast Pass on the West Coast. The route from Te Anau to Milford Sound also does not have good cellular coverage. Northland and the East Coast are also poorly served high-tourism regions.

It can be very difficult and expensive to provide cellular coverage to areas with uneven terrain. Last year the government put aside a \$50 million 'Mobile Black Spot Fund' that enables companies and communities to nominate black spots and key tourist areas that need better mobile connectivity.

²⁷ Tourism New Zealand. (2015). *Visitor experience*. Retrieved from <http://www.tourismnewzealand.com/markets-stats/research/infographics/visitor-experience/>

Figure 37: Map of estimated cellular coverage in New Zealand



Source: Radio Spectrum Policy and Planning, MBIE

9 Events and activities infrastructure

■ Summary

- › As more international tourists visit New Zealand, most National Parks are becoming more highly frequented, though there are some parts of the network that are currently under-utilised.
- › The best opportunities will be at locations close to existing tourism areas and where appropriate infrastructure is available such as transport, accommodation and complementary services and experiences.
- › There is also significant capacity, even at popular sites, outside of the peak season. However, as demand increases, investment should be made to ensure that infrastructure in the parks can support the additional tourism.
- › Business events are becoming a larger part of New Zealand's international presence. Business event attendees tend to spend more, so are viewed as high value to the tourism industry.
- › Visitors for business events are trending up, especially from Australia. The tourism industry and government have made a concerted effort in recent years to capture a larger part of this international conference market, led by significant investments in world-class conference facilities in New Zealand.
- › The overall opinion of international visitors about activities on offer in New Zealand is consistently high, reaffirming the country's place as a 'premium' travelling destination.

9.1 Introduction

This section will explore two aspects of tourism infrastructure for events and activities: national parks and business events.

9.2 National parks

9.2.1 National park infrastructure demand

Figure 38 shows a map of the 13 national parks in New Zealand. The majority are concentrated either side of the South Island's main divide.

In addition, there are a number of iconic tourist experiences (eg, Cathedral Cove, Cape Reinga/Te Rerenga Wairua) provided on conservation land that is outside of national parks.

Figure 38: Map of New Zealand national parks

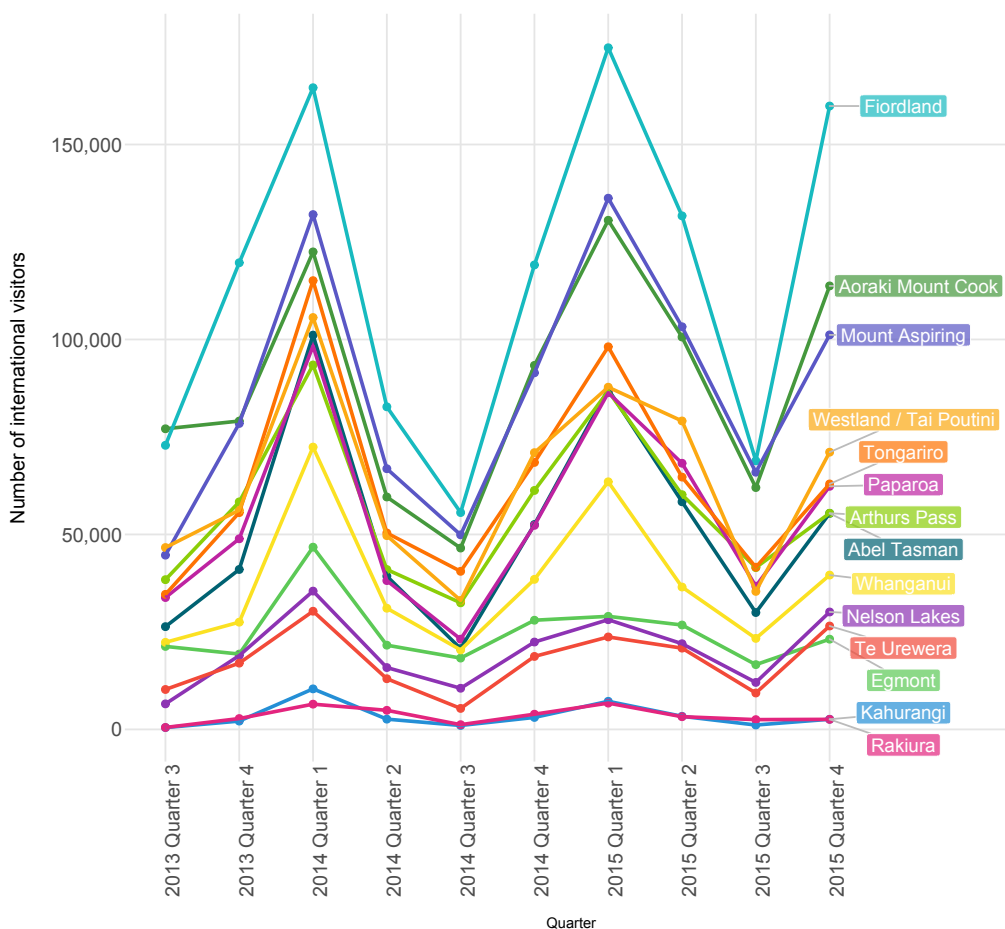
Source: Department of Conservation

An estimated 1.3 million international visitors went to one or more of New Zealand's national parks in 2015. Over a third of these visited during January–March 2015, while just 16 per cent visited during the winter months of July–September 2015. Ten of the 13 national parks saw an increase in international tourism number over 2015.

An additional estimated 1.3 million New Zealanders used national parks from 2014 to 2015, with Tongariro National Park being the most visited.

The most popular national park for international visitors is Fiordland, where an estimated 535,300 visited in 2015. This is an increase of 27 per cent from the previous year, when 422,000 visited. Other popular national parks include Aoraki/Mount Cook with 407,000 visitors (up 26 per cent from 321,900) and Mount Aspiring with 406,600 visitors (up 20 per cent from 340,200). Paparoa National Park also saw a surge of visitors over the year, increasing 20 per cent to 243,600.

Figure 39: International visitor attendance for national parks



Source: International Visitor Survey

9.2.2 National park infrastructure supply

A total of 13 national parks are distributed around New Zealand, of which 10 are located in the South Island.²⁸ Tourism concessions are managed by the Department of Conservation. They allow for commercial operators to provide tourist activities within a national park (that are compatible with our national park concept). Examples of activities include guided walking, transport, accommodation, scenic flights and the operation of ski fields.

²⁸ A 14th national park, Te Urewera, was disestablished in 2014, and it is now a legal entity operated by local Iwi (but which still meets the International Union for Conservation of Nature criteria for a national park). Te Urewera remains open to the public, and the Department of Conservation continues to maintain the tracks and facilities there.

It is difficult to measure the capacity of national parks. Several different practices are in place to measure capacity. These include:

- › the limit to the number of tourists that can visit hiking and walking trails at the same time without causing a negative impact to the environment
- › the capacity of huts and campsites available for accommodation within the national park
- › the capacity of activities occurring in the park run by commercial operators
- › the maximum number of concessionaire clients (ie, tourists).

Technically, information on hut and campsite capacity and allocated concessions are available, but will require further analysis. Most sites are likely only used over some parts of the year, and may have low demand.

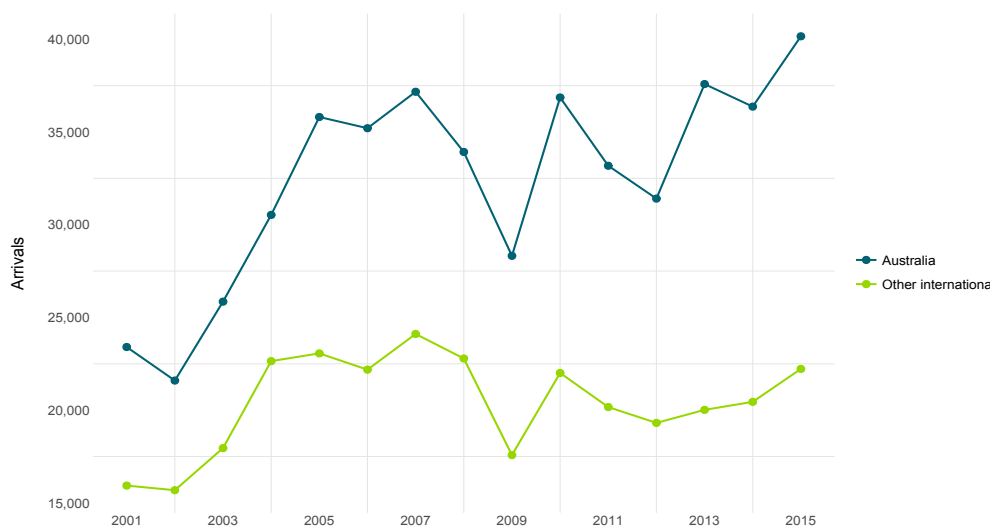
There comes a point for national parks where overcrowding and its resultant damage to the natural environment can have a detrimental effect on the quality of national parks and the visitor experience. These critical points should be identified early in order to preserve our natural diversity, the country's green image, and tourists' experience. Some iconic locations such as the Tongariro Alpine Crossing and Milford Sound are already showing signs of ill effects from increasing numbers of tourists.

9.3 Business events

9.3.1 Business event infrastructure demand

The Convention Activity Survey gives an estimate of the number of international visitors coming to New Zealand for conferences or conventions. In 2015, an estimated 40,200 visitors arrived for these events from Australia, and 22,700 arrived from other international locations – a total of 62,900 people. This is an increase of 9.5 per cent from 2014. Australian visitors have almost doubled over the last 15 years, making this a key target market. There are considerably fewer convention visitors from other countries.

Figure 40: International visitor arrivals for conference and convention events



Source: International Visitor Survey

9.3.2 Business event infrastructure supply

Investment into conference centres

A number of very high profile builds of conference centres are currently in the construction pipeline.

Auckland

In downtown Auckland, work has begun on the \$471 million New Zealand International Convention Centre (NZICC), a two-storey convention centre. A new 5-star, 300-room hotel developed by SkyCity Entertainment Group will be associated with the centre. The construction of the centre will take approximately three years to complete, finishing in 2019. The NZICC will be capable of hosting conventions of around 3,000 people, and one-off events of up to 4,000 people.

A feasibility study of the NZICC²⁹ assumed that the new conference centre will attract the following additional international conferences to Auckland per year:

- › eight global conferences with an average size of 1,440 delegates
- › five Asia-Pacific conferences with an average size of 1,120 delegates
- › 12 Australasian conferences with an average size of 530 delegates.

Overall, the NZICC should attract approximately 33,000 additional international convention delegates each year.

Christchurch

The Christchurch Convention Centre, a Government Anchor project of the Canterbury rebuild, will be able to host several events at the same time. Starting with space for events of up to 2,000 people, this will complement facilities in Auckland and Queenstown. The Crown has set aside \$284 million to develop the centre.

Plenary Conventions New Zealand, a consortium of international infrastructure firm Plenary Group and local entities Ngāi Tahu Property and The Carter Group, has been selected as the preferred consortium for the master-planning and development stage of the convention centre project.

Negotiations with the preferred development consortium and centre operator to determine the exact design and layout of the Convention Centre Precinct are ongoing.

Wellington

Public consultation was completed in March 2016 on a \$134 million convention centre and movie museum in the Wellington CBD. If greenlighted, the centre will take two years to complete and could accommodate up to 1,200 delegates.

Queenstown

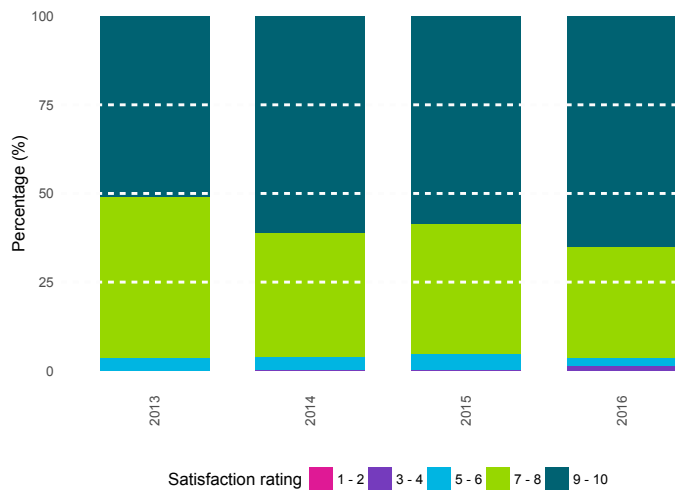
Queenstown has plans to build a 750-delegate convention centre on Lakeview.

29 Auckland City Council & Ministry of Economic Development. (2009). *International Convention and Exhibition Centre: Summary of findings of a feasibility study and supplementary research*. Retrieved from <http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/other-research-and-reports/International%20Convention%20and%20Exhibition%20Centre%20Feasibility%20Report.pdf>

Visitor experience

Overall satisfaction with activities undertaken while visitors are in New Zealand are generally very high. Around 95 per cent of international visitors stated a satisfaction rating of 7–10 in 2015, and less than 1 per cent stated 1–4.

Figure 41: International visitor experience: activities



Source: International Visitor Survey

Appendix 1:

New/Planned flight capacity to New Zealand

AIRPORT	DESTINATION	DETAILS
Auckland	Gold Coast, Australia Kuala Lumpur, Malaysia	Air Asia X launched a daily service in March flying via the Gold Coast. The A330-300 aircraft has a 377-seat capacity.
Auckland	Doha, Qatar	Qatar Airways launched daily flights operating Doha to Auckland from 3 December 2016, using a Boeing 777-200LR aircraft.
Auckland	Dubai, Emirates	Emirates Airways launched daily flights Dubai to Auckland on 1 March, using a Boeing 777-200LR aircraft.
Auckland	Hong Kong, Hong Kong Airlines	Hong Kong Airlines has announced daily flights Hong Kong to Auckland from November 2016. It will use an Airbus A332 aircraft with 283 seats, including 24 business class seats.
Auckland	Manila, Philippines	Air New Zealand has announced flights three times a week using Boeing 767-300 aircraft with a flight time of around 10.5 hours in each direction. This route is planned to start from December 2016.
Auckland	Osaka, Japan	Air New Zealand plans to launch a seasonal service (from November to March) three flights a week to Osaka from November 2016. The service will deliver an additional 14,000 seats over the season.
Auckland	Ho Chi Minh City, Vietnam	Air New Zealand plans a non-stop seasonal service three times a week from June to October (with potential to extend the season in future years) using a Boeing 767-300.
Auckland	San Francisco, USA	United Airlines will enter the New Zealand market with a San Francisco to Auckland service from July 2016. It will operate a 787-8 three times a week moving to a larger 787-9 from November 2016.
Auckland	Rarotonga, Cook Islands	Jetstar commenced year-round services between Auckland and Rarotonga on 22 March 2016. This adds around 25,000 return seats a year to the Auckland–Rarotonga route.
Auckland	Los Angeles, USA	American Airlines will start a daily service between Los Angeles and Auckland in June 2016 using a 787-8 Dreamliner aircraft. The service will boost seat capacity between New Zealand and United States by 16%, or 165,000 seats per year.
Christchurch	Brisbane, Australia	From June 2016, Qantas will operate the direct Christchurch to Brisbane service three times a week, growing to four times a week over the busy summer months.
Christchurch	Rarotonga, Cook Islands	Virgin Australia has just announced it will offer flights on a Boeing 737-800 to Rarotonga, to begin on June 25 and run weekly every Saturday for 16 weeks, with the last flight on 8 October 2016.
Wellington	Canberra, Australia Singapore, Singapore	Singapore Airlines will begin connection flights between Wellington and Canberra and on to Singapore from September 2016. Flights will operate four days a week and use 266-seat Boeing 777-200 aircraft.

Appendix 2:

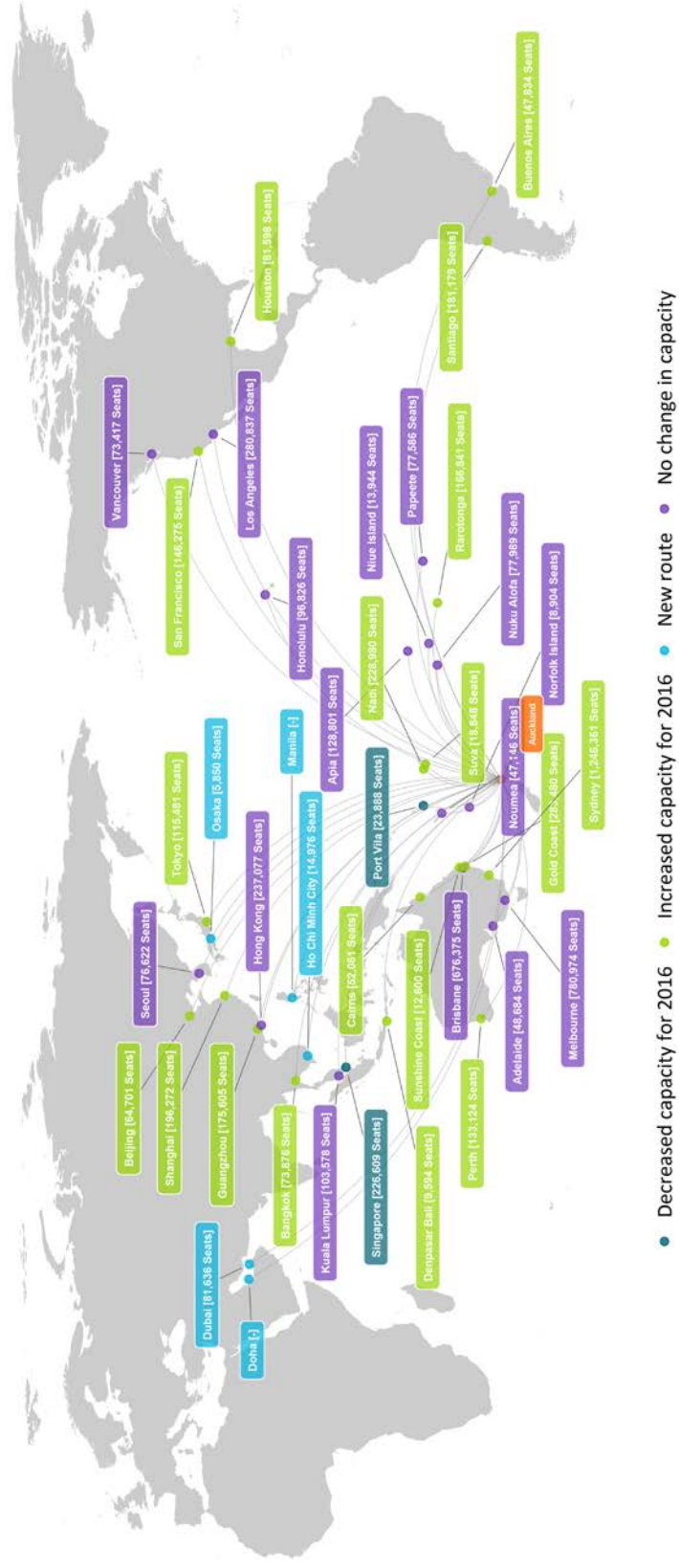
New Zealand large hotel developments (>\$10 million) at construction and planning stages

REGION	DESCRIPTION OF DEVELOPMENT	ROOMS	ESTIMATED	DEVELOPMENT STAGE	EXPECTED COMPLETION
Auckland	Ramada Albany – a mixed-use development including 66 4-star serviced hotel studios	66	\$43m	In construction	End 2016
Auckland	A major refurbishment of the existing Copthorne Hotel Auckland Harbour City - entirely reconstructing the interior. The new hotel (the Millennium) will have 190 5-star rooms.	190	\$40m	In construction	Early 2017
Auckland	As part of the International Convention Centre development, a 300-room 5 star hotel will be built.	300	\$159m	In construction	2019
Christchurch	Repurposing of Forsyth Barr building to a 4-and-a-half-star Crowne Plaza Hotel.	200	\$10m	In construction	2017
Hawke's Bay	The Village Exchange Development is a 40-room, 5-star boutique hotel in Havelock North.	40	\$25m	In construction	Dec-16
Queenstown	Ramada Queenstown will be Queenstown's first "airport hotel". It has 54 rooms and is part of a larger retail and office development by the airport.	54	\$25m	In construction	Jun-16
Queenstown	Boutique hotel development in Henry Street.	54	\$10m	In construction	TBA
Wellington	Sofitel Hotel Wellington on Bolton Street – a 5-star hotel with 130 rooms	130	\$35m	In construction	Jun-16
Auckland	1 Mills Lane, a 125-room hotel part of a larger 30-level office tower development.	125	\$350m	Planning	Dec-18
Auckland	Ritz-Carlton hotel – part of larger residential development 52-story NDG Auckland Centre.	266	\$350m	Planning	2021
Auckland	Park Hyatt Auckland – luxury hotel development planned on Auckland's Waterfront	195	\$200m	Planning	2017
Auckland	Wynyard 100 is a mixed-use development including a 120 room hotel, reconfiguring the current bus maintenance facility	120	\$100m	Planning	2017
Bay of Plenty	Spring Street and Durham Street Hotel in Tauranga, 13 floor development replacing the existing Public Trust building. Includes a conference centre.	150	TBA	Planning	TBA
Wellington	DNA Hotel in Petone.	36	\$20m	Planning	TBA
Wellington	The Sebel Hotel in Lower Hutt, a 4.5 star apartment-style hotel.	60	\$12m	Planning	Nov-16
Wellington	A new luxury Rydges Hotel is planned at Wellington Airport.	134	\$35m	Planning	Late 2017
Christchurch	New, second hotel development at Christchurch International Airport	200-300	TBA	Early planning	2017-2018
Auckland	Auckland Airport is working on a business case for a third "premium" hotel near the International terminal at Auckland Airport.	300	TBA	Early planning	TBA

Appendix 3:

Direct air routes by airport

Figure 42: Auckland Airport international routes



● Decreased capacity for 2016 ● Increased capacity for 2016 ● New route ● No change in capacity

Figure 43: Wellington Airport International routes

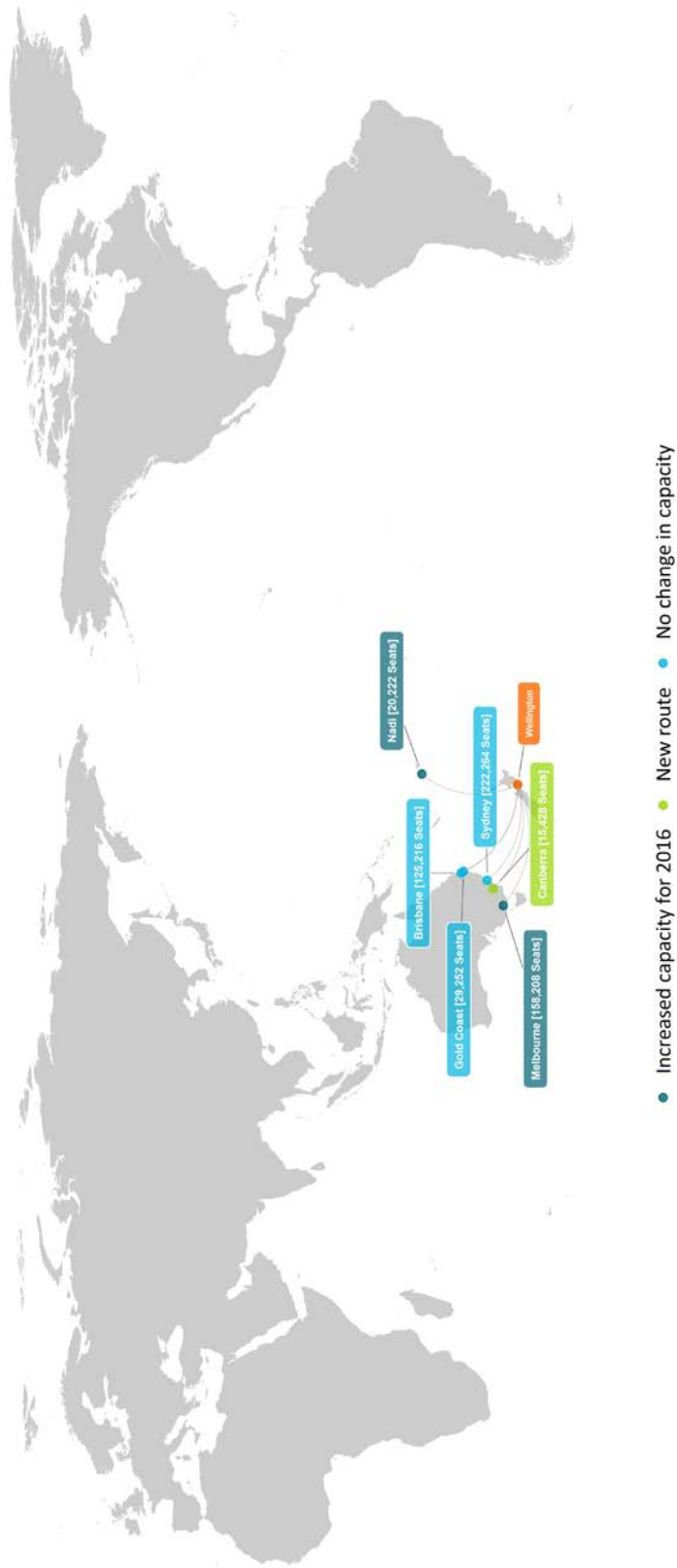


Figure 44: Christchurch Airport international routes





Figure 45: Queenstown Airport international routes

