

The Master Plan presents a strategy for the development of the airport to 2034, taking into account demand forecasting and BAC's specific development objectives.

Connecting People Building Opportunities

CHAPTER 5 GROWTH FORECASTS AND DEVELOPMENT OBJECTIVES

Chapter 5: Growth Forecasts and Development Objectives

GROWTH FORECASTS AND DEVELOPMENT OBJECTIVES 5

GROWTH FORECASTS AND DEVELOPMENT OBJECTIVES

Planning ahead for 20 years requires forecasting of passenger demand and airline operations. For Brisbane Airport it also requires an assessment of the likely demand for commercial development in on-airport precincts.

In addition to forecasting, BAC's master planning is directly influenced by its development objectives. These are based on the long-term vision and values of the company, while also responding to the broader objectives for the city and the state.

5.1 Aviation Growth Forecasts

INTRODUCTION

Aviation business, including the attraction of airlines, passengers and freight, is central to Brisbane Airport's growth and form the basis for this Master Plan. For this reason, trends and issues that impact on air travel and airline expansion are regularly monitored to understand and forecast the pattern and impacts of growth.

This section outlines the current and projected growth of commercial airline movements to Brisbane, annual passenger numbers, trends in general aviation and domestic and international air freight. Brisbane Airport has seen continued strong growth in both domestic and international air travel since the approval of its 2009 Master Plan.

In the financial year 2007/08, Brisbane Airport handled a total of 17.5 million passengers and some 175,000 aircraft movements.

In 2012/13, this has grown to 21.6 million passengers and 219,000 annual aircraft movements, equating to an increase of 23% and 25% respectively.

The growth realised since the 2009 Master Plan is consistent with the longer-term growth results that Brisbane Airport has achieved in recent decades and this growth reflects the population and economic growth of Queensland. Figure 5.1 shows the historical growth in passenger travel through Brisbane Airport since 1997. Since this time there have been a number of significant events that have caused short-term impacts on air travel, including:

FIGURE 5.1: GROWTH IN PASSENGERS FROM 1997 - 2013



- » The Asian economic crisis of 1997
- The terrorist attacks in the United States of America in September 2001
- » The collapse of Ansett in September 2001
- » The SARS virus in 2003
- » The global financial crisis during 2008-10.

Volatility in fuel prices, coupled with worldwide economic concerns have resulted in debate about continued growth in air travel. However, as can be seen from past events, while the rise in fuel costs and economic uncertainty may result in some short-term reduction in growth rates, continued long-term growth in air travel is likely.

Despite the sensitivity of world events that have affected aviation in the recent past, airline services via Brisbane Airport have largely been maintained and in some cases, expanded.

AIRLINE HIGHLIGHTS 2008 – 2013

As Queensland continues its growth as a major business and tourism destination, it is anticipated that international airlines will continue to grow their operations through Brisbane Airport.

Over the last five years, a number of airlines have commenced operations, increased service frequency or up-gauging aircraft for operations into Brisbane Airport. When airlines supply additional capacity in existing and new markets, this capacity underpins the overall growth in passengers arriving and departing Brisbane Airport.

The changes in airlines services through Brisbane Airport since the 2009 Master Plan are outlined in Table 5.1. While the global financial crisis saw some airlines reduce frequency of operations or deferred the introduction of new services to Brisbane Airport, BAC continues to work closely with airlines to promote Brisbane, Queensland and Australia in order to attract new airlines and services to Brisbane Airport.

PASSENGERS

Passenger numbers have grown 23% in the past five years.

TABLE 5.1: CHANGES IN AIRLINE SERVICES SINCE 2009

Date	Changes to Airline Services
February 2009	Emirates commenced a double daily service direct to Dubai
April 2009	Virgin Australia launched services between Brisbane and Los Angeles
November 2009	Virgin Australia launched services between Brisbane and Phuket
November 2010	Tigerair commenced domestic services at Brisbane
November 2010	China Southern introduced direct services connecting Brisbane and Guangzhou
January 2011	China Airlines extended its Taipei to Brisbane service to Auckland
February 2011	Inaugural Aeropelican flight between Narrabri and Brisbane
May 2011	Qantas commenced a now daily flight from Dallas Fort Worth
March 2012	QantasLink introduced the larger B717 aircraft on selected domestic services
November 2012	Hawaiian Airlines launched direct services between Honolulu and Brisbane
February 2013	Etihad Airways increased frequency of its Abu Dhabi-Singapore-Brisbane service from three times weekly to daily
April 2013	Fiji Airways (formerly Air Pacific) made its first scheduled A330 flight between Nadi and Brisbane
June 2013	Philippine Airlines commenced Manila-Darwin-Brisbane services (three times weekly)
June 2013	Malaysia Airlines increased the frequency of its Kuala Lumpur to Brisbane service from five times a week to daily services
June 2013	Qantas increased its frequency of the Hong Kong-Brisbane service from four times weekly to daily
August 2013	Garuda Indonesia launched a daily Denpasar (Bali)–Brisbane service
October 2013	Emirates up-gauged its aircraft from a B777 aircraft on the Dubai-Brisbane-Auckland route to an A380 aircraft. This up-gauging was the first scheduled A380 service into Brisbane
November 2013	China Southern grew the frequency of its service between Brisbane and Guangzhou over time from five times weekly to a daily service
December 2013	Tigerair announced services between Darwin, Cairns and Adelaide commencing in March 2014
December 2013	Jetstar announced B787 services between Brisbane and Bali commencing in April 2014

Approach to Forecasting

A significant number of factors influence the growth of air travel, including:

- » The incomes of travellers both the level of income and confidence that these levels will be maintained or will grow
- » The competitiveness (quality, product attributes) of a destination compared to alternative destinations
- The supply of airline services frequency, reliability, quality of service and aircraft
- » Tourism promotion by governments, airlines and industry bodies
- » Consumer tastes and available time for travel
- The process of air travel and the ground component of travel
- » Threats such as wars, terrorism or the emergence of pandemics such as SARS or avian influenza.

While all of these types of factors have an influence on demand, only some can be measured and factored into the type of modelling used in airport forecasting.

Of the factors listed above, income (generally measured through an aggregate variable such as Gross Domestic Product (GDP)) has the largest influence on growth rates for international travel.

In addition to the influence of GDP, developments in domestic and international aviation will also influence air travel.

Airline alliances, code sharing, privatisation and the advent of new aircraft types can have a material impact on market outcomes. For these reasons, a number of approaches have been used in constructing the forecasts that underpin this Master Plan.

Because forecasting deals with many uncertainties, BAC also considers lower and higher growth scenarios to assess the sensitivity of its forecasts. The forecasting approach is to:

» Review markets and establish trend growth rates for Brisbane Airport traffic

- » Use quantitative analysis and review other studies to establish relationships between traffic drivers, such as GDP and traffic demand. These are undertaken at a high 'macro' level and compared with market based, or 'micro' reviews
- » Establish the 'reasonableness' of the forecasts by reviewing other long-term forecasts (economic, population and traffic), and by comparing Brisbane with other airports.

The 'macro' approach establishes relationships between aggregate passenger numbers for Brisbane Airport and economic factors such as Australian and/or Organisation for Economic Co-operation and Development GDP, as well as identifying specific markets for major tourism generating countries and/or regions.

The 'micro' approach provides an additional perspective on growth and is more responsive to developments in specific regions (e.g. the Asian economic crisis).

From previous research and comparable studies within Australia and overseas, estimates of various elasticities have been established, mainly for income and fares. This data was used in forecasting passenger traffic by travel type and route.

While these elasticity estimates are not derived from Brisbane Airport data, long term monitoring of this indicates that these estimates can be valuable in preparing medium to longer-term forecasts of air traffic markets, particularly when used in conjunction with trend analysis for the specific market. In the case of domestic travel, the Bureau of Infrastructure, Transport and Regional Economics (BITRE) publishes route level data monthly for top Australian domestic routes.

This route level data was used by BAC to establish trends that inform this Master Plan.

In addition, capacity expansion by Australia's domestic airlines has an important influence on growth forecasts in the short to medium term.

Since 1997 BAC has engaged Tourism Futures International (TFI) to undertake annual and peak demand forecasts as a key input to BAC's internal budget and business processes, overall airport master planning, major aviation facility development and analysis of aircraft noise metrics for Brisbane Airport.

In 2013 BAC engaged TFI to update its 20-year traffic forecasts for Brisbane Airport. The following section is based on these forecasts.

GROWTH FORECASTS 2013/14 TO 2033/34

Passenger Growth Forecasts International

In the near-term (out to 2019/20), it is considered that international passenger movements through Brisbane Airport will sustain an average 5.4% annualised growth.

For the same period, the independent body Tourism Forecasting Committee (April 2013), has forecast the number of international visitor arrivals to Australia will grow by an average of 3.5% per annum.

The number of Australians travelling overseas is set to grow by an average of 3% for the same period to achieve a combined annual growth of 6.5%.

Based on these projections, BAC forecasts indicate that by 2033/34, some 11.7 million passengers will pass through the International T1 annually.

Domestic

The number of domestic passengers is expected to grow by an average of 4.6% per year up to 2019/20. Growth rates in the longer term will remain relatively high at around 4% annually for Brisbane Airport due to continuing population and economic growth in Queensland.

Consequently, forecasts suggest that by 2033/34, around 37 million passengers will pass through the Domestic T2 annually.

Figure 5.2 shows the international and domestic growth forecast.

AIRCRAFT MOVEMENT FORECASTS

Commercial Airline Activity

Aircraft movement growth is normally lower than passenger growth due to airlines upgrading their aircraft fleets to larger capacity aircraft. Given this, the forecast growth in aircraft movements at Brisbane Airport is less than the rate of passenger growth. In the shortterm to 2019, aircraft movements are expected to grow at an average of 2.7% per annum. This rate of growth will largely remain consistent over the long-term to 2034 where a forecast average annual growth rate of 2.6% increase in aircraft movements is forecast for Brisbane Airport. Table 5.3 shows the breakdown of aircraft movement growth across the international, domestic and general aviation fleets to 2034. It also shows a comparison with aircraft movement forecasts contained in previous master plans. By 2034, Brisbane Airport is forecast to be handling approximately 360,000 annual aircraft movements.

Figure 5.3 shows this forecast growth in aircraft movements.

New Generation Aircraft

Since the last Master Plan, the world's largest aircraft manufacturers, Airbus and Boeing, have continued

FIGURE 5.2: DOMESTIC AND INTERNATIONAL PASSENGER GROWTH FORECAST



Source: TFI (2013)

FIGURE 5.3: AIRCRAFT MOVEMENTS GROWTH FORECAST



Source: TFI (2013)

5 GROWTH FORECASTS AND DEVELOPMENT OBJECTIVES

the rollout of new technology aircraft including A380 and B787 aircraft. Both manufacturers have also commenced design of several narrow and widebody aircraft for production in the next five years. Some of these aircraft include:

- » Airbus A320 NEO (new engine option) is set to replace the current A320 fleet from 2015 onwards. Qantas has placed orders for this aircraft
- » Boeing 737 Max is set to replace the existing B737 fleets from 2017 onwards. Virgin Australia has placed orders for this aircraft
- » Airbus A350 XWB (Extra Wide Body) which is scheduled to commence airline operations during the second half of 2014. Several international airlines that service Brisbane have placed orders for this aircraft

» Boeing B777-800X and B777-900X are new generation wide body aircraft scheduled to commence production in 2017 for delivery in 2020. As of March 2014 Emirates and Etihad have placed orders for these aircraft.

These aircraft represent significant technological advancements in

aircraft design, including major fuel efficiencies, quieter operation, reduced carbon emissions, as well as improved passenger amenity.

Forecast Comparisons with Previous Master Plans

Tables 5.2 and 5.3 below compares passenger growth forecasts and aircraft movement forecasts contained in the two most recent Master Plans for Brisbane Airport (2003 and 2009) with growth predicted in this 2014 Master Plan.

While there are differences in the forecasts in the near term, the longer-

TABLE 5.2: PASSENGER GROWTH FORECAST COMPARISON

Master Plan Year	Forecast Period of Master Plan		Passenger Numbers (shaded areas are actual figures)						
		Source of Passengers	2007/08	2012/13	2017/18	2022/23	2028/29	2033/34	
2003	2003 – 2022/23	International	3,800,000	5,200,000	6,900,000	9,100,000			
		Domestic	13,100,000	16,600,000	20,700,000	25,900,000			
		Total	16,900,000	21,800,000	27,600,000	35,000,000			
2009	2009 – 2028/29	International	4,100,000	5,300,000	6,900,000	8,800,000	11,800,000		
		Domestic	14,400,000	18,400,000	22,100,000	26,600,000	33,300,000		
		Total	18,500,000	23,700,000	29,000,000	35,400,000	45,100,000		
2014	2014 – 2033/34	International	4,100,000	4,500,000	5,500,000	7,200,000	9,300,000	11,300,000	
		Domestic	14,400,000	16,800,000	20,600,000	25,600,000	31,800,000	37,000,000	
		Total	18,500,000	21,300,000	26,100,000	32,800,000	41,100,000	48,300,000	

TABLE 5.3: AIRCRAFT MOVEMENT GROWTH FORECAST COMPARISON

	Forecast Period of Master Plan		Aircraft movements (shaded areas are actual figures)						
Master Plan Year		Source of Passengers	2007/08	2012/13	2017/18	2022/23	2028/29	2033/34	
2003	2003 – 2022/23	International	24,000	30,000	37,000	45,000			
		Domestic	122,000	153,000	190,000	237,000			
		General Aviation	15,000	15,000	15,000	16,000			
		Total	161,000	198,000	242,000	298,000			
2009	2009 – 2028/29	International	26,000	33,000	40,000	46,000	56,000		
		Domestic	136,000	173,000	204,000	240,000	289,000		
		General Aviation	13,000	14,000	14,000	14,000	15,000		
		Total	175,000	220,000	258,000	300,000	360,000		
2014	2014 – 2033/34	International	26,000	29,000	33,000	39,000	45,000	48,000	
		Domestic	136,000	165,000	194,000	227,000	266,000	290,000	
		General Aviation	13,000	18,000	19,000	20,000	21,000	22,000	
		Total	175,000	212,000	246,000	286,000	332,000	360,000	

term forecasts in the 2014 Master Plan (post 2020) remain similar to those contained in Brisbane Airport's 2003 and 2009 Master Plans.

It is interesting to note that the first Master Plan for Brisbane Airport, the 1983 Master Plan, which included two parallel runways and the cross runway, predicted Brisbane Airport would have an ultimate capacity of 40 million passengers per annum with 400,000 aircraft movements.

Since 1983, significant efficiencies have been realised regarding onground servicing operations, passenger facilitation in terminals and air space management. This, in conjunction with aircraft fleet increasing in size and capacity, means that the predicted capacity in 1983 will be exceeded for passenger forecasts in the 20-year forecast period of this Master Plan.

General Aviation

General aviation refers to that part of the aviation industry not engaged in scheduled commercial flights, such as charter and private operators, or services such as the Royal Flying Doctor Service. Brisbane Airport experienced rapid growth in general aviation as a result of the strong growth in the resources sector between 2010 and 2012. This resulted principally in increased aircraft movements of smaller narrow body jet aircraft and turboprops and subsequently demand for the existing runways.

General aviation movements at Brisbane Airport represent currently only a small percentage of total aircraft movements (approximately 8% on average of total movements). General aviation movements are forecast to grow only marginally over the next 20 years. Table 5.3 shows forecast growth in general aviation aircraft movements to 2034.

Other regional airports such as Archerfield, Caboolture and Redcliffe would be expected to remain the main General aviation airports for South East Queensland (SEQ).

Air Freight

Air freight is an important source of revenue for passenger airlines. The International Air Transport Association reports that air freight can contribute up to 12% of airline revenue on some international services.



International Freight

Approximately 25% of air freight movements into Australia are via dedicated freighter aircraft (BITRE, 2012). The balance of air freight imported into Australia is carried in the cargo holds of passenger aircraft. At Brisbane Airport, future growth in this air freight sector is dependent on increases in the number of services to Brisbane by international network carriers, which is one of BAC's strategic aviation business development objectives. Figure 5.4 shows forecast growth in international freight.

Special consignments such as bulky industrial plant, livestock and airframe deliveries are transported by dedicated charter air freighter aircraft. Current trends suggest that this pattern will continue.

Brisbane Airport handles approximately 12% of Australia's international air freight (BITRE 2012) and ranks third after Sydney and Melbourne. Brisbane is an important international export airport for Queensland and Australian goods, especially perishable produce.

Domestic Freight

Domestic air freight is mainly overnight parcel express business carried by dedicated scheduled air freighter aircraft operating within Australiawide networks. The efficiency of these essential services is highly dependent on Brisbane Airport being fully operational 24 hours a day. Accurate indications about the amount of domestic freight transported are difficult to determine as no industry or government body monitors this aspect of freight.

5.2 Introduction to the Development Objectives

BAC's vision for Brisbane Airport is to be world best and the preferred choice for passengers, airlines, business and the community. Objectives to achieve this vision are based within four pillars of sustainability – economic, operations, environment and social. BAC's approach in adopting the four pillars of sustainability will enable future growth of Brisbane Airport – connecting people and building opportunities for not only Brisbane, but more broadly throughout Queensland and Australia.

A critical driver in establishing the development objectives for the 2014 Master Plan has been to consider how Brisbane Airport can develop while seamlessly connecting not only people with the world, but designing Brisbane Airport to offer exceptional connections with the local community and local businesses.

In order to continue to operate as a critical transport hub and be a catalyst for economic and population growth in Queensland, the provision of infrastructure in a timely manner is critical to demonstrating BAC's vision for Brisbane Airport.

The proximity of Brisbane Airport to rivers, wetlands and Moreton Bay lends itself to embrace and promote features of the surrounding natural environment and to prioritise sustainable design of buildings. By reflecting these qualities, a sense of place and urban fabric that is quintessentially Brisbane is instilled across BAC's development plans.

DEVELOPMENT OBJECTIVES

Economic

- 1. Drive and enable national and state economic wealth and employment growth
- 2. Provide aviation infrastructure to accommodate and encourage growth
- 3. Commitment to best practice corporate governance and prudent management of Brisbane Airport for the benefit of Australia.

Operations

- 1. Facilitate the safe and secure movement of people, freight and aircraft
- 2. Ensure the timely delivery of new and improved airport capacity
- 3. Deliver innovative, efficient and continuous airport services where customer service is at the core of airport operations
- 4. Develop relationships to optimise overall operational performance.

Environment

1. Achieve a balance between the on-airport built environment and biodiversity values

- 2. Achieve environmentally sustainable development across the airport
- 3. To be recognised as a leader in the management of energy, water, waste, noise and biodiversity.

Social

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- 1. Contribute to achieving the vision of Brisbane as a new world city that encourages growth while protecting the city's values and lifestyle
- 2. Harness development opportunities to underpin Brisbane Airport as a business and leisure hub to maximise airport accessibility and connectivity
- **3.** To build respectful and valued relationships so all people want to be part of, and have pride in Brisbane Airport.

5.3 Economic

Objective 1: Drive and enable national and state economic wealth and employment growth

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Being one of Australia's fastest growing airports, Brisbane Airport is recognised as being a key driver in the longterm growth of the Queensland and Australian economies. Brisbane Airport is planning a significant expansion program to support demand for aviation services throughout the next 20 years.

Investments including the New Parallel Runway (NPR), expansions to the International T1 and Domestic T2, satellite terminals, mass transit systems and commercial property developments are planned to enable growth.

The economic benefits of Brisbane Airport will reach beyond its boundary and contribute to the local, Queensland and Australian economies. Locally, sustained growth translates to employment at businesses operating from Brisbane Airport. There are also flow-on effects from transactions between airport businesses and the local economy. As the largest international airport in Queensland, Brisbane Airport contributes to the tourism sector by connecting Brisbane and Queensland to new and existing international markets. The prime contributor to the tourism economy is through expenditure by travellers, be that for business or recreation.

A substantial proportion of the resource sector relies on the ability of its workforce to travel to work on a fly-in fly-out (FIFO) basis. As the major hub airport for Queensland, Brisbane Airport provides a critical role in the resource economy through enabling the movement of the FIFO workforce throughout Queensland and Australia.

Objective 2: Provide aviation infrastructure to accommodate and encourage growth

Additional airport capacity provided through state-of-the-art terminals, satellite terminals and the construction of the NPR are deliberate strategies to accommodate future aviation growth. A responsible strategy to ensure adequate transport options and commercial car parking for visitors to the airport is a necessary adjunct to these developments.

Recent forecasts suggest a doubling of domestic and international passengers at Brisbane Airport in the next 15 years. As Queensland's largest airport for departing and arriving passengers, as well as being the primary airport for air cargo, Brisbane Airport will continue to improve the quality of its airline network linking Queensland with international hubs, destinations and business centres. BAC works closely with airlines to grow capacity (seats and flights) and to promote air cargo business on domestic and international routes. Building strong partnerships with airlines underpins the airport's participation in a high quality aviation network.

Objective 3: Commitment to best practice corporate governance and prudent management of Brisbane Airport for the benefit of Australia.

BAC is committed to responsible corporate governance and compliance, innovative and informed planning and sound business management and systems. These principles have remained consistent over previous Master Plans for Brisbane Airport and they are strong imperatives for BAC to grow shareholder value and to build infrastructure for the future.





Objective 1: Facilitate the safe and secure movement of people, freight and aircraft

The safety and security of people, freight and aircraft at Brisbane Airport remains a fundamental priority within the 2014 Master Plan. This objective is central to the continuity and compliance of airport operations and to the airport's financial success and reputation.

A safe and secure airport is essential to attract airlines, to grow passenger numbers, stimulate cargo and logistics business and to ensure passenger and community confidence. The protection of aircraft (both airside and in surrounding air space) is critical and ensuring the safety of people at work is also vital as the airport expands.

The maintenance of air safety standards and compliance through responsible terminal and airfield design and stringent operating procedures are addressed in the Master Plan and in BAC's supporting implementation strategies. To achieve compliance and confidence in airside operations and safety, BAC works closely with the Civil Aviation Safety Authority, Airservices Australia, government departments and agencies and the aviation industry.

A 'whole of airport' focus is adopted in planning and managing Brisbane Airport's security and emergency services. Risk assessment, innovation, continuous improvements and communication with stakeholders are important steps in designing facilities and processes to meet security obligations e.g. access control, passenger screening, incident response and recovery plans and critical infrastructure protection.

Brisbane Airport strives for and achieves a high level of compliance in safety and security. However, even greater vigilance will be required in the future as airports face potential new or heightened risks, and Brisbane Airport's facilities, flights, employment and freight continue to expand. To address this challenge, BAC is engaged in research that will ensure it remains at the cutting edge of new security technologies. BAC will also work with its industry and government partners to maintain airside safety standards and to explore flexible, risk-based security measures.





<u>1</u> Aircraft refuelling.

2 Aircraft apron directional signage. 3 Brisbane Airport's Operations' team inspects the runway and taxiway system.





Objective 2: Ensure the timely delivery of new and improved airport capacity

The intent in the 2014 Master Plan is to continue to increase airport capacity by investing in an integrated and carefully staged program of development for the airfield (runways, taxiways and aprons), terminals, buildings, aviation support facilities and other infrastructure.

For over a decade, a range of shared forums on infrastructure and capacity provision have paved the way for more productive communication on infrastructure development throughout SEQ. Awareness of the interface between capacity provision on and off the airport is both a current and future priority.

Availability of critical assets to operate the airport and meet the demands of aviation and regional growth is essential. For BAC, achieving sustainable and responsible growth on-airport means ensuring that new and improved operating capacity is available to maintain business continuity and satisfy demand. However, identifying ways to maximise the airport's current capacity is also important.

A consistent and sustained asset maintenance program, the use of new technologies and continuous improvement in processes and front-line skills, allows BAC to more effectively manage the pace of growth on-airport. **Objective 3:** Deliver innovative, efficient and continuous airport services where customer service is at the core of airport operations

Quality, efficiency and innovation jointly influence how the airport will perform as a service provider. Convenient, safe and reliable journeys for passengers, as well as the efficient transit of freight through Brisbane Airport are key outcomes of smooth facilitation processes in the terminals.

Within this Master Plan, innovation and continuous improvements in terminal and airfield design, growing the terminal space at the right time, improved processes and increased automation, are key opportunities to enable the achievement of stakeholder satisfaction with services. Leading edge systems and technologies will help to facilitate aircraft arrivals and departures in 24/7 operations and streamline passenger processing, freight and baggage handling.

Objective 4: Develop relationships to optimise overall operational performance

There are many organisations which contribute to the efficient operation of Brisbane Airport including airlines, aviation support providers, government agencies and regulators. As growth continues, pressure on existing infrastructure will occur until new capacity is operationally ready. Fundamental to optimising the performance of existing runways and terminal areas is for key industry groups to work together to identify, develop and implement opportunities to improve efficiency while continuing to prioritise safe and secure operations.

Industry participation in programs to better manage peak hour demand and opportunities to enhance airport capacity without additional infrastructure are key priorities for BAC in this master planning period.

The provision of adequate terminal capacity is also vital to accommodate a growing number of airline arrivals and departures, along with more efficient processes for check-in, baggage handling, security, customs, quarantine and immigration. Close relationships with the airlines, ground support providers, border agencies and law enforcement are vital to achieve these goals.

5.5 Environment

Objective 1: Achieve a balance between the on-airport built environment and biodiversity values

Part of building for the future is to reserve open space as a means to create a balance with continued development while retaining the most important aspects of the natural environment of Brisbane Airport. Consideration of the most appropriate locations and densities for development and integrating concepts underpinning public realm are high priorities for BAC to achieve a balance between the built and natural environments.

BAC has established a Biodiversity Zone within the boundaries of Brisbane Airport which accounts for more than 10% of the entire airport site. Its purpose is to ensure that biodiversity values are maintained across the site so that a balance between built and natural environments can be realised and preserved. The Biodiversity Zone contains a number of species such as the Lewin's Rail (a small bird) and red-bellied black snake.

The Biodiversity Zone will be actively managed to protect significant species and habitats. BAC is also exploring the feasibility of a public trail to view the Biodiversity Zone. However, the protection of biodiversity values is paramount in evaluating these public access opportunities.

Objective 2: Achieve environmentally sustainable development across the airport

Key to sustainable infrastructure is not only building with quality materials but also considering the broader impact the building will have on the surrounding environment over time. The amount of energy and water consumed, the amount of waste and carbon generated and the quality of the surrounding environment each affect how the infrastructure could impact on the environment. Sustainable development brings into focus these impacts at the design, construction and operational phases.

Objective 3: To be recognised as a leader in the management of energy, water, waste, noise and biodiversity

In BAC's unique position of building and maintaining infrastructure, utility networks and land banks, its management of these lends itself to consider and implement innovative opportunities in an existing operating environment. This often means that BAC is positioned at the forefront of implementing new technologies in an operating environment which has not been done previously. The knowledge gained from this shapes thinking on how systems can be improved. This brings opportunities to share knowledge with broader industries be that other airports, utility providers, government agencies or communities.

<u>1</u> Water quality testing is undertaken across the airport.

<u>2</u> Native flora is a feature of Brisbane Airport's landscape.





5.6 Social

Objective 1: Contribute to achieving the vision of Brisbane as a new world city that encourages growth while protecting the city's values and lifestyle

The past two decades have seen significant growth which has transformed Brisbane from a regional centre to a global hub. Brisbane has evolved into Australia's new world city with an emerging reputation as a vibrant and sustainable centre for innovation and enterprise.

Brisbane Airport is the doorway between the vibrancy of Brisbane and the rest of the world. The global connection that Brisbane Airport offers is a catalyst for Brisbane to create business and tourism opportunities with the fastest growing economies in Asia and beyond.

BAC seeks to capture the city's unique brand of cosmopolitan warmth and translate this into a friendly laidback welcome to all travellers. BAC seeks to extend this approach by reflecting it through all development plans. **Objective 2:** Harness development opportunities to underpin Brisbane Airport as a business and leisure hub to maximise airport accessibility and connectivity

Complementing the program for aviation capacity development is the continuing exploration of commercial opportunities. The selective and timely development of Brisbane Airport's non-aeronautical precincts will underpin and support the continued growth in aviation capacity forecast over the next two decades.

Investment in commercial opportunities will promote Brisbane Airport as a place of transit and gathering for people, ideas and material, a vibrant centre for commerce, innovation and recreation and an internationally recognised model of sustainable development.

Objective 3: To build respectful and valued relationships so all people want to be part of, and have pride in Brisbane Airport

Brisbane Airport is more than just arrivals and departures; it is part of the greater landscape of Brisbane, a host, an ambassador and a showcase for the best of Brisbane. With this in mind, BAC, as the custodian of Brisbane Airport, is committed to supporting and engaging with its local community to build pride in the airport and encourage a sense of co-ownership.

BAC is also proud to be leading the way in engaging with the community through a comprehensive Community Engagement Program. This program is dedicated to generating informed, ongoing and interactive discussion about airport development, aircraft technologies, potential impacts from increased aircraft operations and airspace management.

