



**BRISBANE
AIRPORT
2014**
MASTER PLAN
SUMMARY BOOKLET



Connecting People
Building Opportunities



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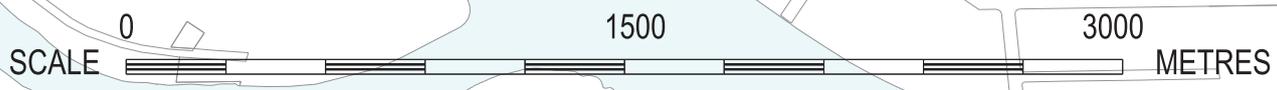
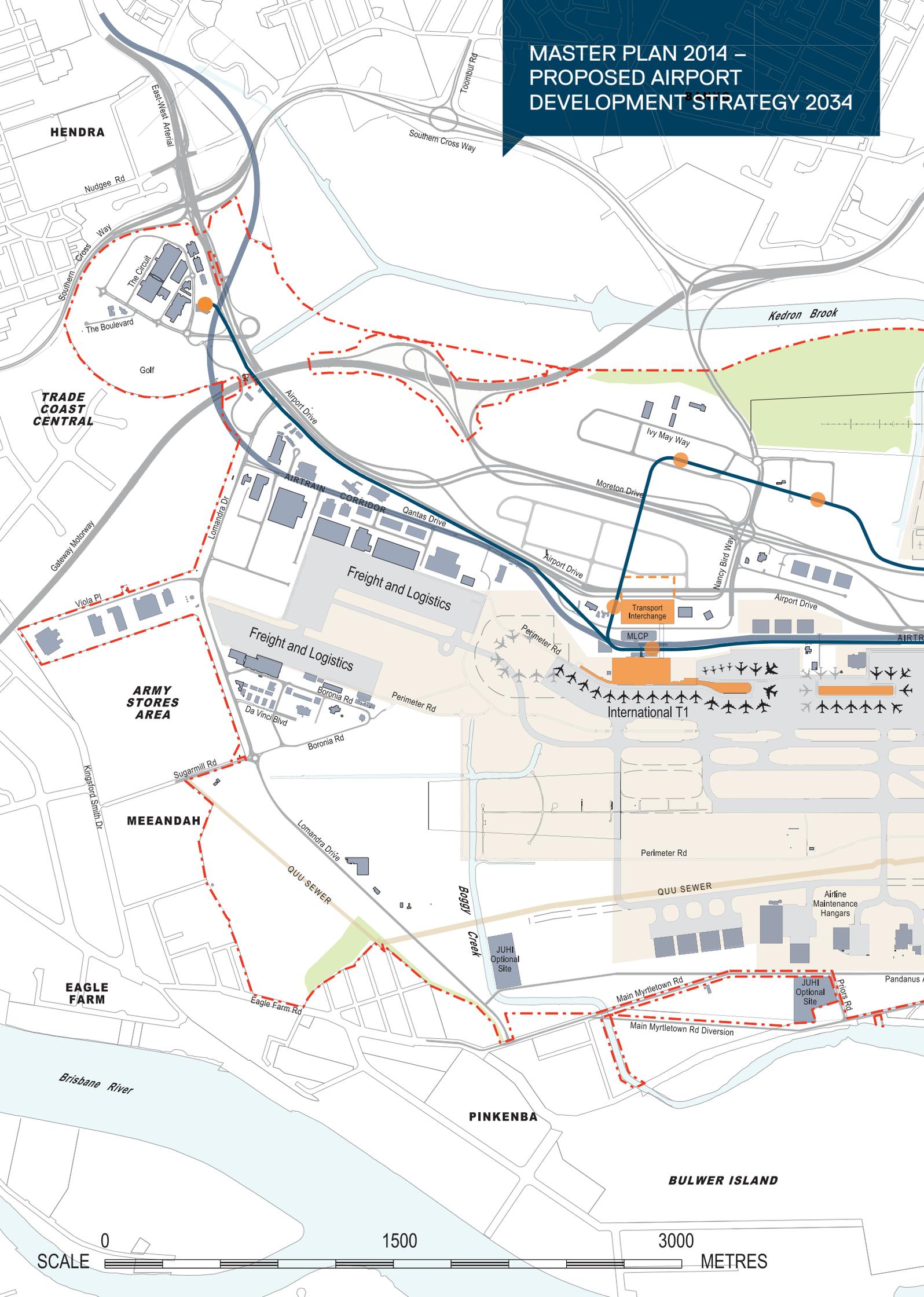
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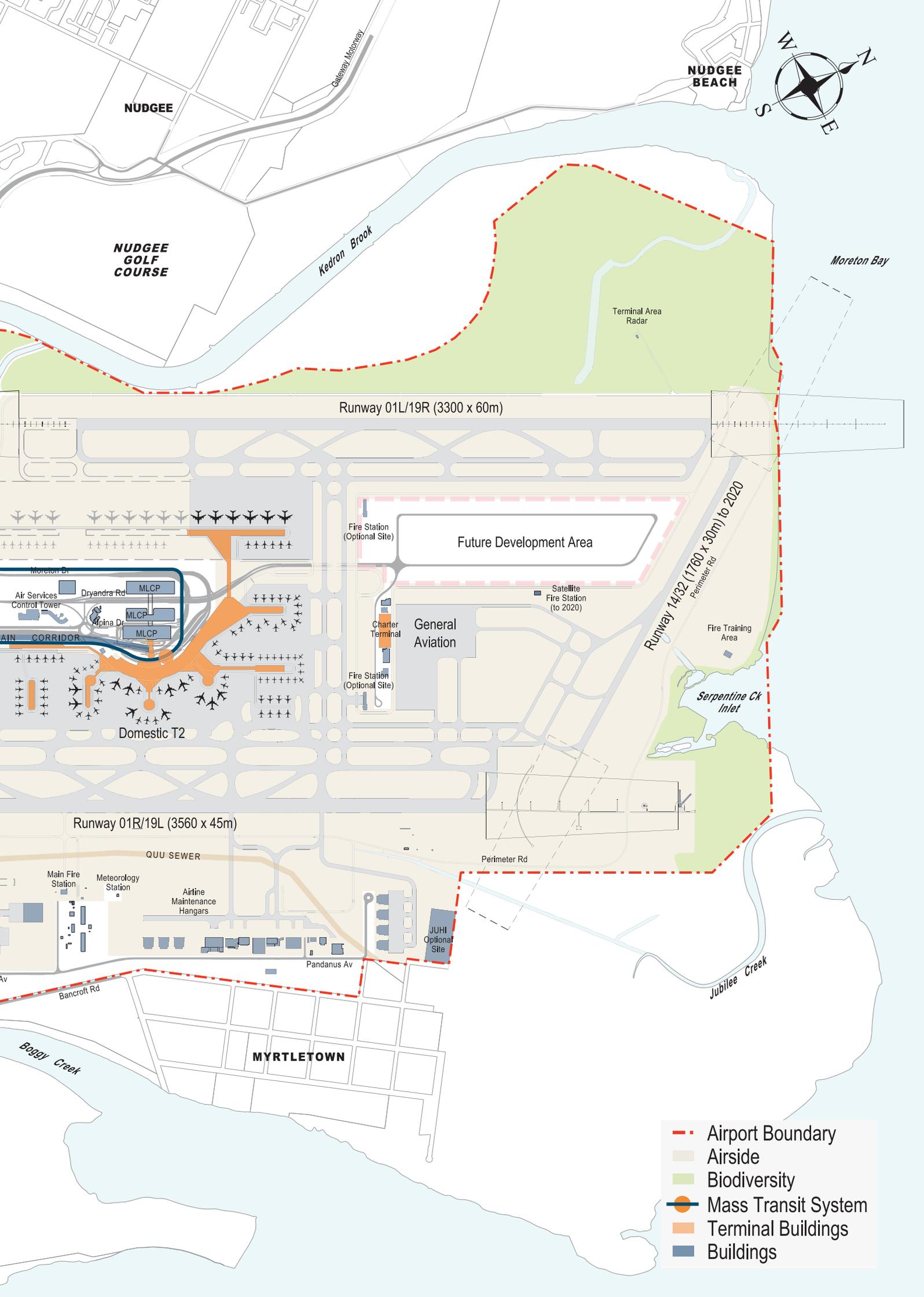
CONNECTING PEOPLE BUILDING OPPORTUNITIES

CONNECTING PEOPLE BUILDING OPPORTUNITIES	1
BRISBANE AIRPORT 2014 MASTER PLAN SUMMARY DOCUMENT	2
What is a Master Plan?	2
About the 2014 Master Plan	2
Inputs to the Master Plan	3
How You Can Be Involved	3
How to Make a Submission	3
PLANNING CONTEXT	4
About Brisbane Airport Corporation	4
About Brisbane Airport	6
Legislative Environment	6
GROWTH FORECASTS AND DEVELOPMENT OBJECTIVES	8
Aviation Growth Forecasts	8
Development Objectives	9
PLANNING RESPONSE	10
Economic	10
Operations	14
Environment	20
Social	22
IMPLEMENTATION	24
Short-term Development (2014-2019)	24
Medium-term Development (2019-2024)	25
Long-term Development (2024-2034)	25
GROUND TRANSPORT PLAN	26
Objectives of the GTP	26
Transport Vision	26
Engagement	27
State and Local Government Planning	27
Transport Strategy and Initiatives	27
Transport and Land Use Five-Year Integration Strategy	28
AIRPORT ENVIRONMENT STRATEGY	30
Environmental Management System	30
Actions 2014-2019	30



MASTER PLAN 2014 – PROPOSED AIRPORT DEVELOPMENT STRATEGY 2034





NUDGEE

NUDGEE BEACH

NUDGEE GOLF COURSE

Kedron Brook

Moreton Bay

Runway 01L/19R (3300 x 60m)

Terminal Area Radar

Fire Station (Optional Site)

Future Development Area

Satellite Fire Station (to 2020)

General Aviation

Charter Terminal

Fire Station (Optional Site)

Fire Training Area

Serpentine Ck Inlet

Runway 14/32 (1760 x 30m) to 2020
Perimeter Rd

Moreton Dr
Air Services Control Tower
Dryandra Rd
MLCP
Alpina Dr
MLCP
MLCP
MAIN CORRIDOR

Domestic T2

Runway 01R/19L (3560 x 45m)

QUU SEWER

Main Fire Station

Meteorology Station

Airline Maintenance Hangars

Perimeter Rd

JUHI Optional Site

Pandanus Av

Jubilee Creek

Boggy Creek

MYRTLETOWN

- - - Airport Boundary
- Airside
- Biodiversity
- Mass Transit System
- Terminal Buildings
- Buildings



CONNECTING PEOPLE BUILDING OPPORTUNITIES



THE BRISBANE AIRPORT 2014 MASTER PLAN SUMMARY BOOKLET

The Brisbane Airport 2014 Master Plan is designed to outline Brisbane Airport Corporation's (BAC) clear vision for the future development of the airport – responding to forecast demand, contributing to nation building and mirroring aspirations for the city and the state between 2014 and 2034.

It encompasses information about the more than \$1 billion investment BAC has made in the airport over the past 10 years and the \$2.5 billion that will be invested in aviation and non-aviation infrastructure and services over the next decade.

BAC has prepared four Master Plans since taking ownership of the airport in 1997. It is produced every five years as part of a statutory requirement, while also acting as an important conduit of information about the evolution of the airport to government, industry, business and the local area and broader community.

The Brisbane Airport 2014 Master Plan reflects BAC's commitment to sustainability across all aspects of the airport's operation. Every action and initiative is based on, and measured by, a set of specific development objectives designed to achieve balance across environmental, operational, social and economic outcomes.

The 2014 Master Plan builds on its predecessors – continuing to expand on previous blueprints for the airport's growth. However, the 2014 edition has been further enhanced through the inclusion of the Ground Transport Strategy and the Airport Environment Strategy, both of which provide detailed five-year action plans for the management of on-airport transport and the environment.

This Summary Booklet captures the primary points and actions contained within the larger Master Plan. As an overview document it provides headline information about all aspects of the airport's development over the next 20 years, any of which you may choose to explore further by reviewing the Master Plan itself, which is available at www.bne.com.au.

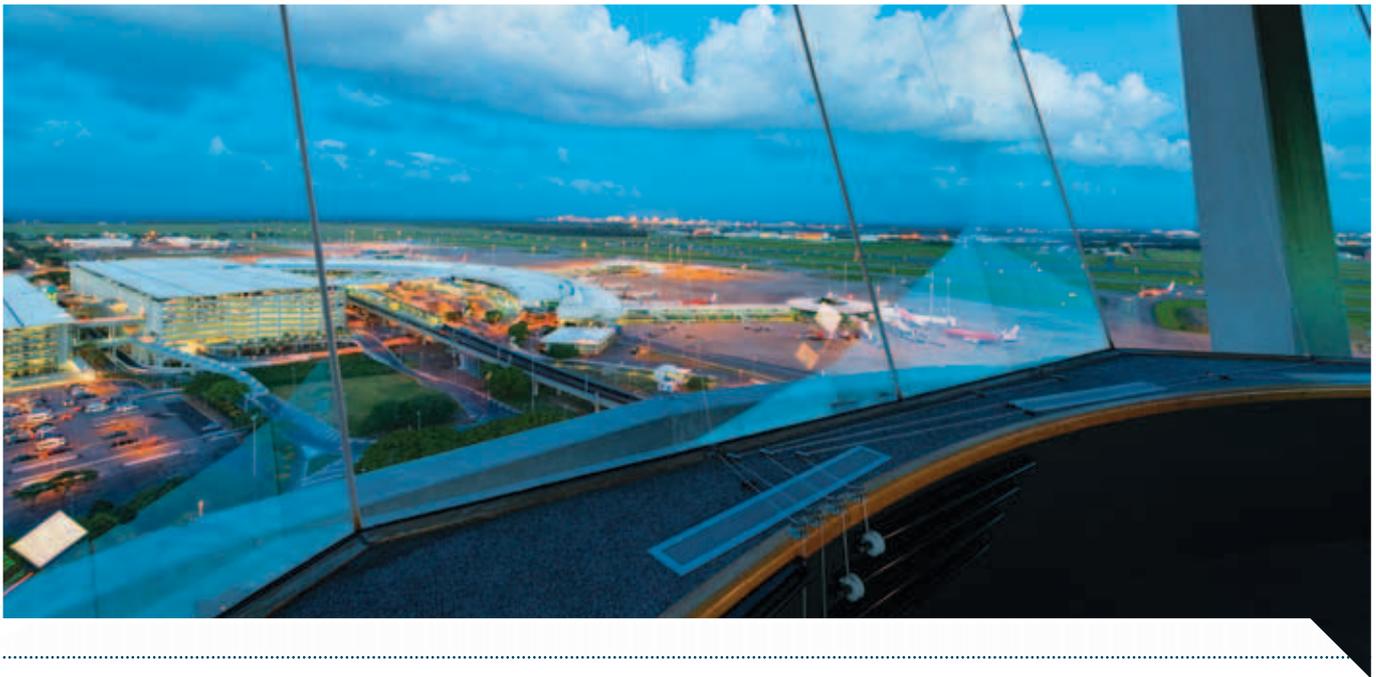
BAC is committed to connecting with all people who have an interest in the future of Brisbane Airport and building opportunities that bring economic, social and environmental benefits that reach far beyond the airport boundary.

I hope that you find this booklet informative and helpful in understanding the future direction for the airport and invite you to join us in shaping the future of one of Australia's most dynamic airports.

Julieanne Alroe

*Managing Director and
Chief Executive Officer*

Brisbane Airport Corporation Pty Ltd



BRISBANE AIRPORT 2014 MASTER PLAN SUMMARY DOCUMENT

Brisbane Airport serves as the premier gateway to Queensland. It is the third largest airport in Australia by passenger numbers and the second busiest in terms of aircraft movements. It makes a significant contribution to local, state and national economies.

Brisbane Airport Corporation (BAC), as the owner and operator, is responsible for ensuring future development supports forecast growth. This is the principal purpose of the Master Plan.

This Summary Booklet has been produced to highlight the Master Plan's key points and actions to 2034.

For greater detail see the Brisbane Airport 2014 Master Plan available at www.bne.com.au

WHAT IS A MASTER PLAN?

An airport Master Plan is a statutory document required every five years that provides a blueprint for airport development for a 20-year period. It outlines the land use planning and development intent for an airport site and is a requirement of the *Airports Act 1996* (Cwth) (Airports Act).

Airport Master Plans are designed to provide a clear direction for the growth and development of Australia's major aviation gateways. They help to ensure that vital aviation infrastructure is delivered when and where it is needed, while maximising the significant economic, social and environmental benefits that well-planned airports can deliver.

While the Master Plan is subject to a public comment, assessment and approval process, it does not mean that all proposals and plans outlined within it are approved. Individual projects remain subject to separate Commonwealth planning and statutory approval processes.

ABOUT THE 2014 MASTER PLAN

The BAC 2014 Master Plan sets out the proposed development of Brisbane Airport to 2034 and provides details on works to happen between 2014 and 2019.

When planning for the future, BAC considers forecasts for growth in passenger numbers, aircraft movements, on-airport traffic and freight, and innovation.

It also considers predicted noise exposure levels and as part of the process, BAC produces the Australian Noise Exposure Forecast (ANEF), an important tool used for statutory land use planning purposes.

While not required as part of the Master Plan, BAC has also developed the companion *Current and Future Flight Path and Noise Information booklet*, which is an important adjunct to the ANEF and geared to respond to the noise information requirements of the community.

The 2014 Master Plan includes an Airport Environment Strategy (AES) and a detailed Ground Transport Plan.

INPUTS TO THE MASTER PLAN

The Brisbane Airport 2014 Master Plan has been the subject of extensive consultation with all levels of government, industry and the community.

Consultation has included:

- » Working groups (ground transport, land use, noise and environment)
- » Vision workshops
- » Community focus groups
- » Online survey
- » Other regular BAC community and industry forums, including the Brisbane Airport Community Aviation Consultation Group, Brisbane Airport Area Round Table and the Brisbane Airport Tenants Environment Committee
- » Briefings with elected representatives and departmental offices
- » Community information exchanges
- » Airport Operators Committee
- » Local festivals and events.



1 Night time operations at the Air Traffic Control tower.

2 Aircraft departing from Brisbane Airport.



PLANNING CONTEXT

Within the first section of the 2014 Master Plan, Planning Context, the purpose and uses of the Master Plan are explained.

It also provides an overview to BAC and Brisbane Airport, summarises relevant legislation, policies and regulations, and outlines the importance of the airport in a local, state and national context.

Refer to Chapters 1 – 4 of the Master Plan.

About Brisbane Airport Corporation

BAC acquired Brisbane Airport from the Australian Government under a 50-year lease in 1997.

BAC is a private, non-listed Queensland company with its shareholders being major Australian and international organisations and significant institutional investors. Approximately 80% of shareholders are individual Australians with their savings invested in superannuation and other funds.

Since privatisation, BAC has invested around \$1.3 billion in upgrading and building critical infrastructure. To meet future demand, BAC is funding over \$2.5 billion worth of infrastructure over the next 10 years.

A VISION FOR BRISBANE AIRPORT

BAC's vision for Brisbane Airport is to be world class.

Its values include building collaborative relationships, being proactive and innovative, acting with integrity and commitment, and providing service excellence.

To achieve its vision for the airport, BAC is:

- » Creating a prosperous airport business community within a sustainable environment
- » Developing Brisbane Airport as a premier gateway airport and a major multimodal transport hub
- » Promoting and evolving Brisbane Airport's role as a major economic engine
- » Achieving growth and development by balancing economic benefits and environmental impacts.

FOUR PILLARS OF SUSTAINABILITY

BAC is committed to the responsible development of the airport that meets the needs of present and future generations. The Four Pillars of Sustainability form the basis of BAC's development objectives for the 2014 Master Plan:

ECONOMIC SUSTAINABILITY:

Brisbane Airport is Queensland's busiest hub airport and a significant component of the national transport network. BAC is committed to continuing its track record of building infrastructure for the future and delivering strong financial results. In doing so, Brisbane Airport will continue to support broader economic development and jobs growth for Brisbane, Queensland and Australia. The pathways to deliver strong financial growth BAC adopts include selective and timely development, diverse revenue streams and efficient use of financial and operational resources.

OPERATIONAL SUSTAINABILITY:

The safe, secure and continuous operation of the airport is both a goal and a necessity for Queensland's busiest aviation hub. For Brisbane Airport, business continuity is tied to ensuring that the necessary capacity and critical assets are available to operate and expand the airport and maintaining regulatory compliance. BAC strives to maintain excellence in service delivery in terminals and across the airport.

ENVIRONMENTAL SUSTAINABILITY:

Managing and protecting environmental features of Brisbane Airport is a cornerstone of BAC's operational and development philosophy. To this end, BAC's sustainability goals are to maximise energy, water and waste efficiencies, manage noise impacts, balance the built environment and biodiversity values and achieve best practice in urban and built design.

SOCIAL SUSTAINABILITY

BAC is the custodian of Brisbane Airport and is committed to supporting and engaging with the local community to build pride in the airport and encourage a sense of co-ownership. Brisbane Airport is a part of the greater landscape of Brisbane, and in this, acts as a host, an ambassador for Brisbane as a new world city and a showcase for the best of Brisbane.

1



1 The red-bellied black snake is protected at Brisbane Airport.

2 Main runway overlay works completed in October 2013.

3 BAC fosters the arts through community sponsorships.

2



3



PLANNING CONTEXT

About Brisbane Airport

Brisbane Airport is located on a 2,700 hectare site and is one of the largest airports in land area in Australia. It was established on its current site in 1988.

Today, approximately 21,000 people are employed, and more than 430 businesses operate from Brisbane Airport.

It comprises a 3,600 m main runway and a 1,760 m cross runway, supported by aviation-related infrastructure and services, as well as retail, warehousing and commercial development. Work on a 3,300 m New Parallel Runway (NPR) commenced in August 2012. It is scheduled to open around 2020.

STRENGTHS OF BRISBANE AIRPORT

Brisbane Airport enjoys a number of geographic, operational and capacity strengths that play an integral role in its regional, state and national economic contribution, including:

Absence of night curfew

The airport's ability to operate 24/7 allows Brisbane to link to international networks via hubs including Dubai, Singapore and Bangkok.

Geography

Brisbane's proximity to major Asian ports provides a strategic advantage over Sydney and Melbourne airports.

Capacity to expand

Australia's largest capital city airport in area with 2,700 hectares, Brisbane Airport has 1,000 hectares available for expansion.

Proximity to CBD

Brisbane Airport is located in Brisbane's north-east. It is only 8 km away from the city and is accessible via road, rail and public transport connections.

Airport buffer

Surrounding communities benefit from the largest buffer zone of any capital city airport in Australia.

Servicing larger aircraft

Brisbane Airport is capable of handling larger aircraft now in operation, including the Airbus A380.

DEVELOPMENT SINCE 2009

Since the approval of the 2009 Master Plan, BAC and airport stakeholders have undertaken over 40 major projects and numerous smaller projects.

Legislative Environment

(Chapter 4 of the Master Plan)

MASTER PLANNING

The 2014 Master Plan sets out the framework for the development of Brisbane Airport to ensure it is able to meet future demand and create business and industry development opportunities to 2034 and beyond.

Under the Airports Act, BAC is required to review its Master Plan every five years. Planning and development of the airport is regulated by the Australian Government Department of Infrastructure and Regional Development. BAC also works closely with state and local government agencies to ensure development is compatible with local and state planning strategies.

THE MASTER PLAN PROCESS

The Airports Act imposes a detailed planning framework on BAC, requiring the preparation and Ministerial approval of a Master Plan and an Airport Environment Strategy.

It requires a Master Plan to specify:

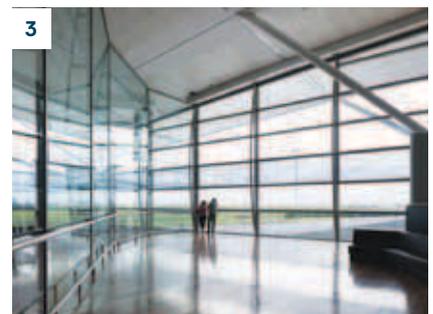
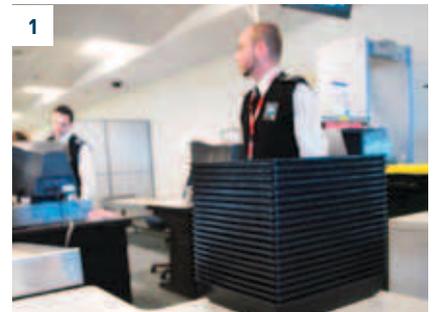
- » Development objectives
- » Assessment of airport users' future needs
- » Intentions for land use and related development

- » An ANEF (BAC includes an Ultimate Capacity ANEF to 2060)
- » Flight paths
- » Plans, developed following consultation with airlines and government bodies, for managing aircraft noise
- » Assessment of environmental issues that might be reasonably expected to be associated with the implementation of the plan
- » Plans for dealing with environmental issues (including solutions or plans to prevent environmental issues)

1 Security screening at Brisbane Airport.

2 View to Brisbane Airport's Domestic T2.

3 View from the International T1.



EARLY HISTORY OF THE AIRPORT

1922

Captain Jack Treacy lands 'The Queen of Sheba' at the Brisbane Airport site.

1926

Qantas commenced scheduled flights from Brisbane Airport.

1928

**Sir Charles Kingsford Smith touches down aboard the 'Southern Cross'.
Bert 'Hustling' Hinkler completes the first solo flight from England.**

1930

Australian National Airways (later part of Ansett) schedules services to Sydney.

- » A Ground Transport Plan (2014-2019)
- » Commercial development plan (2014-2019)
- » An environment strategy
- » Any other matters that may be specified in the regulations.
- » Coastal environment
- » Air, noise and other emissions
- » Hazardous materials and developments
- » Natural hazards
- » Strategic airports and aviation facilities.

The 2014 Master Plan – Proposed Airport Development Strategy to 2034 is shown on the inside front cover of this booklet.

STATE AND LOCAL GOVERNMENT PLANNING

The Airports Act requires the Master Plan to address the extent of consistency with planning schemes in force under Queensland law.

The Queensland State Planning Policy (SPP), adopted in 2013, has five overall themes and 18 separate state interests. The following state interests from the SPP have direct relevance to Brisbane Airport:

The South East Queensland Regional Plan identifies Brisbane Airport as having a vital role in meeting the growth challenges of the region. BAC's development objectives and land use planning outcomes for the airport are consistent with the planning outcomes sought by that Plan.

Brisbane airport is designated a 'Special Purpose' zone under Brisbane City Council's City Plan. Where possible BAC aligns its development with City Plan Principles.

The Master Plan has been informed by the National Airports Safeguarding Framework, which aims to achieve airport planning best practice.



1 Sir Charles Kingsford Smith's "Southern Cross" is a major tourist attraction at Brisbane Airport.

2 Brisbane welcomes the arrival of Sir Charles Kingsford Smith in 1928.



GROWTH FORECASTS AND DEVELOPMENT OBJECTIVES

The second section of the Master Plan, Growth Forecasts and Development Objectives (Chapter 5), is a requirement of the Airports Act.

It also allows BAC to detail information on passenger and aviation forecasts, as well as the development objectives that underpin the Master Plan.

Aviation Growth Forecasts

(Section 5.1 of the Master Plan)

SUSTAINED GROWTH

Brisbane Airport has experienced continued 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 increased to 21.6 million passengers and 219,000 annual aircraft movements – up 23% and 25% respectively.

While fuel prices, worldwide events and economic concerns have resulted in some short-term reduction in growth rates, continued long-term growth is likely – especially as Queensland continues to build its reputation as a major business and tourism destination.

FUTURE GROWTH FORECASTS

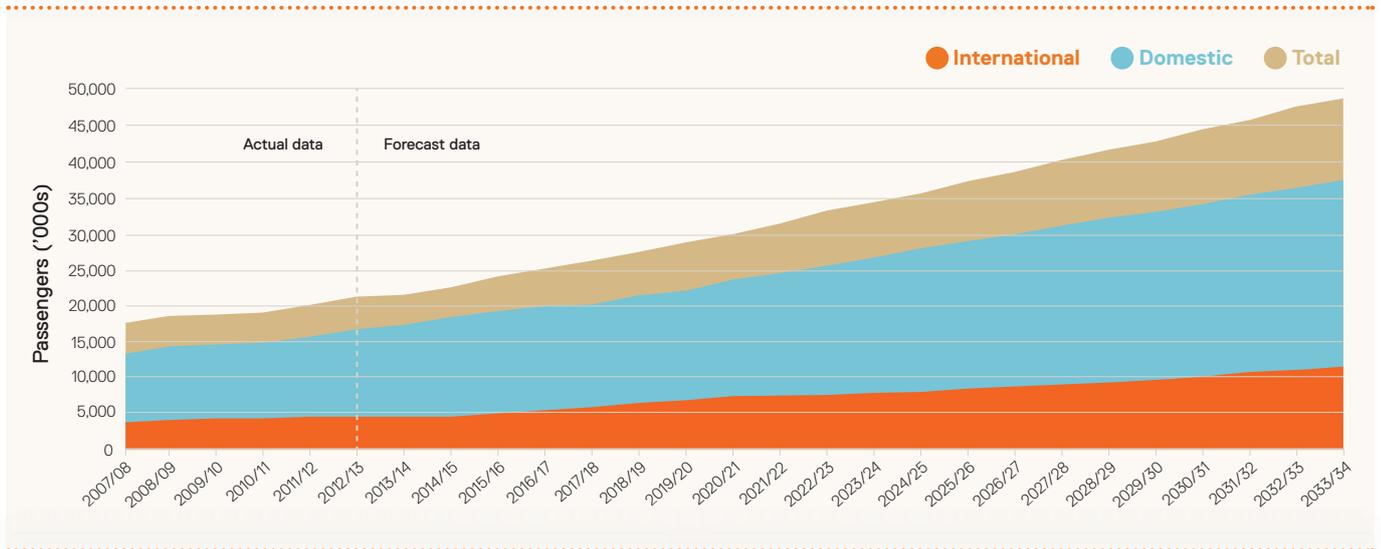
Brisbane Airport modelling has forecast that by 2033/34 some 11.7 million passengers will pass through the International Terminal (International T1) and around 37 million passengers annually through the Domestic Terminal (Domestic T2) annually.

Figure 1 details the international and domestic passenger growth forecasts.

By 2034, Brisbane Airport is forecast to be handling around 360,000 annual aircraft movements.

Longer-term forecasts included in the 2014 Master Plan are similar to those contained in the 2003 and 2009 Master Plans.

FIGURE 1: DOMESTIC AND INTERNATIONAL PASSENGER GROWTH FORECAST



Development Objectives

(Section 5.2 of the Master Plan)

Development objectives for the master planning process are set around BAC’s four pillars of sustainability – Economic, Operations, Environment and Social:

Economic

1. Drive and enable State and National 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.

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.

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.

Social

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.



PLANNING RESPONSE

In the section Planning Response (Chapters 6 – 9) of the Master Plan, BAC reviews activities and actions from 2009 to 2014, and details future initiatives, programs and projects.

Economic

(Chapter 6 of the Master Plan)

BRISBANE AIRPORT'S CONTRIBUTION TO THE ECONOMY

Brisbane Airport is vital to the Queensland economy. Generating jobs, investment and tourism are just some of the contributions the airport makes to the wellbeing and prosperity of the region.

- » Between 2009 and 2014, BAC has invested over \$1 billion in infrastructure developments across the airport
- » Investment at the airport has led to 5,000 additional full-time equivalent jobs

- » By 2034, it is estimated Brisbane Airport will directly contribute over \$8.2 billion to the economy and provide nearly 52,000 full-time equivalent jobs.

National

Brisbane Airport, operating 24 hours a day, seven days a week, is an integral part of the national economic infrastructure and as such is a valuable asset. It is the third busiest airport in Australia by passenger numbers and the second busiest in terms of aircraft movements.

Through BAC's substantial ongoing investment, Brisbane Airport has become an important source of employment for Australia, and plays a catalytic role in tourism, business and industry growth with benefits spreading across the country.

In addition to its important social role in connecting people and communities across Australia, the airport also plays a central role in the national logistics network and has become a vital aircraft maintenance hub.

State

In terms of state significance, Brisbane Airport is the busiest of Queensland's 191 airports or airfields. The Queensland Government considers Brisbane Airport an airport of strategic economic importance with it linking resource hubs with workforces, leisure travellers with destinations, connecting supply chains with markets and providing employment opportunities.

Local

Brisbane City Council has also identified the airport as being in the top three locations for employment growth over the next 20 years.

Brisbane Airport is also the primary gateway for airfreight cargo servicing Queensland, northern Australian and northern New South Wales markets.

PLANNING FOR 24-HOUR OPERATIONS

Maintaining Brisbane Airport's 24-hour operation is vital to allow the airport to maintain current operations as well as attract additional flights, services and investment to Queensland.

The airport's 24-hour status allows Brisbane to act as a gateway for the transport of fresh produce to overseas destinations, particularly Asia, as well as domestic freight.

Around 216,000 international and 112,000 domestic passengers arrive at night during the year.

Research has found a curfew would come at a significant cost to the airport and the wider economy.

Land Use And Precinct Development

(Section 6.2 of the Master Plan)

BAC is one of the largest commercial landholders in Queensland and its approach to land-use planning over the next 20 years is of vital economic significance.

Its land-use strategy responds to market demand with a mix of business, retail, industry and tourism activities that will complement and support the airport's existing activities and anticipated aeronautical growth. Significant land is also preserved for conservation purposes.

Delivery of the land-use strategy for Brisbane Airport will occur in accordance with the development objectives of the Master Plan. Particular priorities are to ensure that Brisbane Airport will:

- » Contribute to regional economic wealth and employment generation
- » Ensure selective, profitable and timely commercial development
- » Ensure the timely delivery of new and improved airport capacity
- » Minimise adverse environmental impacts

- » Achieve an appropriate balance between the built environment and biodiversity values
- » Maximise airport accessibility and connectivity.

Airport Precincts

Brisbane Airport has outstanding and unique attributes that favour its continued commercial growth. With 2,700 hectares of land, it is one of Australia's largest airports in area and benefits from the largest buffer zone of any capital city airport in the country.

The 2014 Master Plan has consolidated developable land into five sub-precincts, which are intended to create and maintain clusters of businesses and operations to generate a sense of identity and community. Over the next five years to 2019 BAC proposes to deliver a flexible property development plan, which is summarised in Table 1 below and in Figure 2 on Page 13.

TABLE 1: PROPOSED FIVE-YEAR PROPERTY DEVELOPMENT PLAN

Precinct	Zoning ¹	Intended Uses ¹	Estimated GFA (m ²)	Estimated Additional Employment
Airport South (Airport Industrial Park)	Mixed Use	Office, animal keeping, warehouse	111,800	1,120
Airport South (Da Vinci)	Mixed Use	Office, warehouse, aircraft maintenance facility, aviation education facility, car park	30,960	300
Airport South (Export Park)	Mixed Use, Industry	Office, warehouse, telecommunications, food and beverage outlet, car park	105,760	1,040
Airport East	Industry	Office, aircraft maintenance facility, car park	7,300	100
Airport Central (Skygate)	Major Centre	Public administration building, office, shop, car park, event entertainment facility, wholesale supplies, food and beverage outlet, public transport facility	63,750	2,000
Airport Central (Airport Drive West)	Mixed Use, Special Purpose Airport	Service station, shop, showroom	13,780	350
Airport Central (Domestic T2)	Special Purpose Airport	Hotel and motel, office, public administration building	29,300	700
Airport Central (International T1)	Special Purpose Airport, Mixed Use	Public administration building, office, aviation support facility, car park	2,570	90
Airport West (Central Parking Area)	Mixed Use	Car park, utility installation	300	35
Airport North	Special Purpose Airport	Aviation activity, aviation support facility	5,080	100
Airport Central (Moreton Drive West)	Mixed Use		Nil	Nil

¹ Zoning and intended uses will be in accordance with those activities listed in the land use chapter. Whilst every attempt has been made to confirm the intended uses of development, market conditions will dictate if developments as listed in the table above meet the requirements of the development strategy.

AIRPORT PRECINCTS

In establishing the five major development precincts (and their nine distinct sub-precincts), a high level of emphasis is placed on creating and maintaining clusters of businesses and land use synergies that generate a strong sense of identity and community. The intent of the five precincts is as follows:

AIRPORT CENTRAL

Airport Central is a mass of activity, energy and vitality including the International T1, Domestic T2, Airport Drive West, Moreton Drive West and Skygate. The high-quality retail, leisure and commercial environment of Skygate enlivens the precinct as the gateway to the airport.

Airport Central, in common with all the development precincts, has been designed according to the planning principle of consolidation and concentration of the development footprint. It allows the achievement of critical masses of activity on a manageable range of development fronts and works to maximise the value of expenditure on infrastructure.

**AIRPORT WEST
(CENTRAL PARKING AREA)**

Covering a large area with a predominantly natural character, Airport West provides a buffer to Kedron Brook and links the airport to Moreton Bay. This area provides a significant future opportunity for protecting and enhancing the environment for Brisbane Airport through BAC's commitment to biodiversity, sustainable management and conservation.

This precinct includes the CPA and caters for a business park and combines a considerable area of parking with associated service buildings and small offices. Mixed industry and business uses in the sub-precinct include commercial offices, car rental depots, staff parking, remote public parking, ground transport operations holding areas and future maintenance facilities for transport and logistic operations.

AIRPORT NORTH

Airport North provides a future logistics hub for industrial and a viation related developments and businesses that require airside access.

The Airport North precinct includes the General Aviation area, and is strategically located adjoining the taxiway systems to runways 01R/19L and 14/32 and the NPR.

AIRPORT SOUTH

Airport South will be a connected village-like precinct with quality amenity and excellent motorway access. An emphasis on diverse built form outcomes and sustainable development initiatives will help differentiate this area.

This precinct provides for efficient flexible land options connected with good transport access.

AIRPORT EAST

The primary focus for this precinct is aviation maintenance, manufacturing and associated aviation support industries.

The Airport East precinct comprises maintenance and manufacturing facilities with direct airside access for defence suppliers, major domestic airlines and a range of other aviation industry operators.



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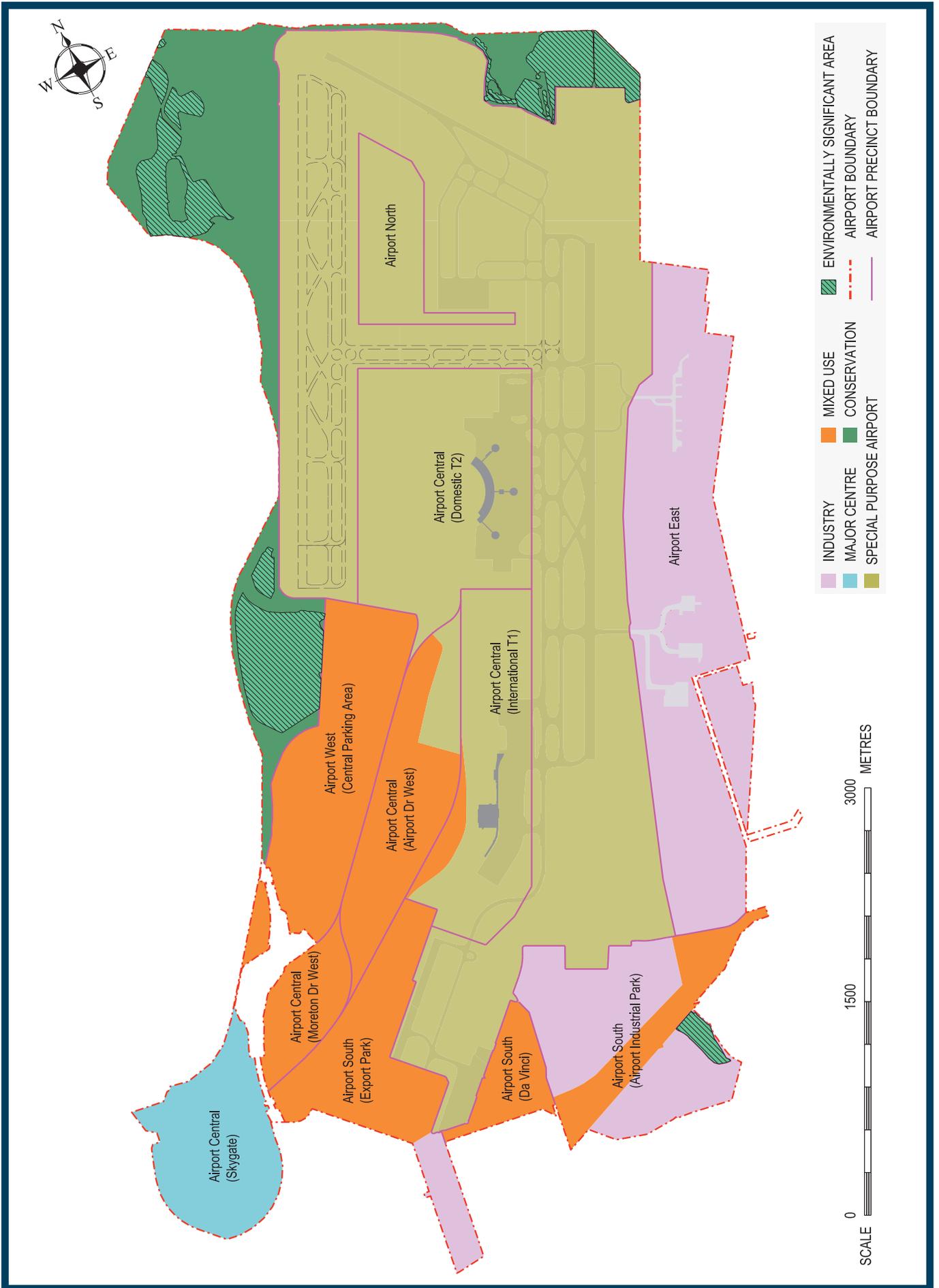


2

1 The Royal Flying Doctor Service operates from Airport North.

2 Australian air Express is located in the Airport South precinct.

FIGURE 2: LAND USE ZONES ON BRISBANE AIRPORT



Operations

(Chapter 7 of the Master Plan)

Convenient, efficient and user friendly passenger terminal areas and construction of the NPR are the major focus for BAC as it seeks to ensure the airport is able to accommodate forecast growth to 2034 and beyond.

AVIATION CAPACITY

(Section 7.1 of the Master Plan)

Terminal Area Development Strategy

Overview

The strategy for the terminal area development takes into account changes in the aviation sector, including the growth of low cost air travel and alliances between full service airlines. The strategy will adopt a strong commercial focus to provide passengers and airport users with a high standard of facilities and services.

BAC's future terminal area development strategy focuses on expanding existing buildings and the addition of shared facilities located between both the International T1 and Domestic T2 precincts. This could include integrated international/domestic operations at either location as well as a central transport interchange with direct links to both precincts.

Existing Situation

International T1

The International T1 is operated as a common user facility under BAC administration. It is a four level building consisting of:

- » Level 1 – baggage handling, delivery dock, stores and airline offices
- » Level 2 – arrivals processing and airline offices
- » Level 3 – departure lounges, airline lounges, airside retail and departures processing
- » Level 4 – check-in and landside retail.

View to the Domestic T2 airside precinct from the Air Traffic Control tower



International T1 Developments

The following projects have occurred since the 2009 Master Plan:

- » Apron expansions
- » Taxiways
- » Extensive aviation fuel installations
- » Staff car park expansion
- » Level 2 transit passenger facilities expansion
- » Transfer baggage expansion
- » Level 2 retail
- » Self service check-in facilities.

Domestic T2

Domestic T2 is a two-level facility consisting of three distinct zones:

- » Virgin Australia operates from the southern end of the Domestic T2
- » The central area operates as a common user terminal under BAC management, primarily used by Jetstar and Tiger Airways
- » Qantas operates from the northern part of the Domestic T2.

Check-in, some security processing, baggage handling and reclaim, airline offices, valet, bus and rental car facilities are located on the ground floor. The remaining security processing area, departure lounges and majority of retail outlets are located on Level 2.

Additional departure lounges and retail facilities are connected to the main terminal at satellite locations.

Domestic T2 Developments

The following projects have occurred since the 2009 Master Plan:

- » Two level common user satellite
- » Food and beverage and other retail upgrades and expansion
- » Northern apron expansion
- » Skybridge (an elevated walkway, over airport roads, between the multi-level car parks and terminal
- » Qantas self service check-in
- » Qantas baggage system expansion
- » Common user terminal self service check-in and bag-drop facilities
- » Expansion of aviation fuel infrastructure

- » Virgin business lounge (under construction)
- » Additional Virgin Australia aerobridges and gates (under construction)
- » Southern apron expansion project (under construction)
- » Common user terminal ground floor upgrade (under construction)
- » Short-term multi-level car park and associated road network
- » Apron floodlighting upgrade.

General Aviation (GA)

GA facilities are located in the Airport North precinct and include a small common user terminal and a large apron.

Capacity and Future Demand

Planning has been undertaken to ensure a balance of capacity between the main elements of the airport system including the runways, taxiways, aprons, terminals and landside infrastructure.

The NPR will provide Brisbane Airport with the capacity to sustain over 100 aircraft movements an hour during peak times. The terminal and apron areas have been sized to accommodate the long-term aircraft demand matching the potential runway capacity.

International T1 and its associated aircraft parking aprons can expand in both directions. The area between International T1 and Domestic T2 has been reserved for long-term expansion with potential landside and airfield connections to either of the south and north terminals.

Domestic T2 can expand to the north and south with a long-term expansion area to the west of the existing Domestic T2, facing the NPR.

Terminal Area Strategy – Planning Approach

In its planning BAC has considered potential development to 2034 and the ultimate capacity of the current airport site.

ULTIMATE CAPACITY

BAC considers that it is an appropriate planning practice to consider very long-term or ultimate capacity scenarios for elements of major airport infrastructure beyond the 2034 planning horizon of the 2014 Master Plan.

The assessment of ultimate capacity scenarios is based on current standards – aviation infrastructure, airspace management and current aircraft fleet technologies.

The 2014 Master Plan presents the implications of considering the ultimate capacity for terminal areas, ground transport, runway system and aircraft noise metrics to ensure appropriate land use reservations and stakeholders are fully informed.

Future assessments of the ultimate operating capacity of Brisbane Airport could change as a result the introduction of new and more efficient aircraft, changes to growth forecasts or changes to airspace management.

To ensure it can act with flexibility in the future and respond to industry trends, two options for the terminal area development are included in the Master Plan.

Figures 3 and 4 outline possible options for how the terminal area could develop to ultimate capacity.

International T1 Area Development Strategy

International T1 was designed and developed to accommodate future staged expansion for the terminal core, concourses, apron and gates. The northern concourse will be extended further north as demand requires, with its ultimate configuration comprising a wrap-around apron, which will allow aircraft to be parked on both sides of the concourse.

Further expansion of International T1 can happen to the south or to the northwest of the Domestic T2.

The main features of the development, common to both options for International T1 are:

- » Expansion of the northern concourse to create a departure lounge with secondary retail
- » Similar satellite expansion to the southern concourse
- » Northern expansion of the terminal core

- » Expansion of existing multi-level car parks.

Both the International T1 and Domestic T2 zones will be served by a ground transport interchange and an early bag storage facility.

Domestic T2 Area Development Strategy

BAC's preferred option for the Domestic T2 is for a complete common user facility that maximises the use of existing infrastructure to address peaks in demand. It could also potentially accommodate a mix of international and domestic services within this zone.

There are two potential options for terminal development up to 2034:

- » Constrained development of International T1 at the southern end because of the high costs of taxiway works in this area. This would mean expansion of Domestic T2 to the north west to accommodate future growth
- » Unconstrained development of International T1 at the southern end, therefore reducing the need to expand Domestic T2 to the north west.

FIGURE 3: TERMINAL AREA PRECINCT LAYOUT ULTIMATE DEVELOPMENT OPTION 1

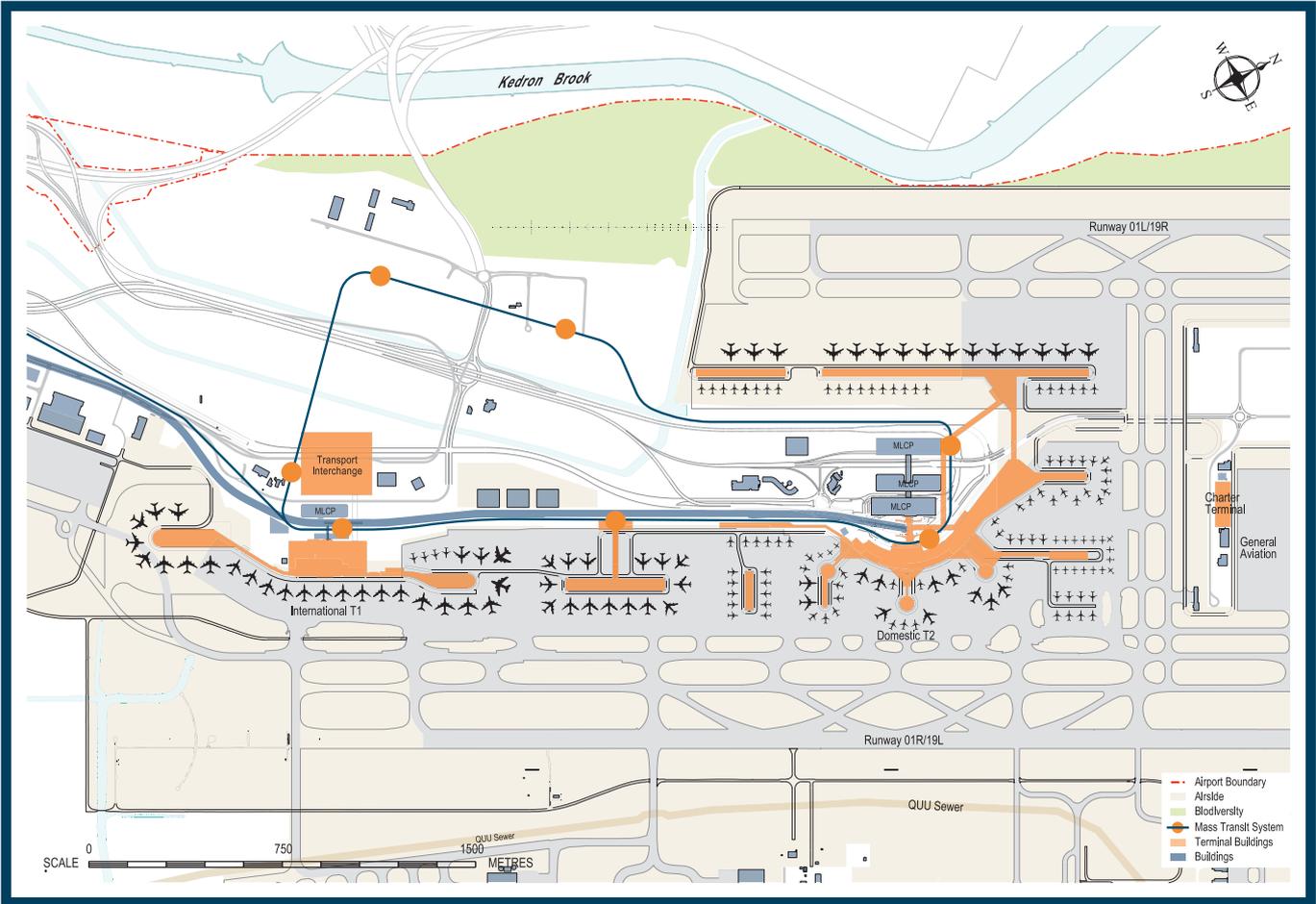
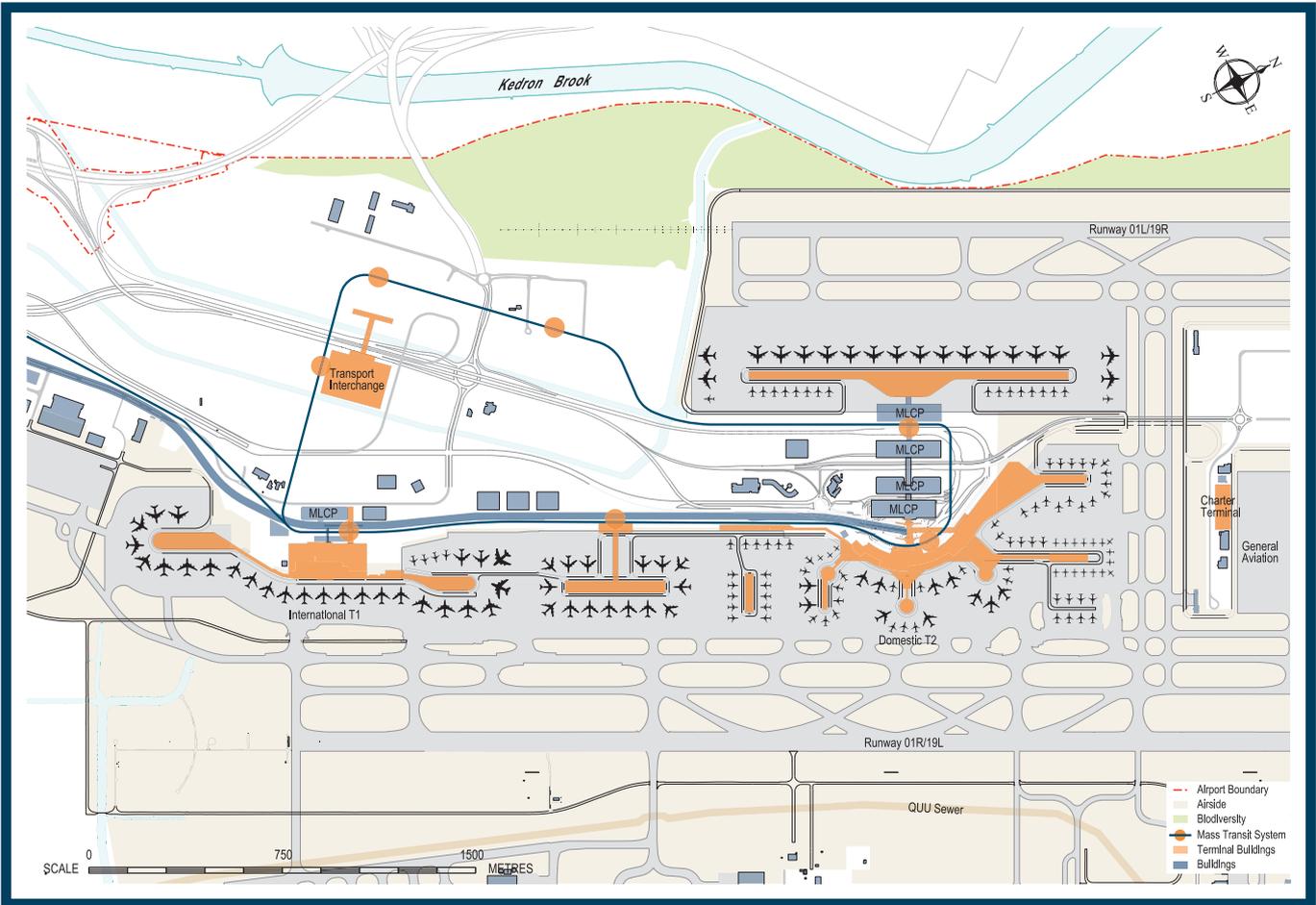


FIGURE 4: TERMINAL AREA PRECINCT LAYOUT ULTIMATE DEVELOPMENT OPTION 2



Both options propose a satellite swing pier between the International T1 and Domestic T2. This pier could serve either terminal zone and be bus connected for the initial development and connected by either bus or airside mass transit system (MTS) in subsequent development.

The options also show potential locations for ground transport interchange facilities. These could be close to terminal zones or centralised with long-term parking and the use of a people mover system.

The main features of Domestic T2 development include:

- » Expansion of the existing terminal to the north
- » Addition of aerobridges to the central satellite
- » Landside expansion of the terminal to the west
- » Covered walkway or concourse to the south to serve new aircraft stands
- » Consideration of an interim, low-cost terminal facility to the north
- » Connection of Domestic T2 to an MTS system providing passenger access from transport interchanges and remote parking areas. The MTS would also serve staff parking and connect terminals.

Short-Term Terminal Infrastructure Development

International T1

The following terminal related infrastructure projects are planned between 2014 and 2019:

- » Northern concourse expansion
- » Northern apron expansion
- » Baggage handling systems expansion
- » Check-in expansion and self service kiosks and bag drop facilities
- » Northern concourse bussing facilities.

Domestic T2

The following projects are envisaged for the Domestic T2 precinct over the period 2014-2019:

- » Southern apron expansion
- » Northern apron expansion
- » Northern regional/intrastate lounge
- » Southern concourse regional lounge and bussing facility
- » Skywalk terminal penetration
- » Centralised security, bag drop and check-in
- » Additional aerobridges
- » Common user bussing lounge
- » Baggage system expansions
- » Southern satellite infill
- » Building services upgrades including central energy plant
- » Northern low cost terminal.

General Aviation

BAC has prepared designs to upgrade existing charter facilities for all non-regular public transport passenger services involving aircraft up to

20 tonnes, which is expected to be completed in 2015. These works will allow for future expansion and both building and apron area reservations are provided.

AIRFIELD SYSTEM

(Section 7.2 of the Master Plan)

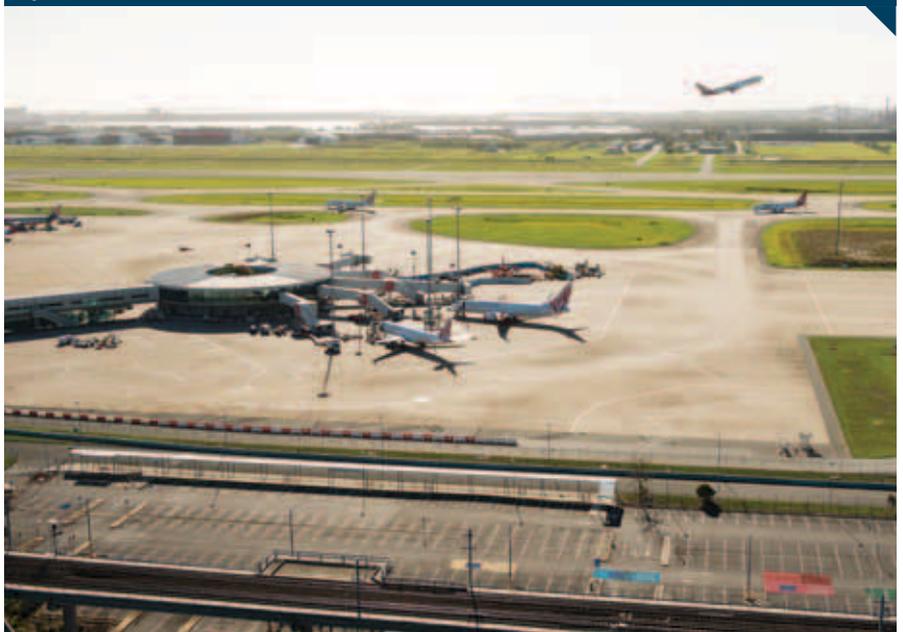
To accommodate growth in passenger and aircraft movements over the next 20 years, and to optimise benefits to the national and regional economies, BAC needs to increase the capacity of the airfield system at Brisbane Airport.

Increased runway capacity will enable:

- » Growth in direct airline routes and frequencies to interstate, intrastate and international destinations
- » Reduced delays
- » Reduced, unnecessary fuel consumption and associated emissions.

BAC will be providing increased runway capacity through the construction of the NPR, which will require a significant investment of over \$1.3 billion by BAC and its shareholders.

Virgin Australia satellite at the Domestic T2



PLANNING RESPONSE

Existing Runway System

The existing runway system at Brisbane Airport consists of a 3,600 m long runway, RWY 01R/19L, which allows operations by all types of large jet aircraft, including the Airbus A380.

There is also the smaller cross runway, RWY 14/32, which can accommodate turbo-prop aircraft as well as limited operations by smaller jet aircraft.

Upon completion of the NPR, RWY 01L/19R, in 2020 RWY 14/32 will be decommissioned.

Planning Approach

The following principles guide BAC in the planning of additional airfield capacity at Brisbane Airport:

- » All opportunities to extract additional capacity and efficiencies from the existing airfield system will be exhausted while the NPR is being delivered
- » The NPR will be constructed to meet future demand
- » Taxiways will be located to ensure aircraft movement efficiency
- » Runways and taxiways will be configured to minimise aircraft noise and environmental impacts wherever practicable
- » Airfield infrastructure will comply with relevant national and international aviation standards.

NPR Runway System

The NPR is being constructed west and parallel to the existing main runway and is being built in stages due to the need to stabilise the site before runway pavement can be constructed.

The five main construction elements of the NPR are as follows:

- » Enabling civil works – drainage, services relocation, modifications to the cross runway (completed in mid 2013)

- » Site clearing and preparation (commenced in 2013)
- » Dredging and sand fill placement (commenced in October 2013 and due for completion in June 2015)
- » Site settlement and monitoring (2015 – 2018)
- » Runway, taxiway and supporting facilities construction (2018 – 2020).

The current planned delivery program for the NPR envisages operations commencing in 2020.

The NPR will require changes to flight paths and to how aircraft are managed by Air Traffic Control.

BAC's Environmental Impact Statement and Major Development Plan for the NPR approved in 2007 identified in great detail the changes to existing departure and arrival routes and associated noise changes for suburban Brisbane.

For further information refer to Brisbane Airport's Current and Future Flight Path and Noise Information booklet.

The construction of the NPR will make Brisbane the premier operational airport in Australia.

With the parallel runway system in place, it is anticipated that Brisbane Airport will be able to sustain an hourly rate of 100+ movements per hour over the morning and evening peak demand periods.

AIRSPACE PROTECTION

(Section 7.3 of the Master Plan)

Facilitating the safe and efficient movement of aircraft to and from Brisbane Airport is a fundamental development objective.

Adequate protection from infringements to the airspace surrounding Brisbane Airport is as important to the safe and efficient use of the airport as the safe design and operation of the on-ground infrastructure such as runways, taxiways, terminals and navigational aids.

View across the airport to the site of the New Parallel Runway



Certain developments and structures in the vicinity of Brisbane Airport, may limit the scope of the airport's existing and future operations.

Airspace Protection – Regulatory Environment

Various regulations, processes and guidelines address airspace protection for Brisbane Airport, including:

- » The Airports Act and Airports (Protection of Airspace) Regulations 1996 (Regulations)
- » Queensland Government State Planning Policy
- » National Airports Safeguarding Framework
- » Obstacle Limitation Surfaces (OLS)
- » Procedures for Air Navigation Services Aircraft Operations (PANS-OPS)
- » Restricted light zones
- » Protections of air navigation aids
- » Minimising stack/efflux and visibility hazards
- » Limiting bird activity in close proximity to the airport
- » Appropriateness of adjacent land uses
- » Minimising the reflective nature of structures in the airport's vicinity.

Diagrams showing the OLS and PANS-OPS are included in the 2014 Master Plan.

AVIATION SERVICES AND FACILITIES

(Section 7.4 of the Master Plan)

Aviation support services cover a broad range of operations, including equipment used alongside aircraft, passenger screening within terminals through to fuelling activities.

This section of the Master Plan outlines plans for the future development of aviation services and facilities.

Safety and Security

Brisbane Airport is committed to maintaining the safety and security of passengers, airlines and the airport community.



Management of lighting on and around Brisbane Airport is critical to aviation operations

BAC complies with the *Aviation Transport Security Act 2004* and *Aviation Transport Security Regulations 2005* and has developed its own Transport Security Program.

The adoption of new technologies assists in achieving continuous improvements in safety and security at the airport. To control and operate its security and emergency services effectively in the future, BAC is also planning for an improved Operations Control Centre once the NPR becomes operational.

Air Freight

Moving air freight in a timely manner is an important part of BAC operations. Total international freight is forecast to increase from 92,000 tonnes in 2012/13 to around 200,000 tonnes in 2033/34.

BAC expects that air freight will continue to be transported as air cargo in passenger aircraft and so freight facilities will continue to be located within close proximity of passenger aprons wherever possible and future expansion will be located within the Airport North precinct.

Ground Service Equipment

Ground Service Equipment (GSE) is used to service aircraft at the terminal and includes:

- » Equipment used by ground handlers for loading/uploading baggage and cargo, aircraft cleaning, lavatory service and potable water supply to aircraft

- » Equipment used by ramp engineers for aircraft line maintenance, ground power, preconditioned air and aircraft push-back
- » Aircraft containers and unit load devises.

Brisbane Airport currently has approximately 38,000 m² of GSE parking and storage areas between International T1 and Domestic T2. By 2034 the GSE area required is expected to be around 55,000 m².

It is proposed to locate GSE in areas that are operationally accessible.

Aviation Fuelling Facilities

Efficient and reliable aviation fuelling facilities are a fundamental component of airport operations. Currently Brisbane Airport stores fuel at Hakea Street, between the terminals, and at Lomandra Drive. This secondary facility is due to cease operations in 2014, at which point additional storage capacity will be installed at the Hakea Street facility. In the long-term the Hakea Street depot will be relocated.

Aircraft Maintenance Facilities

Maintenance activity are undertaken at aircraft gates and hangar facilities, as well as through dedicated facilities. Qantas, Virgin Australia, Five Star Aviation, Alliance Airlines and Australian Aerospace use hangar facilities in the Airport East precinct.

PLANNING RESPONSE

Space for future expansion has been allocated within the southern sections of the Airport East precinct. Land has also been reserved at a remote section of Airport North for engine testing.

Flight Catering

With a mix of premium service airlines and low cost airlines using Brisbane Airport, BAC provides facilities that suit both types of operations. The on-airport flight catering facilities are located in the Airport Central precinct. The ongoing need for flight catering facilities is being addressed through the future development of a proposed airside zone within the Airport Central precinct, located between International T1 and Domestic T2 zones.

Airservices Australia

Airservices Australia (Airservices) owns and operates a number of facilities at Brisbane Airport and is responsible for the following services:

- » Air traffic control
- » Radio navigational aids
- » Aeronautical information
- » Aviation rescue and fire fighting
- » Aircraft noise monitoring.

The existing control tower and related facilities are well suited to handling air traffic at Brisbane Airport. Supplementary aids using radar, closed circuit television, transponders or GPS based tools will be considered as part of the NPR.

In the short-term and in preparation for the NPR, a new main fire station will be constructed in the Airport North precinct.



Environment

(Chapter 8 of the Master Plan)

BAC manages the airport and surrounding environment to ensure the impacts of growth are managed.

BAC has three environmental priorities:

- » Achieve a balance between the on-airport built environment and biodiversity values
- » To be recognised as a leader in the management of energy, water, waste, noise and biodiversity
- » Achieve environmentally sustainable development across the airport.

ACHIEVEMENTS OVER THE PAST FIVE YEARS

BAC is committed to achieving a high level of environmental compliance and environmental sustainability performance for its operations. Since the 2009 Master Plan, BAC undertaken the following initiatives:

Water

BAC has achieved significant water savings through its Water Management Strategy, including:

- » Reduction of potable water
- » Water efficient fixtures and fittings
- » Smart metering
- » The use of water tanks to capture rainwater for irrigation.



Energy and Carbon

BAC developed an Energy Management Strategy in 2011 outlining the preferred approach for balancing Brisbane Airport's energy demand and carbon emissions. BAC efforts have since resulted in savings of approximately 4.8 gigawatt hours of energy consumption.

Effort will continue to be directed towards reducing carbon emissions through improved efficiencies and the generation of onsite renewable energy.

Fill Materials and Land Contamination

BAC uses comprehensive planning, monitoring and management tools to avoid soil degradation, contamination or loss. It will continue to monitor and remediate any contaminated sites in accordance with its own management framework and through any advances in industry standards such as the National Environmental Protection Measures.

Waste

BAC has reduced waste generated on airport through recycling.

Ground-Based Noise

BAC records aircraft engine testing and acts on any complaints. As a part of any airport development, noise attenuation strategies will be applied in designing and constructing of facilities.

Biodiversity Values

BAC has in place a Biodiversity Management Strategy to ensure appropriate management of environmentally significant areas occurs across the site.

A key achievement has been the development of a comprehensive ecosystem health-monitoring program for all Environmentally Significant Areas on Brisbane Airport. A wildlife hazard management plan has also been prepared to reduce the operational risks associated with wildlife strike.

1, 2 Aircraft operating from Brisbane Airport.

Cultural Heritage

Two Indigenous heritage sites on airport land are listed on the Queensland Cultural Heritage Register and Database and three non-Indigenous sites are protected.

FUTURE ENVIRONMENTAL PRIORITIES

Planning for Climate Change

BAC recognises that it has a role to play in adapting to the long-term impact climate change will bring – including rising sea and ground water levels and higher incidences of poor weather. It also aims to reduce its own carbon emissions from facilities and activities, as well as working with stakeholders.

Framework for Environmental Management to 2019

The AES has a range of strategies to reduce the environmental impact of on-airport development and activities, including during construction and operation of facilities and services.

Over the next five years BAC will seek to further reduce its carbon emissions through initiatives including:

- » Review of the energy strategy
- » Investigating solar, gas and alternative energy sources
- » Increased use of recycling and responsible waste disposal.

Further information on BAC's five-year environmental action plans are outlined on page 31 of this booklet and at Chapter 13 of the Master Plan.

Landscaping enhances open space at Brisbane Airport.



LANDSCAPE, OPEN SPACE AND PUBLIC REALM

(Section 8.6 of the Master Plan)

Brisbane Airport offers varied landscapes and open space areas.

BAC's core elements for its open space and landscaped areas include:

- » Landscaping which uses a variety of colours, textures and materials
- » Water sensitive urban design and the use of native plants to reduce water consumption
- » Provision of pedestrian and cycle paths
- » The use of artwork.

Brisbane Airport's Landscape Master Plan identifies many more landscape and open space initiatives.

SUSTAINABLE DEVELOPMENT

(Section 8.7 of the Master Plan)

Sustainable design provides BAC with the opportunity to grow the airport over the next 20 years while enabling a focused and balanced approach to managing the surrounding natural environment.

BAC plans to become the first airport to gain a Communities Rating from the Green Building Council of Australia (GBCA). Green Star Communities Certification requires criteria to be addressed in the key areas of governance, liveability, environment, economic, innovation and design.

Through its support of the GBCA Green Star Community Pilot, BAC can ensure sustainable practices are included in all stages of development.

AIRCRAFT NOISE

(Section 8.8 of the Master Plan)

The management of aircraft noise has a central place in the day-to-day operation of major airports. In line with its development objective to minimise negative environmental impacts, BAC works in close cooperation with aviation partners to minimise aircraft noise over residential areas and to maintain a dialogue with those communities affected by aircraft noise.

Although BAC is not responsible for the operational standards of airlines or how airspace is managed, a proactive approach to monitoring and mitigating noise is consistent with BAC's sustainability goals.

PLANNING RESPONSE

As a result, BAC liaises and collaborates with the airlines, Civil Aviation Safety Authority (CASA) who administer aircraft operations, and with Airservices, who control and manage air space, in a joint effort to address the issue.

2014 ANEF

As a part of the Master Plan process, BAC is required to develop an ANEF. This tool assists Brisbane City Council and State planning agencies to ensure that land use planning decisions and future land uses, such as new residential developments or schools, take into account those areas that may be subject to intrusive or nuisance noise levels from current or forecast aircraft operations.

The ANEF predicts the cumulative exposure to aircraft noise in communities near airports during a specified time period. For Brisbane Airport an Ultimate Capacity ANEF has been prepared. This is an aggregate calculation of noise modelling combining current and future aviation operations to the nominal ultimate capacity year of 2060.

The Australian Standard 2021 provides guidance on the acceptability of various areas of certain development – the higher the ANEF contour, the greater the noise exposure.

The Brisbane Airport Ultimate Capacity ANEF was developed with inputs from planning agencies at the three levels of government, with the Aircraft Noise Ombudsman and the major airlines operating at Brisbane Airport. The ANEF is shown as Figure 5.

Included in the Master Plan are tables which summarise the extensive inputs used to create the ANEF. For further information see Chapter 8, Section 8.8.

DESCRIBING AIRCRAFT NOISE FOR THE COMMUNITY – N70S

While the ANEF is an important land use planning tool for local and state governments, it provides little assistance to individuals in the community seeking to understand specific noise impacts on a day-to-day basis.

For the purposes of informing the community about noise impacts and the effect of aircraft operations on a day-to-day basis, BAC has prepared the *Current and Future Flight Path and Noise Information* booklet. This presents noise impacts in the form of N70 drawings, which illustrate the spread and number of aviation-related events expected to exceed 70 decibels for a range of years, days and seasons.

Social

(Chapter 9 of the Master Plan)

Recognising the importance of Brisbane Airport to the wider community, BAC is committed to supporting and engaging with the local community to build pride in the airport and encourage a sense of co-ownership.

As a part of this commitment BAC contributes more than \$1 million in sponsorship and philanthropic donations each year in support of over 100 local community initiatives and charities.

Community Engagement Program

Brisbane Airport is dedicated to generating informed, ongoing and interactive discussion about airport development, aircraft technologies, potential impacts from increased aircraft operations and airspace management. It does this through a Community Engagement Program, which includes activities such as:

- » Community Information Exchanges
- » Festivals and fairs

- » Brisbane Airport Community Aviation Consultation Group (BACACG)
- » Brisbane Airport Area Round Table (BAART)
- » Airport Discovery Centre
- » Airport Ambassador Program
- » Airport Tours
- » Industry working groups and technical associations.

Master Plan Engagement

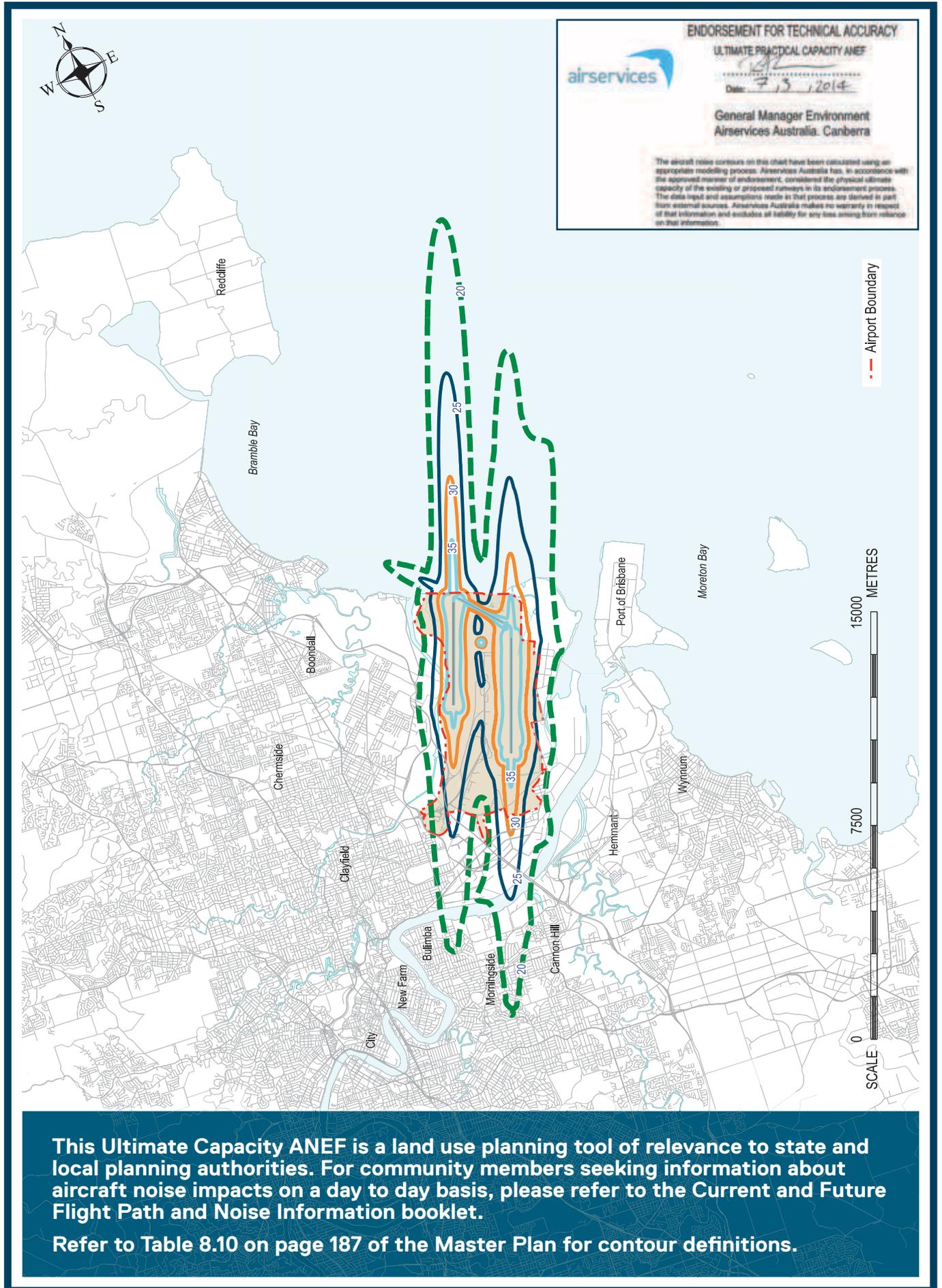
In the 15 months leading up to a formal 2014 Master Plan public comment phase, BAC sought broad and valuable community input. Details of that engagement can be found in Chapter 9 of the 2014 Master Plan.

1 BAC supports a wide range of community initiatives.

2 Interactive display at the Discovery Centre.



FIGURE 5: ULTIMATE CAPACITY AUSTRALIAN NOISE EXPOSURE FORECAST (ANEF)





IMPLEMENTATION

The implementation of this Master Plan will be undertaken in logical stages to meet aviation, passenger and workforce demands.

Refer to Chapter 10 of the Master Plan.

Short-term Development (2014-2019)

Developments required to facilitate short-term forecast growth of traffic demand, and business and industry attraction, are expected to include but not be limited to:

- » Progress on the NPR construction
- » Construction of a new fire station at Airport North
- » Additional rapid exit taxiway with the existing main runway
- » Upgrades and new terminal facilities
- » Airside bussing facilities
- » Staged relocation of staff parking facilities to the Central Parking Area
- » The construction of a hotel and business centre in Airport Central – Domestic
- » Administration buildings at Airport Central – International
- » Aviation facilities and aviation support facilities
- » Additional and upgraded car parking
- » Improvements to surrounding roads, new active transport and public transport facilities
- » Business, industry and commercial developments
- » Additional aircraft maintenance, office facilities and expanded taxiway systems in Airport East
- » Construction of additional freight handling capacity
- » Utility upgrades.

Medium-term Development (2019-2024)

Developments required to facilitate medium-term forecast growth of traffic demand and business and industry attraction are expected to include but not be limited to:

- » Ongoing work and commissioning of the NPR
- » Further terminal, apron and aircraft parking bay expansion
- » Remote terminal facilities
- » Mass transit system linking airport sites
- » Upgrades to surrounding road network
- » Taxiway work
- » Expansion of the cycle and pedestrian pathway network and related facilities
- » Expansion of car parking facilities
- » Construction of additional freight and maintenance facilities
- » Further business, industry and commercial development
- » Additional aviation support facilities
- » Utility upgrades.

Long-term Development (2024-2034)

Developments required to facilitate long-term forecast growth of traffic demand and business and industry attraction are expected to include but not be limited to:

- » Further terminal, apron and aircraft parking bay expansion
- » Remote terminal facilities
- » Further taxiway link development to access additional hangars in Airport East and Airport North
- » Airside mass transit system
- » Upgrades to surrounding road network
- » Ground transport interchange connected to the mass transit system
- » Further development of the Central Parking Area
- » Cycle and pedestrian paths
- » Construction of additional freight and maintenance facilities
- » Further business, industry and commercial development
- » Additional aviation support facilities
- » Utility upgrades.

1 A new fire station is planned in the short-term.

2 Additional taxiway and apron work will be undertaken at International T1.

3 Landscaping will define the development of precincts.





GROUND TRANSPORT PLAN

BAC's Ground Transport Plan (GTP) outlines initiatives to promote the efficient movement of passengers and freight to support the growing airport.

The GTP is a statutory requirement and is an important document aligned with the state and local governments' plans to create a harmonious connection of transport forms on and off airport.

Refer to Chapter 12 of the Master Plan.

The GTP recommends 10 initiatives, incorporating 41 programs to be progressed between 2014 and 2019. Coordination of this work will involve BAC working with stakeholders including Local and State Government agencies and public transport operators.

Objectives of the GTP

- » Maximise connectivity and accessibility
- » Facilitate safe and secure movement of people and freight
- » Deliver innovative, efficient and continuous airport services
- » Continue agency partnering which builds on an integrated transport connection plan
- » Timely delivery of seamless transport system that provides new and improved capacity
- » Minimise adverse environmental impacts
- » Deliver proactive response to climate change

- » Contribute to regional economic wealth and employment generation
- » Ensure selective, profitable and timely commercial development at Brisbane Airport
- » Deliver on BAC's vision of world best and preferred choice for passengers, airlines, business and the community.

Transport Vision

BAC's Transport Vision is to maximise the efficient movement of employees, passengers and freight at the airport.

Over the past 10 years BAC has invested almost \$600 million in transport infrastructure and has contributed studies and resources to support the development of major road infrastructure projects such as the Gateway Motorway and Airport Roundabout Upgrade projects.

Engagement

The GTP has been developed with the assistance and input of government bodies responsible for the delivery of transport networks across Queensland. Their experience, insights and technical knowledge have contributed to the development of a range of programs and initiatives that will integrate transport solutions to improve connectivity to surrounding areas.

BAC has also consulted closely with members of the Brisbane community, facilitated through its regular forums and group presentations.

State and Local Government Planning

In addition to the 2014 Master Plan, BAC has considered the following State and Local Government planning policies to develop the airport GTP:

- » Connecting SEQ 2031: An Integrated Regional Transport Plan for South East Queensland
- » Queensland Transport and Roads Investment Program 2013-2014 to 2016-2017
- » Brisbane Active Transport Strategy 2012-2026
- » Transport Plan for Brisbane 2008-2026.

Transport Strategy and Initiatives

The key drivers and issues for Brisbane Airport's transport strategy relate to:

- » Road network
- » Public transport
- » Transport services for airport employees
- » Active transport network
- » Airport development of terminal and commercial precincts.

The 10 initiatives are shown in Table 2.

TABLE 2: THE 10 GROUND TRANSPORT PLAN INITIATIVES

Initiative	Description
Initiative 1	Improve the on-airport road network
Initiative 2	Improve the off-airport road network
Initiative 3	Improve parking
Initiative 4	Improve the rail network and services
Initiative 5	Improve taxi, bus, coach and shuttle services
Initiative 6	Support freight movements through the airport
Initiative 7	Improve active transport facilities at the airport and link to the external network
Initiative 8	Improve information and signage for travel to, from, and within the airport
Initiative 9	Encourage passengers to use alternative modes
Initiative 10	Encourage employees to use alternative modes

Transport and Land Use Five-Year Integration Strategy

Initiatives to be introduced between 2014 and 2019 include:

- » Continuation of the pedestrian and cycle network
- » Investigation to expand the on airport bus services (T Bus and S Bus) to connect with rail interchange points and extending across airport to development areas
- » Investigate opportunities with the Queensland Government and Brisbane City Council to extend bus services to the terminals and increase services

- » Consolidation of parking sites in precincts, connected by walking and cycling paths
- » Development of sites which contain end of trip facilities either communal or integrated into the building design
- » Planning of an MTS
- » Land reservations for additional bus and rail interchange, plus corridors to benefit future road connections
- » Continued road capacity improvement projects to facilitate efficient transport connections.

The five-year Transport Plan is shown in Figure 6.

- 1 International T1 multi-level car park.**
- 2 Airtrain is an important public transport link.**
- 3 New Domestic T2 road system.**
- 4 Active transport infrastructure has been delivered in the past five years.**





AIRPORT ENVIRONMENT STRATEGY

Strict environmental management and monitoring are at the heart of BAC's approach to protecting the conservation values of the airport.

Refer to Chapter 13 of the Master Plan.

In accordance with the Airports Act, the AES now forms part of the 2014 Master Plan contains individual action plans that identify how environmental issues are to be managed over the next five years.

The AES covers all environmental matters arising from the operation and expansion of the airport in accordance with the Airport Legislation. The AES does not include noise and air pollution from aircraft movements as these are regulated under separate legislation.

Environmental Management System

Airport regulations require BAC to include a comprehensive Environmental Management System (EMS) for the airport that maintains consistency with Australian and international systems.

Furthermore, it is BAC's goal to maintain and apply a world-class EMS across all facets of Brisbane Airport's operations, which achieves long-term improvements to its environmental sustainability and continues to improve and evolve through stakeholder input.

Through the use of an EMS, BAC will identify and assess the level of environmental risk for each of its activities, manage risks, audit performance, review the approach and strive for continuous improvement.

Actions 2014-2019

Within the Master Plan AES, BAC outlines its goals, objectives, achievements and action plans for the following areas: Sustainability, Energy, Air Quality Emissions, Waste and Resources, Water, Soil, Biodiversity, Noise, Heritage, Development, and Tenant and Contractor Management.

Through the AES, BAC has committed to a series of actions over the five-year period covered by the Master Plan. These include, but are not limited to, the following:

BAC EMS

- » Continue to maintain and review the EMS
- » Ongoing staff training
- » Audit the EMS.

Sustainability

- » Annual review of the Environmental Sustainability Action Plan
- » EarthCheck Certification
- » Achieve a GBCA green-star rating
- » Define Brisbane Airport's longer-term sustainability vision for utilities
- » Investigate the Global Reporting Initiative.

Energy Management

- » Review energy consumption and energy efficiency
- » Further rollout of smart metering
- » Incorporate energy efficient initiatives
- » Training for tenants
- » Review BAC strategies relating to energy management
- » Investigate alternative forms of electricity generation technology and innovative renewable energies.

Air Quality and Emissions

- » Ongoing review of air quality monitoring data
- » Review BAC's car fleet policies, specifically around emissions.

Waste and Resource Management

- » Donate food waste to the Wesley Mission Brisbane
- » Identify operational waste management opportunities
- » Develop a waste minimisation strategy for Domestic T2
- » Update guidelines to incorporate waste management of construction activities

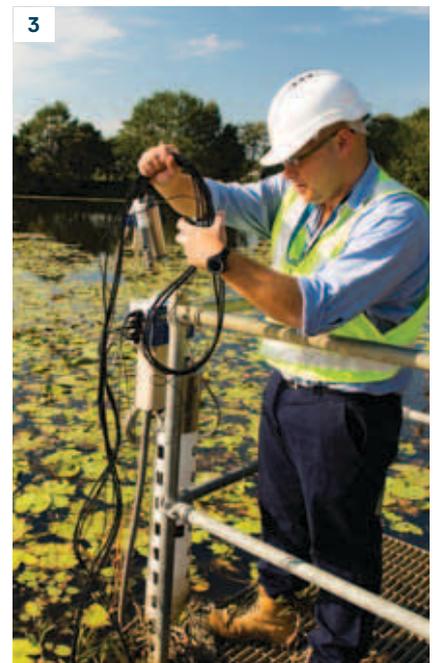
- » Explore reusing recycled building materials.

Water Management

- » Expand recycled water network
- » Consider opportunities to reduce consumption
- » Ongoing testing of surface water, stormwater and groundwater
- » Identify sponsorship opportunities
- » Investigate new technology and methods
- » Investigate alternative water sources.

Soil Management

- » Monitor and remediate contaminated sites
- » Work with stakeholders on site specific environmental management plans
- » Look at new technology and explore options for specific sites
- » Develop an Underground Storage Tank Management Plan.



1 Water measurements at on-airport freshwater lake.

2 Solar photovoltaic array at the Domestic T2 supplements airport energy demands.

3 Water testing at the airport's freshwater lake.



Biodiversity

- » Continue to implement the Biodiversity Management Strategy
- » Drain maintenance
- » Develop a formal agreement with Brisbane City Council to cooperate on adjoining conservation areas and streamline processes
- » Review drainage patterns affecting the Lewin's Rail
- » Work with stakeholders on promoting the Kedron Brook Floodway biodiversity values
- » Monitor and assess casuarina plantation health.

Noise

- » Include noise attenuation measures for new developments where required
- » Review Brisbane Airport Ground Running Procedure
- » Monitor, record and act on noise complaints around ground based activity.

Heritage

- » Develop a Heritage Management Plan
- » Continue to consult with traditional owners
- » Implement the Southern Cross Aircraft Warehousing and Display Agreement requirements
- » Promote the location and significance of the Kingsford-Smith Memorial.

Development Projects

- » Annual reviews of the Construction Environmental Management Plan Guidelines and wider industry best practice
- » Develop guidelines for erosion and sediment control.

Tenant and Contractor Management

- » Continue to facilitate Brisbane Airport Tenant Environmental Committee focus groups
- » Inspections of tenant facilities
- » Continue to require Operational Environmental Management Plans from tenants
- » Review tenant audit reports
- » Update the environmental section of the tenant handbook
- » Communicate development updates to airport community.

Connecting People
Building Opportunities

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