02

WELCOME TO BRISBANE AIRPORT

OVERVIEW

Operating 24 hours a day and serving more than 23 million passengers each year, Brisbane Airport is a leading aviation hub, connecting Brisbane, Queensland and Australia overall to more than 50 Australian airports and a growing number of international destinations.

Bounded by the Brisbane River to the east, the Kedron Brook Floodway to the west, Moreton Bay to the north and the Gateway Motorway to the south and located less than 20 km from the Brisbane CBD, Brisbane Airport is one of the fastest growing airports in the country and serviced by high quality road, rail and public transport connection.

Substantial ongoing investment by Brisbane Airport Corporation has seen the airport and associated businesses become an important source of employment for the region, playing a catalytic role in tourism, business and industry growth with benefits being felt across Australia.

More than just an aviation hub, Brisbane Airport is a convenient and safe place of work for more than 23,000 people and a thriving suburb that supports and fosters over 400 businesses in both aviation and non aviation industries.

Working closely with the local community, the last five years have seen a focus on environmental responsibility at Brisbane Airport, with new initiatives including the installation of a network of 22,000 solar panels, the introduction of an energy efficient electric bus fleet and a variety of recycling and waste management initiatives.

Recognised nationally and internationally with awards for work in the areas of environmental sustainability, accessibility and engineering excellence, Brisbane Airport was awarded the title of Best Airport (Australia/Pacific) in the prestigious 2019 Global Skytrax World Airport Awards.

2020 will be a landmark year in the modern history of Brisbane Airport with the opening of a new runway, a forward looking construction project that guarantees the continuing ability of Brisbane Airport to provide the highest quality of services to airport visitors in the future.

Brisbane Airport Corporation's overall vision is to create a sustainable world-class airport, a distinctive place that visitors keep coming back to, and the best possible neighbour and business partner, building collaborative relationships, exploring opportunities for sustainable growth and acting with integrity in guiding the airport towards a brighter future for all.

BRISBANE AIRPORT AT A GLANCE

Brisbane Airport is managed with a strong focus on community, sustainability, education, knowledge and economic growth.

OVERVIEW

BEST AIRPORT IN AUSTRALIA/PACIFIC
2019 Skytrax World Airport Awards

BEST AIRPORT IN OCEANIA REGION
2017 Future Travel Experience Asia Awards

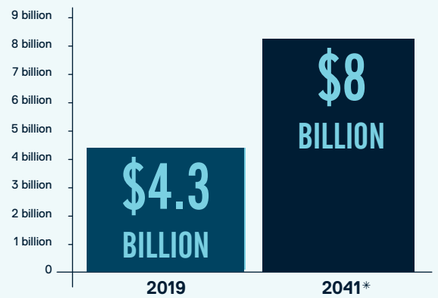
WORLD'S TOP 100 AIRPORTS
Ranked 18th

33 AIRLINES

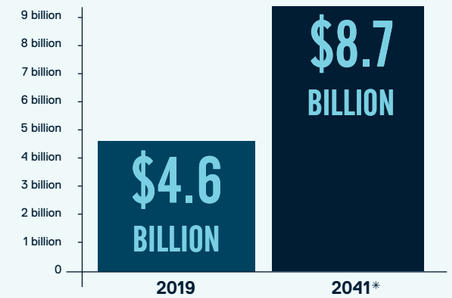
84 DESTINATIONS

ECONOMY

CONTRIBUTION TO QUEENSLAND ECONOMY



CONTRIBUTION TO AUSTRALIAN ECONOMY



BNE Opened in **1988**

BNE 365 24/7 Operates 24/7 365 days a year

23M+ Passengers in 2018

Largest capital city airport in Australia by land size

BRISBANE'S NEW RUNWAY - OPENING 2020

BRISBANE'S NEW RUNWAY SYSTEM WILL BECOME THE MOST EFFICIENT IN AUSTRALIA

90% OF CONSTRUCTION EMPLOYEES LIVE IN SEQ

$1.3BN TOTAL COST TO BUILD

360HA 2.5 TIMES THE SIZE OF BRISBANE CBD

11M CUBIC METRES OF SAND DREDGED

BRISBANE'S NEW RUNWAY IS 3.5KM IN LENGTH

ENVIRONMENT

10% of the Airport is dedicated to biodiversity

BUSINESSES AT BRISBANE AIRPORT

400+ Businesses are located at Brisbane Airport, servicing a diverse range of industries

23,000+ Collectively, businesses employ more than 23,000 people

46,000+ Expected to reach more than 46,000 by 2040

LOCATION

LESS THAN **20KM** TO BRISBANE CBD

COMMUNITY

Distributed through the community partnership program

Third-largest airport in Australia by passenger numbers

Brisbane Airport is a suburb in its own right

Driving time to the city is 20 minutes

BRISBANE AIRPORT AUSTRALIA BNE

ABOUT BRISBANE AIRPORT CORPORATION

Brisbane Airport Corporation has a vision for Brisbane Airport to be a world-class and distinctive place that visitors will keep returning to and the best possible partner for airlines and businesses.

Brisbane Airport Corporation Pty Limited, (BAC) the operator of Brisbane Airport is a proud, private, unlisted Queensland company, helping employ thousands of Queenslanders and creating economic opportunities for the state and city of Brisbane equating to more than $4 billion a year.

BAC first acquired Brisbane Airport from the Australian Government in 1997 under a 50-year lease agreement with an option to renew for a further 49 years.

BAC has a long-term vision to continue to grow the airport to provide a wider range of services to the people of Brisbane, Queensland and the rest of Australia.

Brisbane Airport has significant scope for future expansion, with the long-term capacity to continue to grow into a major international gateway, while maintaining the large buffer zones that separate airport operations from surrounding communities.

BAC has ultimate responsibility for the operations of Brisbane Airport including all airport infrastructure investment. The airport is managed with a strong focus on responsible development, ensuring that it will continue to be viewed with pride by future generations.

In connecting Brisbane and the state of Queensland to the rest of the world, operational priorities of BAC include a focus on building collaborative relationships, supporting the local community, including the arts and charitable organisations, and ensuring safe and secure accessibility to airport services.

Details of some of those activities appear on the following pages.

BRISBANE AIRPORT CORPORATION'S VISION

CONNECTING THE WORLD CREATING THE FUTURE

From building opportunities for our community to fostering cultural and economic growth, the management team and staff at BAC thrive on the knowledge that their collective efforts are helping passengers and business partners connect with Australia and the world.

Helping passengers every day, BAC's frontline Ambassador team is at the heart of everything the airport strives for – to be an extraordinary host.

A team of more than 160 ambassadors work inside the Domestic and International Terminals seven days a week, providing efficient, informative and compassionate assistance to travellers and airport visitors.

In 2018, the Ambassador team volunteered nearly 31,000 hours, assisting around 390,000 domestic and international passengers, including the thousands of athletes and officials who travelled through the airport for the 2018 Commonwealth Games.

CREATING STRONG COLLABORATIVE PARTNERSHIPS

BAC has fostered strong collaborative relationships with Government at all levels, the aviation industry and the local community.

Community partnerships and engagement activities are a vital part of the ongoing operations of the airport. All future planning involves a committed program of engagement, discussion and collaboration to ensure that all parties have an input.

Throughout the year, the airport actively engages with the community through a range of forums, information exchanges and festivals and works hard to ensure all contact is meaningful, robust and based on a two-way exchange of information.

ACTIVE ENGAGEMENT IN FORWARD PLANNING

BAC places great emphasis on the importance of regularly reviewing forward planning and through ongoing and constant collaboration and engagement with stakeholders, industry, the community and Government at all levels. The team seeks and values feedback on new initiatives from conception through to construction and completion.

The Corporation has strong and long-standing relationships with aviation industry partners, with a year round range of working groups, forums and regular meetings addressing operational issues.

Together these groups actively research, plan and implement initiatives to support the continued growth of the airport, including introducing new destinations and services.

SUSTAINABILITY AND PROTECTING THE ENVIRONMENT

BAC is committed to reducing the impact on the environment and has programs in place to manage and minimise the long-term impacts of climate change and adverse environmental impacts from aviation and property development activities.

The benefits of embedding eco-efficient initiatives and values into the business are significant cost savings and the guarantee of supply as the airport grows.

A team of 35 Ambassadors – the Food ResQ team – donated more time to rescue nearly 52 tonnes of untouched food for Oz Harvest, which was then distributed to schools in Brisbane for their breakfast program.

PARTNERSHIPS AND ACCESSIBILITY

COMMUNITY AND THE ARTS

BAC is a dedicated supporter of local charity, community, arts and sporting organisations and distributes more than a million dollars in sponsorship and philanthropic donations each year to more than a hundred local community initiatives and charities.

Partners include the Brisbane Roar Football Club, Brisbane Festival, Museum of Brisbane, Queensland Theatre, Brisbane Powerhouse, QAGOMA, La Boite Theatre Company, Brisbane Writers Festival, Camerata of St John's, and Brisbane Philharmonic Orchestra.

THE COMMUNITY GIVING FUND

BAC's major charitable partnerships include The Royal Flying Doctor Service, Crime Stoppers, Surf Lifesaving Queensland and Life Flight.

To benefit smaller community groups, the Brisbane Airport Community Giving Fund has been developed to provide much needed financial assistance to smaller community groups and schools in the Brisbane area.

The fund has been designed to assist community groups of all types to apply for assistance in a range of fields, including education, health and wellbeing services, as well as community initiatives promoting sporting activities, environmental responsibility and other initiatives of benefit to the community.

Applications for grants from the fund are invited every six months.

ACCESS FOR ALL

BAC is committed to removing the barriers that inhibit travel and has invested more than $3 million in the last five years implementing its Disability Access Management Plan.

All future planning at Brisbane Airport will continue to recognise the importance of providing accessible services and ensuring that compliance with appropriate legislation is maintained in new developments.

As part of the planning process, each element of the passenger journey is thoroughly reviewed with the intention of delivering the best accessibility solutions.

Brisbane Airport was the first in Australia to open a dedicated 'Changing Places' facility, with specialised equipment including a hoist, adult change table, and a toilet with moveable handrails.

BAC has also developed a dementia friendly action plan and is actively working towards becoming a dementia friendly organisation. It will continue to work closely with airline partners and organisations representing disability groups to ensure access needs are met, while continually upgrading services to remove barriers for those with special needs.

RECONCILIATION ACTION PLAN

Brisbane Airport is proud to be the first airport in Australia to formally commit to celebrating and promoting the traditions, laws and customs of Aboriginal and Torres Strait Islanders, with its Innovate Reconciliation Action Plan (RAP) officially endorsed by Reconciliation Australia.

Working in close partnership with Traditional Owners, the RAP is based on building relationships, showing respect and looking for opportunities, while helping create social change and economic contributions for Aboriginal and Torres Strait Islander communities.

To help strengthen professional development, employment and economic opportunities for Aboriginal and Torres Strait Islanders, the plan includes work internships for Indigenous students.

Other initiatives including flying the Aboriginal and Torres Strait Islander flags in front of the International Terminal and performing both Acknowledgement of Country and Welcome to Country at airport events.

Above: *Maxwell Gilbert Gabori, Amanda Gabori, Dorothy Gabori, (Family of the acclaimed Indigenous artist, the late Mirdidingkingathi Juwarnda Sally Gabori) - whose artwork adorns the International Terminal Arrivals concourse.*

KEY STRENGTHS OF BRISBANE AIRPORT

Brisbane Airport Corporation places the utmost importance on being a great host and providing world-class infrastructure and facilities. As the first and last experience passengers and visitors have of Brisbane, Brisbane Airport Corporation has invested significant capital in creating a unique and engaging sense of place within the terminals, a place that proudly showcases the very best of Brisbane, Queensland and Australia.

GEOGRAPHY

Being closer to both the USA and a number of major Asian ports, Brisbane Airport enjoys a strategic geographic advantage. This is of particular importance to fresh produce exporters. Further, with a high number of tourism destinations located in Queensland, Brisbane Airport is the state's primary gateway for many national and international tourists.

THE CAPACITY TO EXPAND

Brisbane is Australia's largest capital city airport by area, covering approximately 2,700 hectares. This extensive land area provides significant scope for future expansion, giving the airport capacity to continue its growth into a major international gateway, while still maintaining buffer zones that separate airport operations from surrounding communities.

PROXIMITY TO THE CBD WITH GOOD CONNECTIONS

Brisbane Airport is served by excellent road, rail and public transport connections. Recent major road infrastructure projects delivered by local and state Government have improved the airport's connectivity to the CBD with a network of underground motorways allowing swift and convenient access at even the busiest times of the day.

THE ABSENCE OF A NIGHT TIME CURFEW

Brisbane's curfew-free status provides a competitive advantage that facilitates the continued growth of Queensland and Australian business and tourism interests. The ability to operate 24/7 allows global carriers to effectively link Brisbane to international networks which hub from cities including Dubai, Singapore, Hong Kong and Bangkok.

The absence of a night curfew is also critical for air freight, with time-sensitive and perishable freight reliant on the airport's 24/7 operation to achieve timely delivery.

CAPACITY TO RESPOND TO CHANGE

With air travel experiencing a rapid pace of innovation and change, manufacturers are working hard to deliver new aircraft that respond to changing demands. Brisbane Airport is configured to service the wide variety of current and future aircraft, including the new runway, taxiways, terminal facilities and aviation support services.

In line with state and local Government planning intent, the development of an on airport network of neighbourhoods will cluster together businesses with similar needs.

BRISBANE'S NEW RUNWAY

A testament to long term planning, Brisbane's new runway is Australia's largest aviation project and will double the capacity of the airport. First considered when the original airport plans were created, approval for the construction of the new runway was granted in 2007.

THE LARGEST BUFFER ZONE OF ANY CAPITAL CITY AIRPORT

Brisbane Airport has the largest buffer zone from surrounding communities of any capital city airport in Australia, helping to minimise the impacts of aircraft noise.

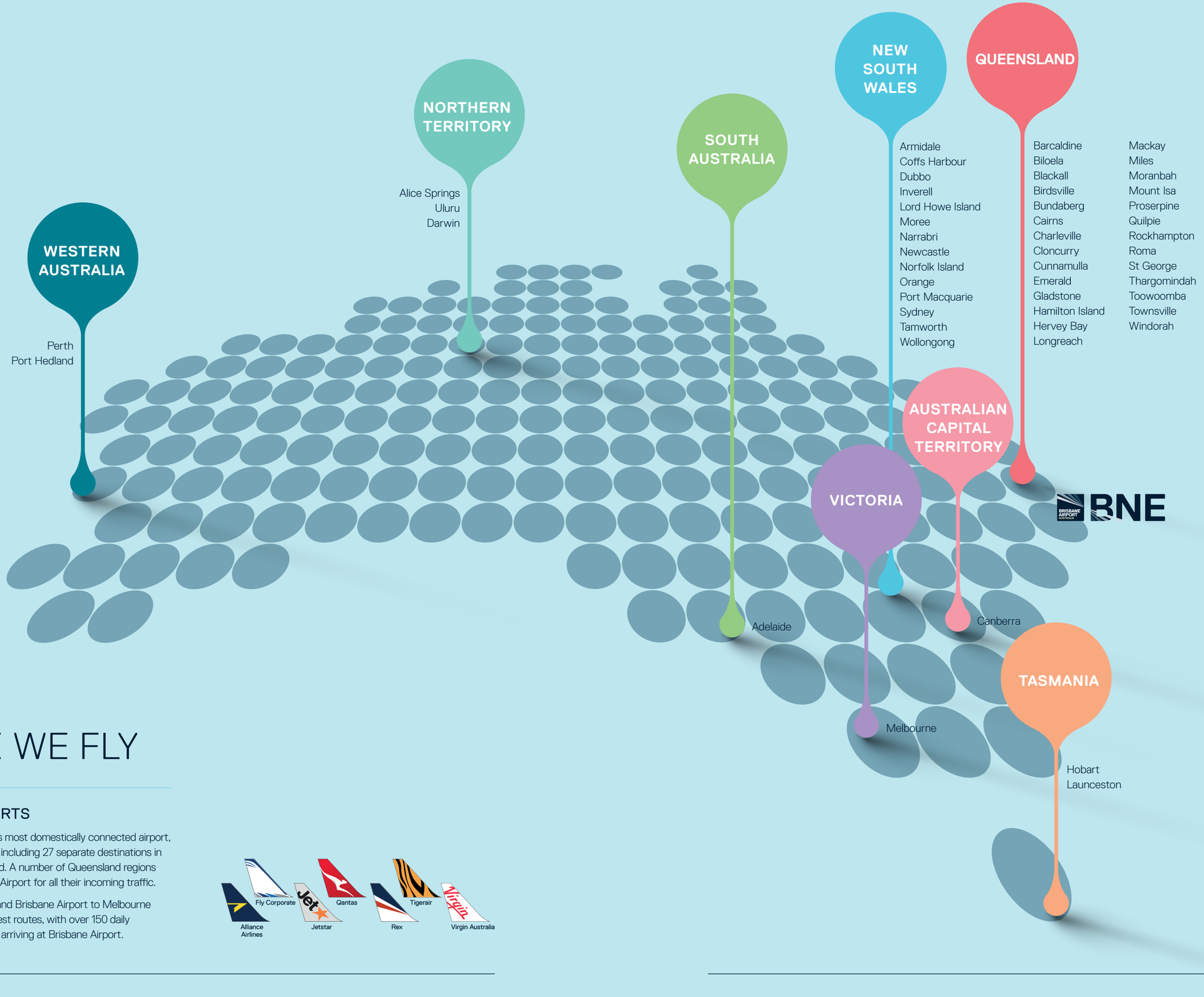
WHERE WE FLY

52 DOMESTIC PORTS

Brisbane Airport is Australia's most domestically connected airport, flying to 52 Australian ports, including 27 separate destinations in its home state of Queensland. A number of Queensland regions depend entirely on Brisbane Airport for all their incoming traffic.

Brisbane Airport to Sydney and Brisbane Airport to Melbourne are amongst Australia's busiest routes, with over 150 daily services departing from and arriving at Brisbane Airport.

Alliance Airlines · Fly Corporate · Jetstar · Qantas · Rex · Tigerair · Virgin Australia



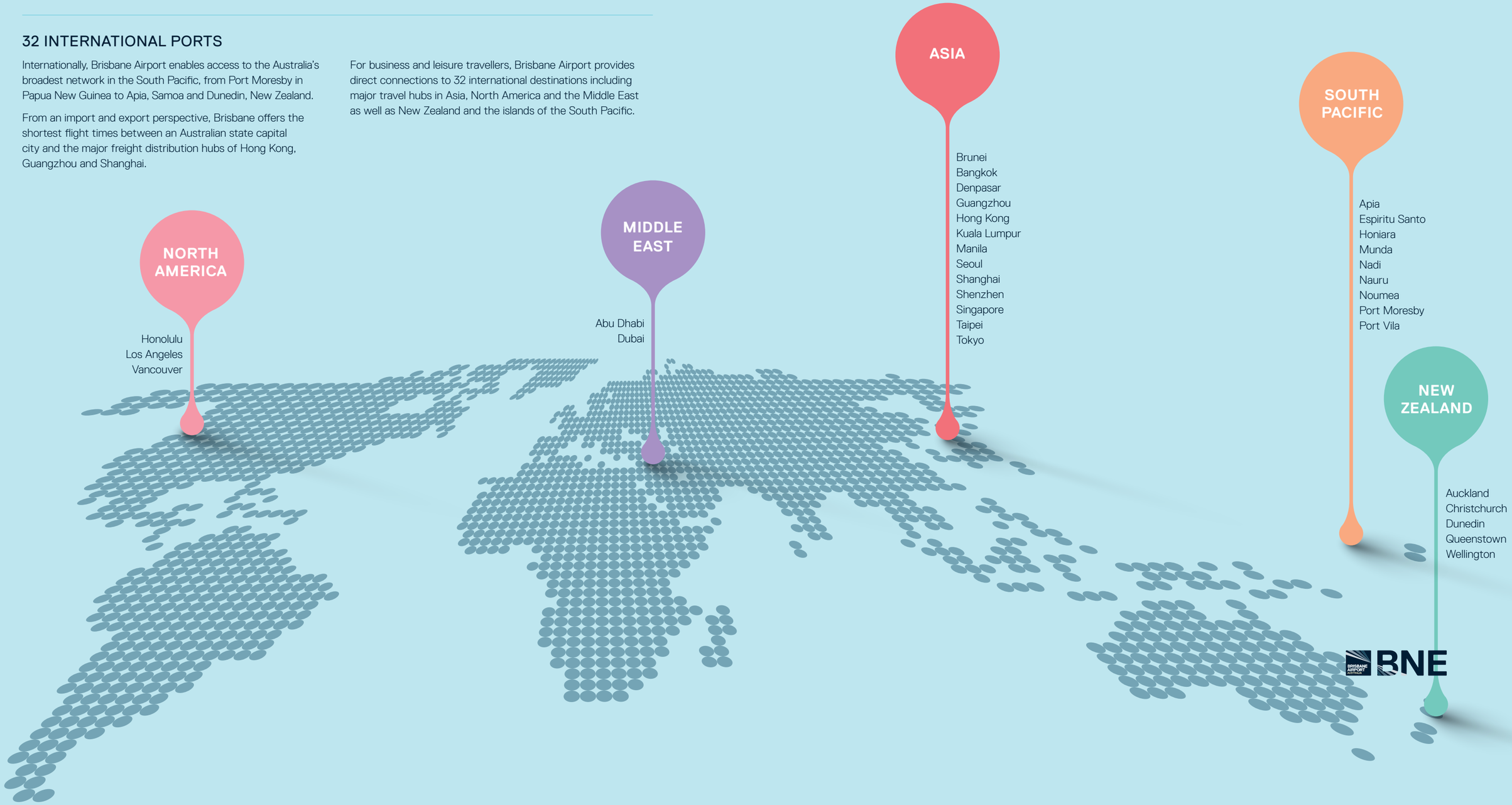
WHERE WE FLY

32 INTERNATIONAL PORTS

Internationally, Brisbane Airport enables access to the Australia's broadest network in the South Pacific, from Port Moresby in Papua New Guinea to Apia, Samoa and Dunedin, New Zealand.

From an import and export perspective, Brisbane offers the shortest flight times between an Australian state capital city and the major freight distribution hubs of Hong Kong, Guangzhou and Shanghai.

For business and leisure travellers, Brisbane Airport provides direct connections to 32 international destinations including major travel hubs in Asia, North America and the Middle East as well as New Zealand and the islands of the South Pacific.



Aircalin · Air Asia · Air Canada · Air New Zealand · Air Niugini · Air Vanuatu · Cathay Pacific · China Airlines · China Eastern Airlines · China Southern Airlines · Emirates · Etihad · Eva Air · Fiji Airlines · Hainan Airlines

Hawaiian Airlines · Jetstar · Korean Air · Malaysia Airlines · Malindo Air · Nauru Airlines · Philippine Airlines · Qantas · Royal Brunei · Samoa Airways · Singapore Airlines · Solomon Airlines · Thai Airways · Virgin Australia

AWARDS

Brisbane Airport Corporation's commitment to excellence has been rewarded with success in a number of national and international awards.

At Singapore's Future Travel Experience Asia Awards, Brisbane Airport was voted Best Airport (Oceania region).

Brisbane Airport received the HSBC Award for Doing Business in Asia at the Brisbane Lord Mayor's Business Awards.

Brisbane picked up three Australian Airports Association awards for its Customer Experience Program, Runway Overlay Project and Innovative Tracker AIRSIDE program.

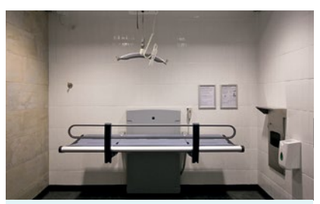
Winners of Construction/ Engineering and Program/Project Director Project of the Year at the Annual Institute of Project Management Awards.

Category winner in the Airports Going Green Sustainability Awards for our Sustainability Strategy recognising the contributions in pursuit of sustainability.

Winner of a Business Development Award in Hong Kong Australia Business Association Awards, Qld Chapter for Aviation Business.

The Brisbane Airport team won the Excellence in Marketing award at the Property Council Awards.

Brisbane Airport and GHD won the Queensland Engineering Excellence Award for the Runway Stage 2 Overlay Project.



Category winner for Best Accessible Toilet in the MyTravelResearch.com International Toilet Tourism Awards.

SKYTRAX WORLD AIRPORT AWARD

Brisbane Airport reclaimed the title of Best Airport (Australia/Pacific) in the prestigious global Skytrax World Airport Awards 2019.

This is the third time Brisbane Airport has claimed Best Airport (Australia/ Pacific) in the past four years.

The only Australian airport to appear in the top 20, it was voted 18th in the World's Top 100 Airports list, up from 22nd place in 2018.

ROUTES ASIA 2019 MARKETING AWARD

Brisbane Airport was recognised for its outstanding achievements in route development marketing at the Routes Asia 2019 Marketing Awards being named the Overall Winner, while also taking out the 20+ million passenger category.

CUSTOMER INITIATIVES

THE BRISBANE AIRPORT APP

Constantly updated, the Brisbane Airport Smart Phone App is available in English, simplified Chinese, Japanese and Korean.

The App has the latest information on arrivals and departures information with the option to receive text notification of changes to flights including gate changes and timings.

The App is available in an Apple and Android version and is free to download.

JOURNEY PLANNER

BAC has developed an Accessibility Journey Planner to ensure accessibility for all.

The Planner provides advice on getting to and from the airport, parking, transferring between the terminals and moving around the terminals, as well as details of services and facilities at the airport.

The content of the Planner is based on guidance from the Department of Infrastructure and Regional Development and Cities and was produced in consultation with the Brisbane Airport Accessibility Reference Group. It includes advice for visitors with general accessibility requirements and also for any visitors who may require specific additional assistance at Brisbane Airport.

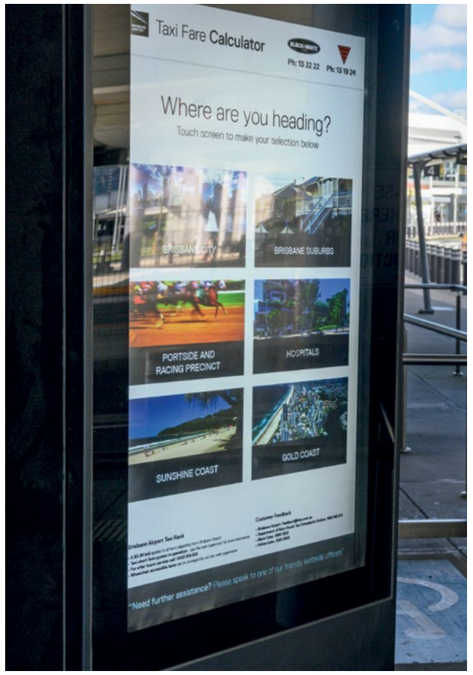
ASSISTANCE ANIMAL FACILITIES

Brisbane Airport Corporation introduced new assistance animal facilities in both the International and Domestic Terminals in 2014.

The first of their kind in Australia, these purpose built amenities provide both toileting area and watering facilities for assistance animals. screening areas in both terminals.

ACCESSIBLE CHANGE FACILITIES

Accessible changing facilities were installed in the Domestic Terminal in 2017, followed by the installation of similar facilities in the International Terminal in 2018. These purpose built facilities provide additional space and specialised equipment for use by people with disabilities and their carers, including an adult change table, hoist and toilets fitted with movable handrails.



IMPROVED CONNECTIVITY

New initiatives to make journeys easier include a new Real Time Passenger Information system with digital signs on terminal bus stops an inside buses.

For taxi users, new screens display advance estimates of fares from the Domestic Terminal with a new 'short fare system' allowing drivers to collect short trip and lower fare passengers.

Bus passengers are also benefiting from a new Con-x-ion ticket office and upgraded waiting area at the Domestic Terminal and a new dedicated bus and coach parking area at the BNE Service Centre.

DEDICATED RIDE SHARING, AND PASSENGER PICK UP POINTS

In 2016, BAC introduced a dedicated location for ride-sharing pick up at both terminals, with dedicated waiting areas provided for vehicles collecting passengers.

At the International Terminal, public pick-up was relocated from Level 2 to Level 1, providing an increase in the kerbside area of over 300 per cent.

The improvements helped accommodate baggage trolleys and other bulky passenger luggage, releasing capacity on the terminal ramps.

ACCESSIBILITY PARTNERSHIPS

AIRPORT ACCESSIBILITY REFERENCE GROUP

The Airport Accessibility Reference Group (AARG) started in 2016 and convenes bi-annually. Its core function is to discuss options to maintain a high level of accessibility for all throughout Brisbane Airport.

The AARG includes representatives comprised of a number of disability organisations across Queensland, including Vision Australia and Guide Dogs Queensland.

AIRPORT FAMILIARISATION TOURS

Airport familiarisation tours commenced at Brisbane Airport in 2016. Conducted in collaboration with a range of disability organisations the tours are specifically designed to alleviate the anxieties of travel.

Specifically, they allow future passengers with a disability, including hidden disabilities, to better understand available facilities and the operation of the airport, prior to travelling.

INFRASTRUCTURE INITIATIVES

BUILDING THE DRYANDRA ROAD UNDERPASS

A new purpose-built underpass at Dryandra Road will allow road vehicles to travel between the Domestic Terminal and the airport's northern facilities once the new runway is open.

The underpass will allow continuous uninterrupted vehicle access to the airport's northern facilities including the General Aviation precinct, Royal Flying Doctor Service and the Acacia Street Plane Spotters Loop.

The physical structure is comprised of approximately 20,000 cubic metres of concrete and 4,000 tonnes of reinforced steel. The underpass will be able to bear more than 700 tonnes, which is 140 tonnes more than the heaviest passenger plane - a fully loaded A380.

More than 300 jobs were created in the construction process due to the enormity and complexity of the works.

CHECK-IN AND BAG DROP UPGRADES

Between June 2015 and June 2018, BAC made further improvements to services including innovative new self-service check-in and automatic bag drop facilities at the International Terminal.

The upgrade of these areas saw the addition of 96 new self-service kiosks and 32 new automatic bag drops.

SKYGATE EXPANSION

Development of the Skygate precinct started in 2005 with a plan to create a dynamic commercial, retail and leisure precinct. As it continues to grow in popularity, 2015 saw a $35 million expansion of DFO, recently complemented by the opening of Skygate Home & Life, home to a number of popular large scale Australian and international retailers.

TERMINAL REDEVELOPMENT

In 2015, BAC redeveloped the departure level and retail precinct at the International Terminal.

New features include a themed departures lounge, with local artists selected to provide key pieces, using locally sourced stone, materials and plants to give the building an iconically Queensland feel.

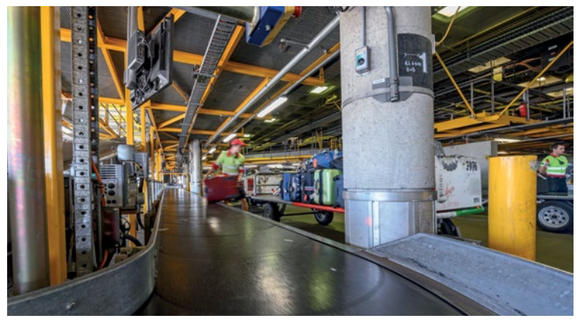
New 'walk through' Duty Free shopping, plus a range of specialty retail and food and beverage outlets now offer the best of local produce and products.

INTER-TERMINAL TRANSFER

The new Inter-Terminal Transfer Facility was designed to reduce connection times between terminals.

A new transfer check-in service in the arrivals area of the International Terminal included new bus stops and extra bus services during peak periods.

Facilities for transferring passengers were complemented by the installation of covered areas for walkways and enhanced digital way-finding signs in the forecourt area of the Domestic Terminal.



BAGGAGE HANDLING UPGRADES

The security and efficiency of baggage handling is an important part of airport operations. In 2017, the Domestic Terminal baggage handling system was upgraded and modernised.

With the installation of new baggage carousels and improved bag sortation software, complemented by the addition of new x-ray machines, baggage handling systems are now larger and more efficient, anticipating the continued increase in passengers using the airport.

SUSTAINABILITY INITIATIVES

NEW ELECTRIC BUS FLEET

In 2018, Brisbane Airport became the first Australian airport to roll out a fleet of fully electric buses,

The use of electric buses for landside transport reinforces an ongoing commitment to creating a cleaner, greener environment and improved passenger experiences at Brisbane Airport.

The new fleet boasts reduced noise pollution and zero tail pipe emissions and, will result in a reduction of 250 tonnes of carbon emissions each year, equivalent to taking 100 cars off the road.

The new buses sport all passenger comforts, with tailored interiors designed specifically for travellers, including ample baggage and luggage racks and featuring three full size double doors making boarding and disembarking more efficient for all.

SOLAR POWER GENERATION

As part of a commitment to renewable energy, $11 million has been invested in a solar power generation project across six sites at Brisbane Airport.

The major project includes the largest commercial rooftop solar system in the southern hemisphere.

Consisting of about 22,000 panels, it spans an area at least twice the size of the GABBA Cricket Ground.

Electricity is one of the most significant expenses in running Brisbane Airport with multiple large buildings requiring cooling, lighting and heating all year round.

The solar energy generated at Brisbane Airport is equivalent to powering more than 1,700 Australian homes for a year, with carbon offsets equal to planting more than 50,000 trees or taking 1,500 cars off the road each year.

RUNWAY LIGHTING

Brisbane's new runway will be the first runway system in the southern hemisphere and Asia Pacific region with a fully addressable LED runway lighting solution.

It is estimated that the system will save 460 tonnes of carbon emissions each year, in comparison to a traditional incandescent system.

In addition to the environmental benefits, the new system increases effiiciency of operation. Addressable airport lighting systems allow the flexibility for each individual airport navigation light to be remotely controlled and monitored for correct operation, maximising pilot safety and operational efficiency.

REDUCED EMISSIONS

A range of proactive measures have seen Brisbane Airport Corporation's carbon emissions continue to decline since reaching a peak in 2013.

The Brisbane Airport Energy Management Strategy describes the preferred mix of grid electricity and renewables to ensure a high level of energy security and quality, while meeting emissions reduction commitments.

The Brisbane Airport Emissions Reduction Strategy includes a commitment to ongoing emissions reduction through a low carbon policy, with regular audits benchmarking continued improvement in carbon and energy performance.

RECYCLING PROGRAMS

As part of day to day operations, the Environment team at Brisbane Airport is actively seeking opportunities for effective waste management and recycling.

A voluntary food recovery initiative launched in 2014, in partnership with the charity Oz Harvest, on airport catering companies and the airport's Ambassador Program has led to more than 50 tonnes of food being redistributed to the needy each year.

New cardboard compactors installed at the Domestic Terminal in 2017 saw the volumes of recycled cardboard double to 300 tonnes per year, reducing consumption and saving waste destined for landfill.

CURRENT MAJOR PROJECTS UNDERWAY

Through ongoing investment by Brisbane Airport Corporation, Brisbane Airport plays a catalytic role in tourism, business and industry growth with benefits being felt across Australia. Major projects underway at Brisbane Airport include the following;

BNE AUTO MALL

Following final approval, the revolutionary development will create a high-profile visitor attraction and the only automotive precinct in Australia offering 24/7 operation.

INTERNATIONAL TERMINAL CHECK-IN UPGRADE

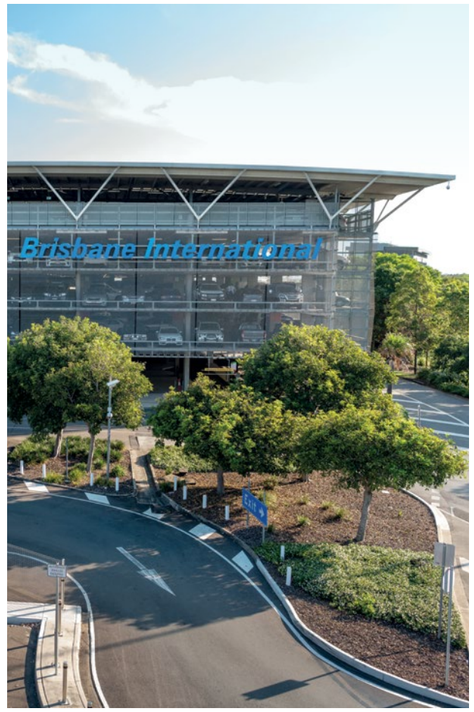
A $12.6 million upgrade of check-in and bag drop facilities as part of an ongoing program of work. Four of the six check-in rows have been completed to date including the provision of 96 new self-service kiosks.

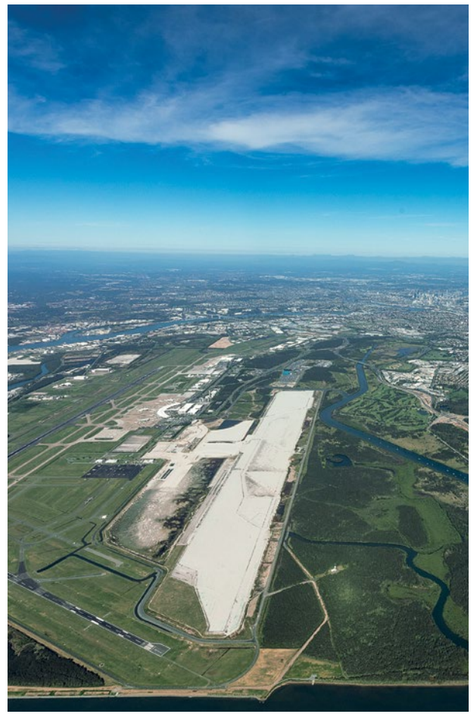
DOMESTIC TERMINAL RETAIL UPGRADE

A major project delivering a range of improved services. Including 50 new and refurbished retail offerings, each contributing to an improved passenger experience.

MULTI STOREY CAR PARK

Ideally located for visitors to the International Terminal, the car park will provide up to 2,800 additional parking bays and will be linked by a new intersection on Airport Drive.





BRISBANE'S NEW RUNWAY

Brisbane's new runway is the culmination of long term planning which commenced in the 1970s. Work on the site began in 2012, with the runway scheduled to open in 2020.

THE HISTORY OF BRISBANE AIRPORT

EARLY HISTORY

The first aircraft to use the Brisbane Airport site as a landing field was 'The Queen of Sheba', piloted in 1922 by Captain Jack Treacy. Three years later, the 32 hectare Eagle Farm Aerodrome was officially opened, with records showing that in 1928, an estimated 26,000 people welcomed Sir Charles Kingsford Smith arriving at the Aerodrome aboard the Southern Cross after completing a record-breaking 11,566 kilometre, three stage flight from Oakland, California.

The original Southern Cross is now preserved in a specially built exhibition hanging at the airport.

Scheduled flights to regional centres commenced in the late 1920s with Qantas beginning operations in 1926 and Australian National Airways commencing services to Sydney in 1930.

The onset of the Second World War saw Eagle Farm used as a US Military airfield. With the end of the war in 1945, the hangars and administration facilities at Eagle Farm soon became a key part of Brisbane's commercial aviation operation, taking advantage of the additional facilities constructed during the war, as well as the more favourable meteorological conditions.

MOVING TO THE CURRENT SITE

In the early 1970s, in response to an emerging increase in demand, research began into finding an alternative site for a significantly larger airport complex to serve Brisbane and Queensland. A large site to the north-east of Eagle Farm was identified for the new airport. History shows that the chosen site included the former suburb of Cribb Island, the childhood home of one of Australia's most successful pop groups, The Bee Gees.

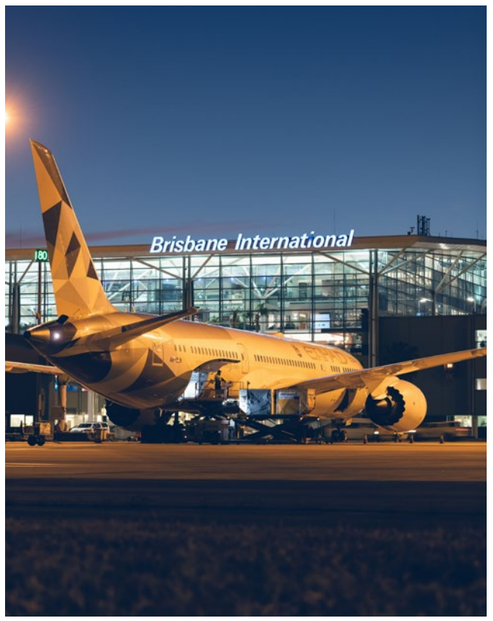
The chosen site allowed the development of widely spaced long parallel runways in NNE/SSW direction and was also large enough for the runways to be sufficiently separated to permit independent operations on each parallel runway and allow the optimum central location of terminal facilities. The runway's orientation minimised the noise and height restrictions on areas including the Brisbane CBD.

Construction of the new airport and associated aviation facilities commenced in May 1980. During this period, the Australian Government was responsible for the operation and development of the airport including the planning and construction of the new International Terminal. The airport commenced operations in 1988, with the International Terminal opening in 1995.

BRISBANE AIRPORT CORPORATION

In July 1997, Brisbane Airport Corporation purchased the long-term lease of Brisbane Airport and took over management and operations. From the outset, the strategic plan was to redefine the role of the modern airport in Australia with a strong emphasis on the importance of community, sustainability, education, knowledge and economic growth.

In the intervening years, Brisbane Airport has become one of Australia's most progressive and fastest growing airports.



BRISBANE'S NEW RUNWAY

HISTORY OF BRISBANE'S NEW RUNWAY

BRISBANE'S NEW RUNWAY

LOOKING BACK: OBJECTIVES OF THE PROPOSAL TO BUILD A NEW RUNWAY

The original proposal for the construction of the new runway had five main objectives;

- Meeting future capacity needs by the staged delivery of the new runway in an economically justifiable time frame
- Driving the generation of regional economic growth
- Balancing economic benefit, social and environmental impact
- Maintaining appropriate risk management
- Achieving stakeholder support throughout the delivery of the project.

LOOKING BACK: WORKING WITH THE COMMUNITY

The projected economic and operational benefits to the city of Brisbane and the surrounding region in the proposal to create a new runway were clear.

The proposed new runway would double the capacity of Brisbane Airport, facilitating up to 50 million passengers by 2040, with that extra capacity predicted at the time of the original proposal to deliver $5 billion per year in regional economic benefit.

While the economic argument was strong, it was important also to consider the reaction of local communities. In 2006, once terms of reference for the Environmental Impact Strategy were released, more than 30 independent consultants were employed by BAC to engage with residents and communities of interest to both explain the plan and to consider all feedback.

LOOKING BACK: THE LEGISLATIVE APPROVALS REQUIRED TO PROCEED

From a legislative point of view on what would become Australia's largest aviation project, the proposal to build the new runway required;

- Approval of the relevant 'Controlled Actions' under the Environment Protection and Biodiversity Conservation Act 1999
- Approval of a Major Development Plan under the Airports Act 1996
- Approval for building activities under the Airports (Building Control) Regulations pursuant to the Airports Act 1996 and
- Approval for controlled activities under the Airports (Protection of Airspace) Regulations pursuant to the Airports Act 1996.

The potential for environmental impact on Commonwealth land, including on wetlands of international importance and on listed threatened and migratory species meant that a further environmental assessment was needed prior to the approval of the project, in line with the environmental impact process provided for under the Environment Protection and Biodiversity Conservation Act 1999.

To fulfil all legal and compliance requirements, Brisbane Airport Corporation, in consultation with key stakeholders from Government and industry developed a Major Development Plan and an Environmental Impact Statement.

The final versions were provided for public comment during 2006. Following further consultation and consideration of feedback, the development plan for the new runway was approved in 2007 by the then Federal Minister for Transport and Regional Services. The Australian Government approved Brisbane Airport Corporation's Public Engagement Strategy shortly thereafter.

Since the approval of the project, BAC has continued to actively engage with all stakeholders providing them with the ongoing opportunity to participate in and to comment on issues of interest and concern.

BRISBANE'S NEW RUNWAY

MASTER PLANNING FOR THE NEW RUNWAY

1970s | 1980s | 1990s | 2000s

1970s

The opportunity to build a new parallel runway at Brisbane Airport was first identified in the 1970s by the Brisbane Airport Advisory Committee. Formed before the airport moved to its current site, the committee included representatives of the Queensland Government, Brisbane City Council and a selection of Federal Government departments.

1970s | 1980s | 1990s | 2000s

1980s

A series of studies into the requirements and impacts of potential developments at Brisbane Airport, including a 1981 report by the Parliamentary Standing Committee on Public Works were followed in 1983 by the creation of the Federal Department of Aviation's Brisbane Airport Master Plan, providing the first framework for development of the airport to the year 2000 and beyond. Broadly this plan provided for future aeronautical and associated facilities to cater for a projected ultimate capacity of 40 million annual passengers. Forecasting ahead, the plan envisaged the airport having two 01/19 parallel runways and a 14/32 cross runway configuration.

Once construction of the new airport site commenced, initial development works on the new site were governed by the content of the first airport Master Plan published in 1983. Major works included the construction of the existing main and cross runways and taxiways, the Domestic Terminal Building, Control Tower and Air Services Australia facilities, plus essential airline support facilities, roads and services infrastructure.

As passenger numbers and the demand for flights to and from Brisbane Airport grew, an updated Master Plan also identified opportunities for development of the terminals and commercial precincts. The 1988 plan retained the same airfield planning layout as the original plans, including the future development of a western parallel runway. A plan published in 1991 continued to adopt the same airfield planning layout, providing for the future development of a western parallel runway and further terminal precinct development and identifying opportunities for the development of commercial precincts within the airport lease area.

MASTER PLANNING FOR THE NEW RUNWAY

1970s | 1980s | **1990s** | 2000s

1990s

The first Master Plan published by BAC recognised the significant investment in infrastructure to date and the airport's physical site extents, form and limitations.

In consideration of industry trends and external influences, the Master Plan maintained the aeronautical layout strategies of previous Plans, while proposing improvements to surface transportation strategies and considering potential future opportunities for business and industry development.

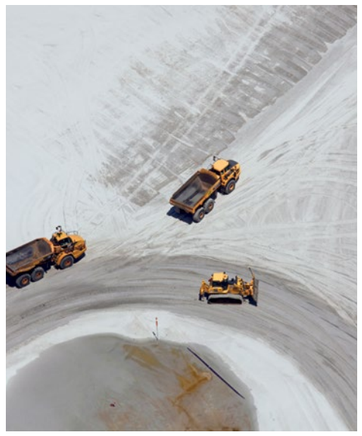
In that Plan, BAC continued to support the location of a new runway located parallel to and 2,000 metres west of the existing 01/19 runway.

BRISBANE'S NEW RUNWAY

1970s | 1980s | 1990s | **2000s**

2000s

The 01/19 parallel runway layout concept was further refined in the 2004 Master Plan. Following public consultation, Ministerial approval and publication, BAC commenced the first stages of active planning and preparation required to bring the Plan to build a new parallel runway to fruition.



BUILDING THE RUNWAY

Once approvals had been received, there were three major stages to a construction project lasting over eight years in total.

PHASE ONE
2012–2015

DREDGING AND RECLAMATION

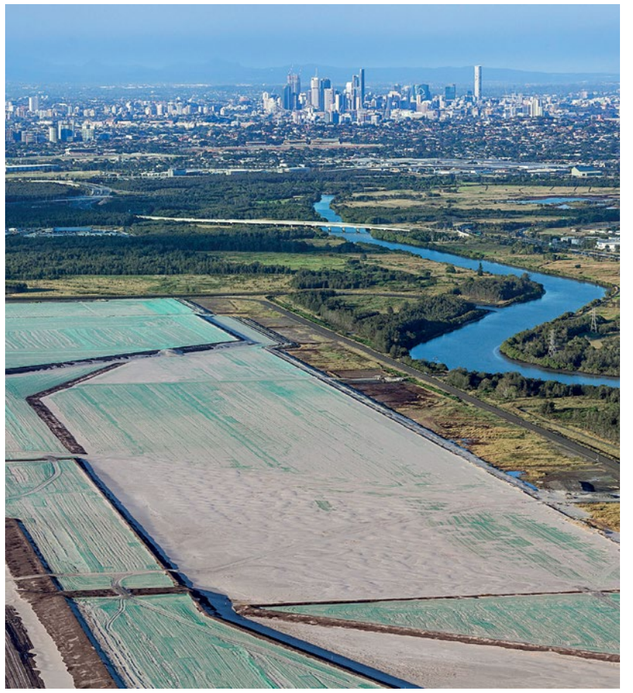
PHASE TWO
2016–2020

AIRFIELD PLANNING, DESIGN AND CONSTRUCTION

PHASE THREE
2016–2020

AIRSPACE DESIGN

BRISBANE'S NEW RUNWAY



PHASE ONE: CIVIL WORKS, DREDGING AND RECLAMATION

The preparatory works for the construction of the new runway commenced in 2012 with the construction of access roads and site compounds. The new site was cleared of Casuarina plantation placed on site when the airport was built in the 1980s to stabilise the soil.

Prior to any construction commencing, the new runway project team was faced with a series of complex construction challenges. The site was located at sea level on an old estuarine delta of the Brisbane River and featured deep, soft, alluvia soils, in some places more than 30 metres in depth across the areas where the new runway would be built. Engineers at the time described the surface as having the consistency of "sticky toothpaste".

Project Director, Paul Coughlan, when interviewed about the original site outlined the enormity of the issues that the project faced. "The site has a "California Bearing Ratio" (CBR) of between 1 and 1.5. That's incredibly soft soil.

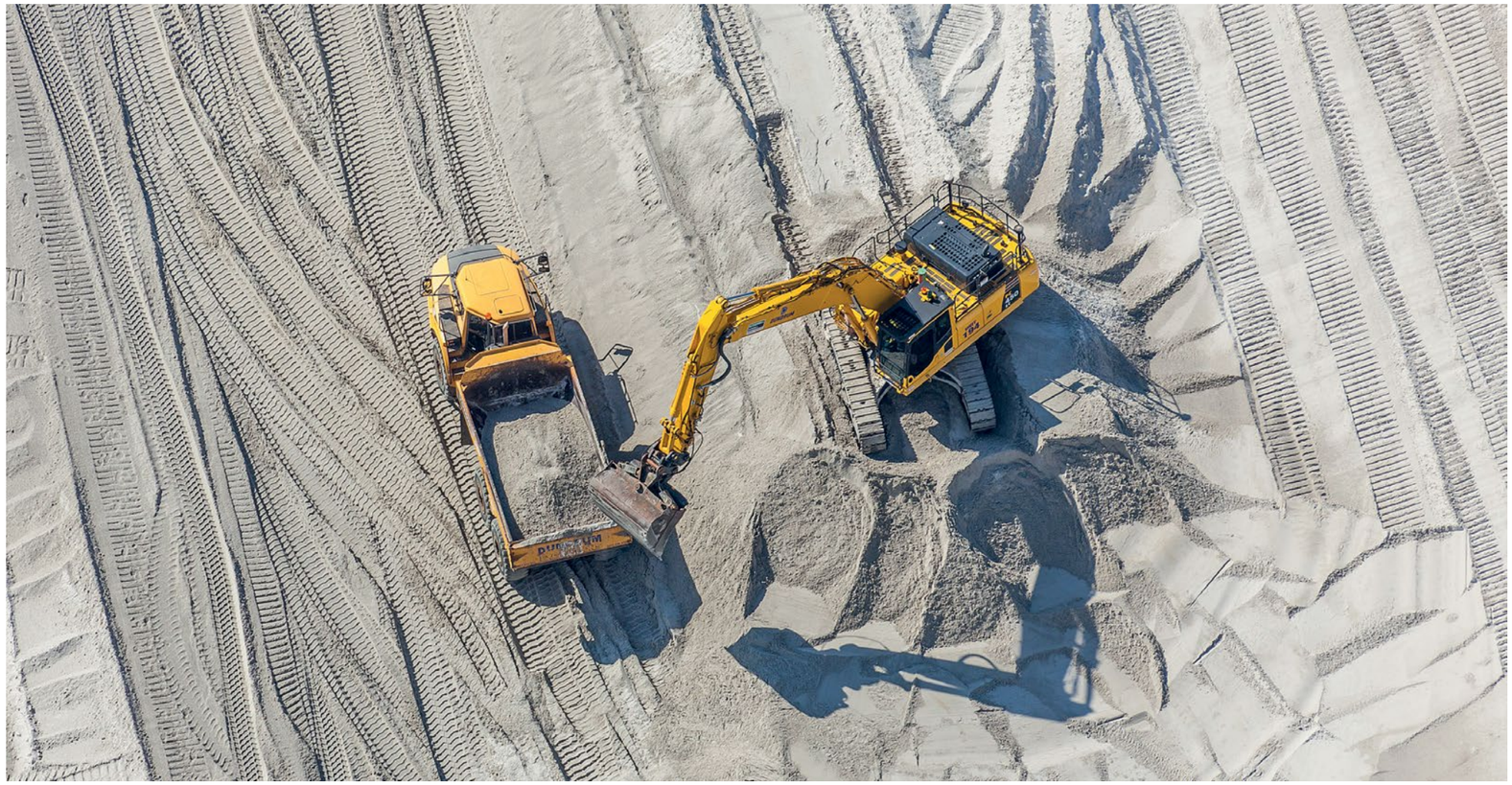
You would normally see runway projects built on CBRs of 10 or better. Put in perspective, the Federal Aviation Authority in the US runway pavement software packages don't assume a CBR of anything less than 3. We're not even on that package!"

The expert firm hired to complete the engineering design of the new runway had more than 35 years' of high-level airport experience, yet had never previously had to build a runway on a site with such a low bearing ratio.

In these unusual circumstances, the plan to reclaim the site prior to the construction of the new runway became dependant on the Airport Project team being able to identify an environmentally-sound and economical source of the sand needed to create a surface for construction.

PHASE ONE: CIVIL WORKS, DREDGING AND RECLAMATION

BRISBANE'S NEW RUNWAY



SOURCING SAND TO ALLOW CONSTRUCTION: A LOCAL SOLUTION

The Environmental Impact Study conducted prior to the approval of the construction plan in 2006/07 had proposed that Moreton Bay could potentially be an ideal source for the type of sand needed to surcharge the land and make it suitable for construction. Surcharging involves the application of a large volume of sand as a heavy load to a sodden soil surface, causing the ground level to sink and consolidate to form a stable foundation.

Having found a potential source of the sand needed, the challenge of finding an economical way of transferring it from the bay and on to the airport again proved to be complex and multi-layered.

To tackle the challenge of the dredging itself, the team sourced the use of a specialist vessel, the "Jumbo Class" dredge known as the Charles Darwin.

The Charles Darwin measured 183 metres long, 40 metres wide and had the capacity to store up to 30,000 cubic metres of sand. The closest to the site the dredge could comfortably berth however was at the mouth of the Brisbane River in an area called the swing basin for the Port of Brisbane. That location meant it had to pump the sand upwards of 8 kilometres from its mooring to the runway site. It was also directly adjacent to the Luggage Point Sewage Treatment Plant, the main treatment plant for Greater Brisbane.

The chosen solution involved running a pipeline across the treatment plant land and the operational airfield, to reach the site for the new runway.

A solution for the route of the pipeline through the sewage treatment plant was arrived at in discussion with Brisbane City Council and the site manager Queensland Urban Utilities. Once solved, the next challenge was to find ways for the pipeline to go around the main runway, as well as under the cross runway. A series of large concrete culverts were created under the cross-runway through which the pipeline was threaded with facilities to turn the pipe to avoid breakage.

Two large diameter concrete enveloper pipes were constructed under the cross runway. This enabled the heavy steel dredge pump out pipeline to be installed through the enveloper pipes on steel rollers.

In total, the three-year dredging phase saw almost 11 million cubic metres of sand sourced from the bay and transported to a 3,300 metre strip of solid land on a greenfield site of 360 hectares, helping to create a platform fit for the construction the new runway.

The work had transformed the site by raising the ground level by three metres, making it free from flood impacts as well as achieving the strength necessary to make it suitable for construction.

To accelerate ground settlement, once the first 2 metre layer of sand had been pumped ashore onto the new runway site, some 350,000 wick drains were installed down to depths of up to 30 metres over approximately 40 per cent of the site.

The wick drains provided an uninhibited vertical pathway for soil moisture to be squeezed from the ground under the downward pressure of the heavy sand and the effects of gravity.

The last cubic metre of sand was pumped on 7 December 2014. Estimates assumed that the sand base would take around three years to settle. The sand and wick drains were left in place to consolidate the underlying soils.

To monitor progress, a series of regular monitors were created to establish the point where the site had reached a suitable level of settlement to commence building the runway and taxiways.

PHASE TWO
AIRFIELD PLANNING, DESIGN AND CONSTRUCTION (2016-2020)

The second phase of the construction project, including the runway system and all necessary airfield infrastructure, commenced in August 2016 with the Seawall and Site Access contract and in early 2017, the construction of a four-lane underpass, to allow traffic to pass under the new taxiways linking the runway to the terminal buildings.

Work on the airfield commenced in mid-2017 with the first task, before runway construction could commence being the redistribution of an estimated 4.5 million cubic metres of now surplus sand to other parts of the airport site for use in future development.

The runway project itself involved the construction of a new runway 3.3 kilometres long, 60 metres wide, topped with asphalt, 12 kilometres of taxiways, topped with concrete supported by taxiway pavements and airfield infrastructure including navigational aids, lighting, multiple utilities, signage, operations roads, airfield drainage and landscaping, security fencing and control systems.

A high intensity approach lighting system is located at both ends of the runway, with 300 hectares of landscaping undertaken to cover all non-paved areas of the airfield.

THE DRYANDRA ROAD UNDERPASS

The building of the new purpose-built underpass at Dryandra Road was essential to allow road vehicles to travel between the Domestic Terminal and the airport's northern facilities once the new runway is open. The Dryandra Road Underpass allows continuous uninterrupted vehicle access to the airport's northern facilities such as the General Aviation precinct, Royal Flying Doctor Service and the Acacia Street Plane Spotters' Loop.

Building the new underpass proved to be a highly complex project, constructed five metres below sea level, with a dewatering system required to remove the equivalent of the volume of two Olympic swimming pools in a single, 24-hour period.

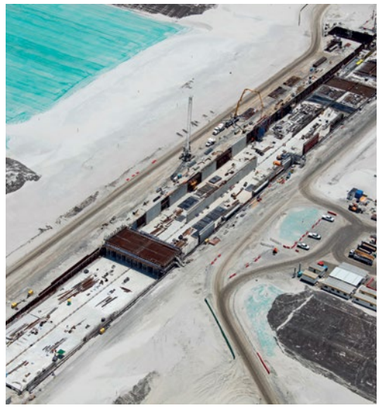
The physical structure is comprised of approximately 20,000 cubic metres of concrete, and 4,000 tonnes of reinforced steel. 750,000 cubic metres of sand was moved for construction of the underpass.

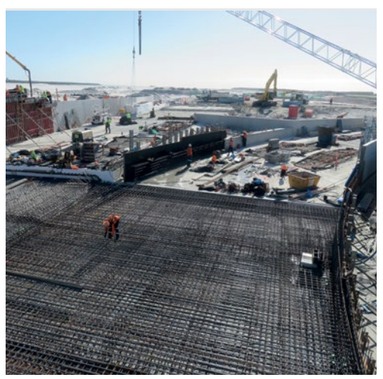
Including an estimated 20, 000 cubic metres of very heavily reinforced concrete 1.6 metres thick at the deepest point, the underpass will be able to bear more than 700 tonnes, which is 140 tonnes more than the heaviest passenger plane - a fully loaded A380, and is future proofed for aircraft of the future

Employing more than 300 people due to the enormity and complexity of the works, the underpass co-locates vehicle access, partitioned down the centre, for public use on one side and restricted secure operational use on the other side. Each side has one lane each way. All vehicle traffic will travel under the soon-to-be-built link taxiways with aircraft taxiing overhead between the new runway and the existing passenger terminals.

BRISBANE'S NEW RUNWAY

Installation of new Runway Lighting





Dryandra Road Underpass

BRISBANE'S NEW RUNWAY

Artist Impression of the new runway at Brisbane Airport

PHASE THREE
AIRSPACE DESIGN (2016-2020)

One of the final stages of the development of the new runway will be the introduction of new flight paths as part a revised airspace design.

The airspace design for Brisbane's new runway was undertaken as part of the original Environmental Impact Statement and Major Development Plan approved by the Australian Government in 2007.

Those original plans and supporting materials are published on the Brisbane Airport website.

In preparation for the opening of the new runway an expert team is reviewing the changes to airport operations, aviation procedures and policies that have come into effect since the original airspace design was created.

The review is a collaboration between BAC and Airservices Australia who are responsible for designing and managing airspace across Australia, with further input also being sought from industry stakeholders and Government departments.

Following that review, BAC will confirm the Standard Arrival Routes and Standard Instrument Departures to be introduced after the opening of the new runway.

The airspace design work focuses on achieving safe and efficient operations for all aircraft, while minimising noise impacts for the community. Other factors in deciding the airspace configuration include consideration of emerging aviation technology, airline fleet capabilities and the airspace needs of other airports.

Greater detail on the aviation considerations regarding the new runway can be found in chapter eight of this Master Plan.