

LAUNCESTON AIRPORT MASTER PLAN 2020



PLEASE NOTE

Launceston Airport is managed by Australia Pacific Airports (Launceston) Pty Ltd (APAL), which is a private company limited by shares. The ownership structure of APAL has Australia Pacific Airports Corporation Limited (APAC) as the ultimate holding Company, with Launceston City Council having a 10 per cent beneficial interest. In this document, the term 'Launceston Airport' is used to refer to both the airport site and to APAL as airport operator and manager of the site (as the case may be). 'Launceston Airport' is a trademark of APAL.

This Master Plan was prepared by APAL as part of its internal strategic planning processes and in accordance with the provisions of Part 5 of the Airports Act 1996 (the Airports Act), and the Regulations made under that Act, and should be read in that context only.

This Master Plan is a revision of the previous Master Plan that was approved by the Commonwealth Minister in May 2015. The fundamental philosophies of the previous Master Plan are maintained in this version.

This Master Plan incorporates the 2020 Launceston Airport Environment Strategy and the Launceston Airport Ground Transport Plan in accordance with Part 5, Section 71 of the Airports Act.

Development strategies and scenarios in this Master Plan are based on certain assumptions and forecasts that have been prepared by APAL to assist in the strategic planning process, and to discharge its obligations under the Airports Act. Therefore, the assumptions and forecasts should not be used or relied upon by any person for any other purpose.

This Master Plan is APAL's statement of intent, based on current data and insights, and is subject to change. Accordingly, the development strategies and scenarios detailed in it are indicative only, and their inclusion is not to be read as an assurance that any, or all of them, will occur.

Changes to the approved Master Plan can only be made by processing a replacement Master Plan or via the minor variation provisions of the Airports Act. As a result of recent changes to the Act, Launceston Airport's next Master Plan will be required in eight years (2028) rather than the previous five-year time frame.

In addition, in accordance with Section 83A of the Airports Act, the airport-lessee company must take all reasonable steps to ensure that the Environment Strategy in the final Master Plan is complied with.

Our vision is to be the port of choice and tourism gateway to Tasmania.

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ABBREVIATIONS

the Airports Act	Airports Act 1996 (Commonwealth)	MTOW	Maximum certified take-off weight
the airport	Launceston Airport	NAP	Noise Abatement Procedure
ABC	Airport Building Controller	NASAG	National Airports Safeguarding Advisory
AEO	Airport Environment Officer	NASF	National Airports Safeguarding Framewo
AEPR	Airports (Environment Protection) Regulations 1997	NATA	National Association of Testing Authoritie
AER	Annual Environment Report	NCIS	Noise Complaints and Information Servi
AES	Airport Environment Strategy	NGER	National Greenhouse and Energy Report
AFFF	Aqueous film forming foam	NGER Act	National Greenhouse and Energy Report
AHAR	Aboriginal Heritage Assessment Report	NIFIR	National Institute of Economic and Indus
AHT	Aboriginal Heritage Tasmania	NPI	National Pollutant Inventory
ΔΗΜΡ	Aboriginal Heritage Management Plan	NTDC	Northern Tasmania Development Corpo
ΔIP		NEMP	Operational Environmental Managemen
ALCs	Airport-lessee companies		Obstacle Limitation Surfaces
ALCS		PAALC	Pilot Activated Airport Lighting Control S
	Australia Noise Exposite Forecast		Procedures for Air Navigation Services
	Australia Pacific Airports Coliporation 1 ty Etu		Procision Approach Dath Indicator
AFAL	Austratia Facility Airports (Launceston) Fty Ltu	DAC	
			Potential Area of Sensitivity
ARI AGT-	Average recurrence interval	PFAS	Per- and poly-ituoroalkyl substances
ASIS	Above-ground storage tanks	PFUA	Perfluorooctane acid
CACG	Community Aviation Consultation Group	PFUS	Perfluorooctane sulfonate
CAGR	Compound annual growth rate	PSAs	Public Safety Areas
CASA	Civil Aviation Safety Authority	PWG	Project Working Group
CBS	Checked baggage screening	RAAF	Royal Australian Air Force
CEMP	Construction Environmental Management Plan	RFDS	Royal Flying Doctor Service
CEO	Chief Executive Officer	RPT	Regular Public Transport
CNS	Communications, Navigation and Surveillance	SDS	Safety data sheets
DITRDC	Department of Infrastructure, Transport, Regional Development and Communications	SMS	Safety Management System
DME	Distance Measuring Equipment	SPPs	State Planning Provisions
DVOR	Doppler Very High Frequency Omni-Directional Range	the Environment Strategy	Launceston Airport Environment Strateg
EMP	Environmental Management Plan	the Master Plan	Launceston Airport Master Plan 2020
EMS	Environmental Management System	the Minister	Minister for Infrastructure, Transport and
EPA	Environmental Protection Authority	the Plan	Regional Economic Development Plan
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)	TPS	Tasmanian Planning Scheme
ERU	Environmental Response Unit	TVS	Tasmanian Visitor Survey
FAA	Federal Aviation Administration	UST	Underground storage tank
FAC	Federal Airports Corporation	WONS	Weeds of National Significance
FFTG	Firefighting training ground		
FIFO	Fly-in fly-out		
FTE	Full-time equivalent		
GA	General Aviation		
GGF	Green and Gold Frog		
GHG	Greenhouse gas		
GLP	Greater Launceston Plan		
GSE	Ground Services Equipment		
HLS	Helicopter landing sites		
HMP	Heritage Management Plan		
IATA	International Air Transport Association		
ICAO	International Civil Aviation Organization		
IIS	Instrument Landing System		
INM	Integrated Noise Model		
ISO	International Organization for Standardization		
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MUL	ויוסוטי שפיפוטאווופות רומו		



System - Aircraft Operations

gy 2020

d Regional Development

GLOSSARY

Airport Master Plan

The principal planning document required under the *Airports Act 1996*, setting out a 20-year plan for each leased federal airport.

Aircraft Noise Contours

Contours that display the existing or forecast aircraft noise exposure patterns around an airport. These contours help land-use planning authorities decide on acceptable development in close proximity to the airport.

Aircraft Throughput

Equals aircraft demand.

Airside

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The movement area of an airport, adjacent land and buildings that is access-controlled.

Airservices Australia

The Australian Government agency providing air traffic control management and related airside services to the aviation industry.

Airservices Noise Complaints and Information Service (NCIS)

A toll-free enquiry line operated by Airservices Australia to provide the public with information on noise levels at major airports.

Australian Noise Exposure Concept (ANEC)

A set of contours based on hypothetical aircraft operations at an airport in the future. As ANEC maps are based on hypothetical assumptions and may not have been subject to review or endorsement, they have no official status and cannot be used for land-use planning. However, an ANEC can be turned into an ANEF.

Australian Noise Exposure Concept (ANEF)

A system developed as a land-use planning tool aimed at controlling encroachment on airports by noise-sensitive buildings. The system underpins Australian Standard AS2021:2015 'Acoustics' – Aircraft Noise Intrusion – Building Siting and Construction' The Standard contains advice on the acceptability of building sites based on ANEF zones. ANEFs are the official forecasts of future noise exposure patterns around an airport and they constitute the contours on which

land-use planning authorities base their controls.

Australian Noise Exposure Concept (ANEI)

Contours developed under the ANEF framework showing historic noise exposure patterns used in environmental reporting and benchmarking.

Aircraft Apron

The part of an airport where aircraft are parked and serviced, enabling passengers to board and disembark and cargo to be loaded and unloaded.

Busy Hour Rate

The sliding 60-minute period during which the maximum total traffic load in a given 24-hour period occurs.

Civil Aviation Safety Authority (CASA)

An independent statutory body responsible for regulating aviation safety in Australia and the safety of Australian aircraft overseas.

Code C Aircraft

An aircraft that has a wingspan of between 24 metres and up to, but not including, 36 metres. Examples are the Airbus A320 series and Boeing 737-700/800 series.

Prescribed Airspace

An area in the interests of the safety, efficiency or regularity of existing or future air transport operations into or out of an airport for the airspace to be protected.

Curfews

A restriction on certain flights taking off or landing from specified airports at designated times.

Foreign Object Debris

A substance, debris or article alien to a vehicle or system, which would potentially cause damage.

Ground Service Equipment (GSE)

Airport support equipment, for example, aircraft pushback tractors, baggage tugs, ground power units and engine air start units.

Instrument Landing System (ILS)

Instruments capable of providing both directional and glide slope guidance.

International Air Transport Association (IATA)

An international organisation representing and serving the airline industry worldwide.

International Civil Aviation Organisation (ICAO)

An agency of the United Nations which codifies the principles and techniques of international air navigation and fosters the planning and development of international air transport.

Landside

The area of an airport and buildings to which the public normally has free access.

Leased Federal Airports

The 21 airports privatised under the Airports Act 1996, where the airport operators lease the airport land from the Australian Government.

Major Development Plan (MDP)

A requirement under the *Airports* Act 1996 for airport-lessee companies to provide information to the Australian Government and the public about significant planned developments of a defined value, scale or impact on leased federal airport sites.

N-above (N) Contours

A supplementary metric to the ANEF which reports aircraft noise in the way that a person perceives it – as a number of noise events per day above a certain decibel level.

Non-aviation Development

Commercial developments not related to aviation activities, such as retail outlets and certain leased buildings, on airport sites.

Obstacle Limitation Surfaces (OLS)

A series of surfaces that define the volume of airspace at and around an aerodrome to be kept free of obstacles in order to permit the intended aircraft operations to be conducted safely and to prevent the aerodrome from becoming unusable by the growth of obstacles.

Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS)

A set of ICAO rules for designing instrument approach and departure procedures at aerodromes.

Taxiway

A paved movement route on an airport connecting runways with aprons, hangars, terminals and other facilities.

WebTrak

A web-based system established by Airservices to provide the community with information on where and how high aircraft fly around major airports, as well as the noise levels of these operations.

FOREWORD

We are pleased to present Launceston Airport's Master Plan 2020 for public comment. The plan outlines our vision and strategic intent for Launceston Airport's future over the next 20 years.

As the Greater Launceston area and Tasmania grow, so will the demand for air transport. In years to come, Launceston Airport will serve more passengers, new aircraft and more flights, all of which will support the growth of the local and state economies and keep Tasmanians connected with the rest of Australia and the world for business, tourism, education and trade.

Since privatisation in 1998, use of Launceston Airport has grown from 550,000 to almost 1.4 million passengers per year. Forecasts indicate that the number of passengers coming through the airport each year will increase to nearly 2.5 million passengers by 2040. Effective on-airport planning by Launceston Airport, combined with off-airport development planning in collaboration with local and state governments, will ensure Launceston Airport continues to meet the changing needs of airport users, local communities and businesses.

This Master Plan builds on Launceston Airport's strategic strengths, including 24-hour operations, efficient and reliable transport links, state and local government support through strategic planning and safeguarded capacity, to grow in a sustainable way.

The Master Plan also addresses the key issues facing Launceston Airport, including the need to successfully manage interactions between what is an essential transport infrastructure hub and its surrounding communities. With the support of our stakeholders, we will operate and grow the airport responsibly. After recent amendments to the *Airports Act 1996* Launceston Airport in future will develop a Master Plan every eight years, clearly communicating the business intentions to the community and key stakeholders. It is an important part of the continued consultation process and we welcome feedback.

Launceston Airport's vision is to strengthen its position as the tourism gateway to Tasmania through continuous growth and development in line with increasing passenger and freight demand while maintaining economic and social benefits for Northern Tasmania. This Master Plan sets out the steps we will take to achieve this vision.

Lyell Strambi CHIEF EXECUTIVE OFFICER Australia Pacific Airports Corporation

Andrew Gardiner CHIEF OF LAUNCESTON AIRPORT Australia Pacific Airports Corporation

EXECUTIVE SUMMARY

Launceston Airport is Tasmania's second busiest passenger airport and the main airport for the Northern Tasmania region. 1.39 million passengers passed through the airport in financial year 2019. Launceston Airport and the other operators engaged in the provision of services at the airport currently directly employ 383 people. The airport is a significant component of Tasmania's transport infrastructure.

As the gateway to Northern Tasmania, Launceston Airport is a key driver in securing and sustaining employment, business, tourism and other services. The airport provides significant direct and indirect employment opportunities to a range of aeronautical and related businesses and the capital employed by the airport represents a significant stimulation to the Tasmanian economy.

Over the next eight to 20 years, Launceston Airport will contribute even more to Tasmania. The number of passengers is forecast to grow to 1.9 million by 2028 and to 2.49 million by 2040.

Preparations have already begun to ensure Launceston Airport can accommodate this projected growth. During the past five years, the airport has put in place the facilities and services outlined in the development plans contained within the 2015 Master Plan. In that time, it has undertaken a terminal retail expansion, security reconfiguration, internal office upgrades, overlay of the main runway, a new main entrance and car parking facilities, and replacement of ageing concrete pavements on Taxiway Alpha, Taxiway Delta and the RPT apron.

THE 2020 LAUNCESTON AIRPORT MASTER PLAN

As the Greater Launceston Area and Tasmania continue to grow, so will the demand for air travel. To service this demand, Launceston Airport must continue to efficiently and sustainably develop the precinct to overcome airfield and terminal capacity issues as well as any road congestion. It must also ensure its day-to-day operations and proposed developments do not have adverse impacts on the environment and local communities. As part of the planning and development process, the *Airports Act 1996* (the Airports Act) requires Launceston Airport to produce a Master Plan outlining its strategic vision for the site for the next 20 years. This Master Plan presents concept plans for the medium-term (eight years), long-term (eight to 20 years) and ultimate term (20 plus years).

The Master Plan covers the subjects set out in Section 71 of the Airports Act, including development objectives, future use forecasts and environmental impacts. It includes plans for:

- land-use
- airside development (runways, taxiways, aprons and air navigation facilities)
- terminal development
- non-aviation development
- ground transport
- infrastructure development (water, sewerage, stormwater drainage, electricity and other utilities)
- environmental management
- airport safeguarding
- implementation.

LAND-USE PLAN

Planning requirements for the Launceston Airport site are administered under the Airports Act. State planning laws generally do not apply to the site. However, Regulation 5.02(2) of the *Airports Regulations 1997* requires the Master Plan to, where possible, describe proposals for land-use planning and zoning (in relation to the landside part of the airport) in a manner consistent with that used by the state or territory in which the airport is located.

As required under Section 71 of the Airports Act, this Master Plan demonstrates how the landuse plan is consistent with planning schemes in force under Tasmanian law. It has considered the Tasmanian planning system and has used zones, overlays and other planning provisions derived from the Tasmanian Planning Scheme.

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AIRSIDE DEVELOPMENT

The principal objective of the Airside Development Plan is to ensure that appropriate airfield infrastructure is provided to accommodate Launceston Airport's existing aviation activities and the forecast growth in those activities. To this end, the Master Plan proposes a number of airside initiatives including additional RPT apron based on demand, decommissioning of the two grass runways, utilisation of Bay 7 as a stand-off RPT parking bay, additional GA sealed apron and parking areas to the south of the current southern freight apron, and additional GSE storage areas.

TERMINAL DEVELOPMENT

The Master Plan outlines how Launceston Airport intends to facilitate and ensure longterm sustainable growth through its planned development of terminal infrastructure.

To prepare for the expected increase in passenger numbers, during the next eight years the airport plans to undertake a number of developments to support aviation growth, much of which will be directed towards upgrading and expanding the existing terminal building. This includes expanding apron-level passenger boarding and airline lounge facilities, and provision for expansions of the security screening point and the departures and arrivals hall areas.

NON-AVIATION DEVELOPMENT

Non-aviation development plays an important role in Launceston Airport's economic viability and complements its key functions. It supports the airport's growth; is complementary to the aeronautical business; may provide enhanced customer amenity within the terminal; and provides a strong contribution to the local and broader community by stimulating economic activity and employment outcomes.

The Master Plan describes current non-aviation developments and explains the airport's vision for future non-aviation development. The airport has defined a number of areas within the two landside precincts where non-aviation development will be undertaken.

GROUND TRANSPORT

Based on detailed analysis of the existing conditions and projected future conditions, the Launceston Airport Ground Transport Plan outlines the potential actions and strategies for the development of the ground transport systems facilities and infrastructure to enable safe, efficient and reliable ground transport to, and within, the airport's precinct into the future.

To ensure the Launceston Airport ground transport system can accommodate the anticipated future demand, modal share changes, a range of potential upgrades and existing network modifications have been identified. Master planning, strategic development and integration of access for a range of passenger vehicle modes will be critical to satisfy the needs of our passengers and to assist in the delivery of improvements in safety, efficiency and reliability in the ground transport network.

Launceston Airport is aware that its transport infrastructure has to be integrated into the wider state and local transport networks and will work actively with all tiers of government to achieve this.

INFRASTRUCTURE DEVELOPMENT

The unconstrained development of existing airport infrastructure is paramount to Launceston Airport's planned long-term growth. APAL is committed to ensuring the water, sewerage, stormwater drainage and electrical supply infrastructure can support this future growth. The Master Plan outlines key strategies to achieve this, including for risk management, maintenance, extensions and renewing this infrastructure.

ENVIRONMENT STRATEGY

Launceston Airport is aware that what occurs today may impact the environment tomorrow. The airport understands it has an environmental responsibility to all Tasmanians to limit, as far as practicable, the impact its operations have on the surrounding environment.

The Environment Strategy contained within this Master Plan describes the key environmental issues faced by the airport and how it intends to address them. It provides an overview of the environmental management systems, processes and practices in place at the airport, as well as its environmental policies, monitoring and training procedures. The strategy also sets environmental targets for on-airport business operators, tenants and retailers.

Among the key topics covered are ecologically sustainable development, climate change, water consumption, waste and resource management, air quality, noise, biodiversity and conservation, and cultural heritage.

Launceston Airport recognises that with expected increases in passenger numbers and expansion over the coming years, commitment to sustainable operations is now more important than ever. The Environment Strategy will underpin the airport's activities and developments to ensure its future growth is not at the expense of the environment or the area's cultural heritage.

AIRPORT SAFEGUARDING

As the Greater Launceston area and Tasmania grow, so does the demand for residential landuses and other development near the airport. New developments that encroach on the airport environs have the potential to restrict the ongoing operation of the airport. However, responsible planning by Launceston Airport and both state and local governments will enable the airport to expand without compromising the needs of the wider community.

The Master Plan describes the objectives of the airport's safeguarding strategy, in accordance with the National Airports Safeguarding Framework, including suggested improvements to state and local planning policies and controls relating to landuse and development around the airport, managing aircraft noise and protecting airspace. These measures will help strengthen Launceston Airport's role within Tasmania's economic and transport infrastructure, secure its long-term operations and 24-hour curfew-free status, and facilitate future growth, while balancing the needs of communities surrounding the airport.

IMPLEMENTATION

The final section in this Master Plan describes the systems, policies and procedures that Launceston Airport will use to implement the proposed vision. An important part of the implementation strategy is engaging with stakeholders and the community.

COMMUNITY AND STAKEHOLDER ENGAGEMENT

Launceston Airport will continue to demonstrate a strong commitment to community consultation and proactive communication about its plans for the future. The airport will continue to communicate with local, state and Commonwealth governments, local businesses, industry partners and the broader community.

Launceston Airport will continue to hold regular briefings, meetings and forums to update all levels of government, airlines, businesses, industry bodies, tourism agencies, residents and employees on its current operations and future projects. The independently chaired Community Aviation Consultation Group (CACG) will be critical to the ongoing engagement process. The airport encourages open, transparent communication and welcomes feedback from all parties.

CONCLUSION

The developments and improvements proposed in this Master Plan will ensure Launceston Airport can meet the increasing demand on its facilities and services over the next 20 years. By acting now in a responsible and sustainable manner, the airport can continue to deliver significant, long-lasting access, economic and social benefits to Tasmania. Г С

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1.1 LOCATION

Launceston Airport is situated 15km south of Launceston City near the local towns of Perth and Evandale. Figure 1.1 shows the location of the airport.

The airport serves as a domestic, regional and general aviation gateway to Northern Tasmania for commercial aircraft, airfreight and private operators. The airport is well situated to service the north of Tasmania as it is located adjacent to the Midland Highway and close to the Bass Highway which services the north and north-west of the state. A major rail junction is located to the south of the airport.

1.2 **EXISTING AIRPORT**

The existing airport site is 180 hectares and comprises various aviation facilities for aircraft passengers and freight, as shown in Figures 1.2, 1.3 and 1.4.

Current facilities available for aircraft operations consist of a primary north-west – south-east runway and full-length taxiway. There are two secondary grass runway strips located to the north-east of the primary runway for use by small general aviation (GA) aircraft, however these strips have been closed for some time due to ground surface irregularities, and at the time of writing APAL was in the process of decommissioning these runways.

The existing airport comprises six domestic aircraft stands, three freight stands and 15 GA stands. The terminal building comprises a three-storey complex with a distinct check-in hall, security controlled departures lounge, arrivals hall, two gate lounges and four dedicated departure gates.

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FIGURE 1.2 EXISTING AIRPORT AERIAL PHOTOGRAPH

FIGURE 1.3 EXISTING AIRPORT PLAN

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LEGEND

- Navigation Aids
 Car Rental Area
 Terminal
 Other Buildings
 Hangars
 Runways
 Car Parking Areas
 Roadway
- Airport Boundary
- --- Airside Boundary

This plan has been prepared to illustrate the Master Plan and is not intended to serve any other purpose.

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LEGEND

Airport Boundary

This plan has been prepared to illustrate the Master Plan and is not intended to serve any other purpose.

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LAUNCESTON AIRPORT MASTER PLAN 2020

FIGURE 1.4 EXISTING BUILDINGS PLAN

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(110)

INTRODUCTION

Airport Site Area 180Ha Runway Length 1980m

RPT Bays x6

Freight Bays x3

LEGEND

- No. Building Description
- 1 Air Cargo Office
- 3 Fire Station
- 5 Fuel Facility
- 6 Vacant
- 10 Air Cargo Hangar
- 14 Air Cargo Hangar
- 16 Building 16
- 17 Hangar 17
- 26 Air Traffic Control Towe 47 Tasmanian Aero Club H
- 49 Pump House
- 53 5000 GAL Water Storag
- 60 Glass House (part)
- 70 Mechanical Workshop
- 71 Power House 72 Flammable Liquids Sto
- 73 Amenities Building
- 74 Vacant
- 75 Vacant
- 76 Vehicle Shelter

		\wedge
	No.	Building Description
	77	Gardeners Building
	78	Car Rental Operator
	83	Storage Shed
	84	Terminal Building
	85	Royal Flying Doctor Service
	87	GA Hangars
	89	Storage
	90	Royal Flying Doctor Service
er	91	Vehicle Shelter
louse	92	Regional Airline Terminal
	94	Fuel Facility
e Tank	95	GA Hangar
	102	Airline Offices
	105	Vacant
	108	Vacant
re	109	Royal Flying Doctor Service
	110	Satellite Ground Station
	112	Washdown Bay
	—	Airport Boundary
		Airside Boundary

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(70)

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This plan has been prepared to illustrate the Master Plan and is not intended to serve any other purpose.



1.3 LAND AVAILABILITY

The airport has limited landside area available for further aeronautical or commercial development. Expansion of the airfield is challenging due to surrounding terrain and rail line to the south of the site. To preserve the maximum flexibility for the airfield and ensure appropriate operational clearances are maintained, a building development limit line has been defined on the north-eastern side of the main runway.

There is sufficient land to the north-east of the existing runway, some of which is occupied by the grass runways which are to be decommissioned. This area is earmarked for long-term future activities, particularly aviation support and freight operations.

The portion of landside area where the existing terminal, freight and infrastructure activities occur is confined by the runway/taxiway system and Evandale Road. This is a relatively narrow strip and as a result, future development growth will be linear, running parallel to the runway. In the medium- to long-term, it is anticipated that passenger growth will eventually require additional terminal facilities, whilst also facilitating access and managing passenger walking distances. A future terminal footprint has been identified in Section 7 of this Master Plan. It is expected that future Regular Public Transport (RPT) apron growth will initially be directed to the south of the current RPT apron. There is also the potential to utilise the northern portion of the freight apron for RPT services.

Additional land is available at the southern portion of the landside area for aviation support. A small parcel of land to the north-west of the runway may be required for operational/security services in the short-term. Due to the terrain on the parcel of land and the impact of the airport Obstacle Limitation Surface (OLS), development opportunities are limited.





1.4 HISTORY

The airport site was purchased by the Home Territories Department in 1929 with the first service in 1930. The first hangar in Tasmania was constructed on-site for Tasmanian Airways Services in 1934.

During the Second World War the Airport became an elementary flying training school run by the Royal Australian Air Force (RAAF). Civil operations recommenced in 1946 and the airport was upgraded to its present configuration that included a new terminal, apron and lengthening of the runway and taxiway system in the early 1960s to handle DC9 aircraft. The runway was subsequently upgraded to B727 standard in 1982.

Launceston Airport became part of the Federal Airports Corporation (FAC) in 1988.

The privatisation of airports in Australia saw the Launceston Airport lease purchased by an Australian company – Australia Pacific Airports (Launceston) Pty Ltd (APAL) in May 1998.

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THE MASTER PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AIRPORTS ACT

1.5 STATUTORY FRAMEWORK

1.5.1 AIRPORTS ACT 1996

In preparing this Master Plan, APAL has addressed the requirements under section 71 of the *Airports Act 1996* (Airports Act) which requires the Master Plan to provide 'the airportlessee company's assessment of the future needs of civil aviation users of the airport, and other users of the airport, for services and facilities relating to the airport'.

A program was established for extensive consultation with a wide range of industry stakeholders and representatives from federal, state and local government.

Launceston Airport is situated on land largely owned by the Commonwealth Government and is

subject to Commonwealth legislation to regulate both its own business operations and those of business operators, including airlines, tenants and retailers. The Airports Act is the primary legislative instrument governing the airport's operation, planning and development. The Airports Act and associated regulations are the statutory controls for ongoing regulation of aeronautical and nonaeronautical activities on airport land.

As part of the planning framework, the Airports Act requires APAL, as lessee of the airport, to prepare a Master Plan setting out a 20-year strategic vision for the growth of airport activities and site development, and to provide to the Minister an updated Master Plan periodically. Originally this period was five years, but under changes made to the Airports Act in 2018, a number of Commonwealth-leased airports, including Launceston, must now give the Minister a draft Master Plan for the airport no later than eight years after the original plan came into force. However, this amendment does not extend the life of the existing approved Master Plan. The amendment provides for this Master Plan to be prepared under the new eight-year cycle.

Section 70(2) of the Airports Act states that the Master Plan's purpose is to:

- a) establish the strategic direction for efficient and economic development at the airport over the planning period of the plan
- b) provide for the development of additional uses of the airport site
- c) indicate to the public the intended uses of the airport site
- d) reduce potential conflicts between users of the airport site and to ensure that use of the airport site is compatible with the areas surrounding the airport



- e) ensure that all operations at the airport are undertaken in accordance with relevant environmental legislation and standards
- f) establish a framework for assessing compliance with relevant environmental legislation and standards
- g) promote the continual improvement of environmental management at the airport.

Section 71 of the Airports Act specifies the matters that must be set out in a Master Plan. Among other things, the Master Plan must provide details of future land-use plans, proposed developments and noise impacts. The Master Plan must also include an Environment Strategy and Ground Transport Plan.

This Master Plan has been prepared in accordance with the requirements of the Airports Act.

1.5.2 ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

Launceston Airport must comply with the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This legislation is particularly relevant to airport master plans and the incorporated Environment Strategy, due to its requirements for managing significant flora and fauna species.

1.5.3 STATE LEGISLATION

Launceston Airport must also comply with state environmental legislation to the extent that its activities impact surrounding Tasmanian land and waterways. The principal legislation is the *Environmental Management and Pollution Control Act 1994 (Tasmania).* This applies to receiving bodies of stormwater, waste, ground vehicle emissions and hazardous materials.

State planning laws do not apply to the airport site. However, regulations made under the Airports Act require the Master Plan, where possible, to describe proposals for land-use planning and zoning in a format consistent with that used by the state or territory in which the airport is located. Where possible, this Master Plan has considered state planning requirements and has used zones, overlays and other planning provisions derived from the Tasmanian Planning Provisions.

1.5.4 AIRPORT LEASE

Under the provisions of the Airports Act, APAL is the 'airport-lessee company' for Launceston Airport. APAL is responsible for managing the airport for 50 years to 2047, with an option to extend this lease by a further 49 years. It manages the entire airport site, including the airside, terminal and landside precincts, the road network and associated service infrastructure.

APAL is also required to develop Launceston Airport, taking into account anticipated traffic demand, to the quality standards reasonably expected of a major regional airport in Australia and consistent with good business practice.

In meeting its obligations under the lease, APAL has been responsible for a number of major developments, including a major redevelopment of the terminal building, road access network and public parking facilities; complete replacement of the airfield lighting system; construction of increased heavy freight aprons and freight handling facilities.



1.6 PREVIOUS STUDIES, STRATEGIES AND PLANS





1.6.1 LAUNCESTON AIRPORT MASTER PLAN 1990

In response to long-range traffic forecasts covering the period 1990 to 2011, the airport's previous owner (the Federal Airports Corporation) and state and local government jointly developed a long-term strategy for the airport's development and management.

The Launceston Airport Master Plan 1990 provided a broad framework for orderly airport development, road access and external landuse control to protect the 24-hour curfew-free operation of the airport. A key feature of the plan was the reservation of land for general aviation and operational support on the northern section beyond the main runway and reservation of freight to the north-western landside area.

1.6.2 LAUNCESTON AIRPORT MASTER PLAN 1999

The 1999 Master Plan reviewed the land-use zoning plans, renaming the previous general aviation and operational support zones north of the runway to Future Development Beyond Planning Horizon.

The north-western freight zone was divided to incorporate the existing Bureau of Meteorology facilities.

The Obstacle Limitation Surface (OLS) and Prescribed Airspace future layouts were introduced to help secure the protected airspace and assist in managing residential development in the approach paths off-airport.

The airport's land zoning was incorporated into the Northern Midlands Council's Planning Scheme 1995 model which adopted its format.

1.6.3 LAUNCESTON AIRPORT MASTER PLAN 2004

The 2004 Master Plan was consistent with the 1999 Master Plan and included an update of the Australian Noise Exposure Forecast (ANEF) Ultimate Practical Capacity model and passenger/movements forecast.

Zoning changes in the 2004 Master Plan included the removal of a future reserve area to the north of the runway and a revision of the freight reserve to encompass the meteorological facilities.

1.6.4 LAUNCESTON AIRPORT MASTER PI AN 2009

- The 2009 Master Plan considered and addressed the impacts of significant growth at the airport and the pressures this had placed on existing infrastructure, particularly the terminal facilities. The developments included:
- Additional gate lounges
- Expansion of ground floor level public lounges
- Additional check-in and Checked Bag Screening facilities
- Provision for a second passenger screening point
- Upgrade of the terminal infrastructure as demand required.

Airside developments included:

- Provision for future aprons and taxiways to service the growth in aircraft movements and long-term freight objectives
- A staged upgrade of the southern freight apron to extend the high strength (80,000kg) apron, and a decision to decommission the parallel grass runway.

An airfield capacity study was conducted which informed the production of an Ultimate Practical Capacity ANEF for the purpose of noise modelling.

1.6.5 LAUNCESTON AIRPORT MASTER PLAN 2015

The 2015 Master Plan's primary aim was to strengthen the airport's position as the gateway to Northern Tasmania and set out plans for accommodating the projected growth in passenger movements. Key aspects of the plan were:

- For the first time the Master Plan included an incorporated Ground Transport Plan and the Airport Environment Strategy, in accordance with changes made to the Airports Act in 2010
- Updated passenger and aircraft movement forecasts
- Various airside development proposals, including closure of the grass runway strips
- Various terminal and aviation support development proposals, including the creation of a precinct to protect the requirements of terminal expansion and consolidation of air freight services to the southern apron area
- Inclusion of an Airport Safeguarding Strategy, having regard to the National Airports Safeguarding Framework which was adopted in 2012, including an updated long-range noise forecast for the airport and, for the first time, inclusion of 'Number Above' or N-contours.

1.7 SIGNIFICANT DEVELOPMENTS SINCE THE 2015 MASTER PLAN

There have been significant developments and improvements at Launceston Airport since the 2015 Master Plan was approved. Around \$21.7 million has been invested in expanding, redeveloping and maintaining the airport facilities since the 2015 Master Plan. The following list identifies the major items:



Replacement of ageing concrete pavements on Taxiway Alpha, Taxiway Delta

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MAJOR AIRPORT OF THE YEAR 2015, 2016 AND 2017

LAUNCESTON AIRPORT RECEIVED THE FOLLOWING AWARDS SINCE 2015



1.8 PLANNING APPROACH

In preparing this Master Plan, Launceston Airport has reviewed previous plans and reassessed the location and spatial requirements for land-use and development needed to cater for the forecast growth in airport activity over the next 20 years. Long-term requirements beyond 20 years have also been reconsidered.

The triggers for each development proposal will depend on actual rates of growth in demand and commercial considerations of Launceston Airport and its customers. All major airport developments will be planned and developed in consultation with relevant stakeholders and, at a minimum, with relevant statutory requirements.

For the landside part of the airport, the regulations associated with the Airports Act require that proposals for land-use and related planning be described using state legislation planning terminology. Proposals for airport landside use have been set out in a format consistent with the Northern Midlands Interim Planning Scheme 2013.

A key focus of these reviews was to ensure that future development planning adequately accommodates forecast growth projections, safeguards the implementation of infrastructure requirements, and manages environmental and off-site impacts. The safe and efficient integration of the various airside, terminal and landside access and commercial requirements, and maintaining the airport's 24-hour curfew-free status, remain key considerations.

The planning approach also considered all on-airport interests that existed at the date the lease was granted, including easements, licences and leases. It also considered off-airport land-use issues such as local planning schemes.

These reviews were undertaken in consultation with Commonwealth and state government departments and agencies, local government, industry partners and other external stakeholders.

Launceston Airport is to establish a medium and long-term strategy for the airport site to fully realise the airport's potential as the state's northern gateway for passengers and freight.

The primary approach of master planning for

CONCEPT PLANS

1.9

This Master Plan presents concepts for developing the airport site for the next eight years and up to 20 years. Proposals for land-use and development in response to forecast growth during the period of the Master Plan are shown in Figure 1.5 and are described in more detail in this document. Note that the future growth in traffic demand levels and the changing commercial needs of Launceston Airport's operators will determine the extent and timing of particular projects and programs.

The key objective is to efficiently use and develop the site for operational purposes and associated commercial activities, this being conducted in an environmentally sustainable manner as outlined in the Launceston Airport Environment Strategy (refer to Section 11).

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1.9.1 EIGHT-YEAR MASTER PLAN CONCEPT

In the short- to medium-term various incremental airport developments and enhancements are planned within the context of the 20-year vision for Launceston Airport. This will potentially include:

- Expansion of terminal facilities to enhance passenger handling and processing capacity
- Expansion of car parking facilities
- Terminal RPT apron expansion
- Expansion of air freight and GA facilities on the southern apron
- Decommissioning of the grass runways.

1.9.2 20-YEAR MASTER PLAN CONCEPT

The medium- to long-term concept plan (refer to Figure 1.5) provides a snapshot of land-use and development in 2040, again within the context of the vision for Launceston Airport. Key features include:

- Provision for further terminal expansion
- Identification of RPT apron expansion areas
- Reservation of land on the east of the airport for aviation support and freight
- Expansion of GA facilities to the south of the freight apron
- Identification of areas available for nonaviation development
- Expansion of car parking facilities
- Improvements to ground transport access.



FIGURE 1.5 20-YEAR CONCEPT PLAN





^{1.10} **KEY DIFFERENCES** FROM THE 2015 MASTER PLAN

THE FOLLOWING LIST INDICATES THE KEY DIFFERENCES BETWEEN THE 2015 AND THE 2020 MASTER PLANS:

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The Master Plan has been developed to reflect the Airports Act amendments in 2018 which provide for an eight-year planning cycle.



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Updated passenger and aircraft movement forecasts.

Revision of the Ground Transport Plan based on current traffic data and updated demand forecasts.



Both grass runways are now to be decommissioned.



Aboriginal heritage assessment undertaken.

Airport Safeguarding Strategy expanded to better align with the National Airports Safeguarding Framework.

Updated ANEF and N contours.

Updated airspace surfaces.





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ECONOMIC AND SOCIAL IMPACTS Vara mannin



2.1 **OVERVIEW**

2.1.1 REGIONAL CONTEXT

The Northern Tasmania region comprises approximately one-third of Tasmania's land mass and is the second largest region in Tasmania by population. The area of Northern Tasmania aligns with the areas of the eight Northern Tasmanian councils: Break O'Day, Dorset, Flinders, George Town, Launceston City, West Tamar, Meander Valley and Northern Midlands. It hosts approximately 28 per cent of the state's population (143,752 persons in 2017) and produces an equivalent proportion of the state's domestic product.

In terms of value added (business productivity), Northern Tasmania's dominant industry sectors are: health care and social assistance: agriculture, forestry and fishing; financial and insurance services; manufacturing; and education and training. Its highest employing areas are: health care and social assistance; retail trade; construction; manufacturing; education and training; and agriculture, forestry and fishing.

Northern Tasmania boasts an enviable mix of assets, including a deep-water port, the largest industrial area in the state, a major regional airport, a university, a 300-bed public hospital, significant banking and financial services, a recognised tourist destination and gateway, and diverse landscapes, coastal areas and tourist products. Beyond the five mainland capital cities, this combination of assets is only held by a handful of Australian regions.

Of all the state's regions, Northern Tasmania is best placed in terms of location, proximity and infrastructure capacity to link with the rest of Australia. This is particularly advantageous given the region's proximity to south-east Australia, being the source of concentrated skilled employment, residence to two-thirds of the Australian population and regarded as the 'engine room' of the national economy.

2.1.2 THE ROLE OF REGIONAL **AIRPORTS IN A REGIONAL ECONOMY**

Airports are essential community infrastructure assets. Australia's network of airports, across major urban centres and regional areas, form an integral part of the national social and economic infrastructure and are critical to connecting communities and enhancing broader economic performance. Collectively, all airports act as a network. Each facility has a discrete but complementary role to play in servicing aviation demands and needs. They provide connectivity and social equity, and contribute to their surrounding economy.

According to Deloitte Access Economics, in 2016-17 the total value added of major regional airport 'core activities' in Australia was \$303m and these activities provided 945 full-time equivalent (FTE) jobs. Core activities comprise the central operation of an airport facility, including its runway infrastructure, terminals, and critical aviation safety and security. This core activity is a subset of the broader activity that may occur on the airport precinct which includes airline and charter operations, retail and tourism services, and landside transport and logistics. In 2016-17 the total value added of airport 'precinct activities' at major regional airports in Australia was \$1.366m and these activities provided 10,279 FTE jobs.

Airports play an enabler role for personal, commuting and tourism-related movement. Regional airports such as Launceston Airport also provide their catchment areas with access to major cities and other major regional centres for roles as diverse as access to community services, highertier health services and the facilitation of mail and time-sensitive freight deliveries. While air freight represents less than one per cent of Australia's trade by volume, it is generally comprised of highvalue and time-sensitive exports and imports that make up over 20 per cent of trade by value (over \$100 billion). The majority of air freight is carried in the cargo hold of passenger aircraft, supported by some dedicated freighters.

DEEP-WATER PORT NORTH SOUTH WEST SOUTH

The Northern Tasmanian region hosts approximately 28% of the state's population.

A MAJOR REGIONAL AIRPORT

A UNIVERSITY CITY

LARGEST **INDUSTRIAL AREA** IN STATE



LAUNCESTON AIRPORT IS A MAJOR ECONOMIC GATEWAY

FOR TASMANIA

Regional airports like Launceston Airport play a key role in supporting tourism activity, which is an important contributor to the Tasmanian economy. They also enable commuting of higher paid professionals through fly-in fly-out (FIFO) commuter arrangements which have been increasingly popular over recent years, particularly as the resources boom has necessitated the 'import' of workers from urban centres.

Regional airports also facilitate border protection services where quarantine restrictions apply for passengers entering key agricultural areas. They provide for the safe disposal of offending materials and the quarantine services to render them safe to bring into the region.

2.2 ECONOMIC IMPACTS

Launceston Airport is a major economic gateway for Northern Tasmania and for the State of Tasmania.

Launceston Airport is the second busiest airport in Tasmania for passengers and provides the main aviation hub for Northern Tasmania. Located close to the Launceston CBD, the airport is a key component of Tasmania's infrastructure, providing access to national and international markets for both tourism and business.

2.2.1 EMPLOYMENT

Launceston Airport is a key driver in securing and sustaining employment, development and other services. It provides significant direct and indirect employment associated with a range of aeronautical and related businesses, and the employment benefits provided by the airport represent a significant stimulation to the Tasmanian economy.

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Launceston Airport and its operators and tenants on the airport site directly employ 383 people. These employees are engaged in a range of activities including airport management, Airservices, airlines, retail, car rentals, service contractors, security, general aviation, quarantine and a number of non-aviation tenants in the



terminal building. Overall employment is expected to grow to approximately 452 over the next eight years and to approximately 559 over the next 20 years, primarily in the airline, retail and service contractor sectors.

The economic impacts of the current and forecast employment at Launceston Airport was calculated using an input-output model which is derived from the local economy microsimulation model developed by the National Institute of Economic and Industry Research.

The current employment of 383 people at Launceston Airport is estimated to make a direct contribution of approximately \$81m in output to the Northern Tasmania region economy. From this direct contribution to the regional economy it is estimated there are flow-on effects into other related intermediate industries, creating a further increase of \$24m in output.

There is an additional contribution to the Northern Tasmania region economy through consumption effects as correspondingly more wages and salaries are spent in the local economy. It is estimated that this results in a further increase in output of \$9m. The combination of all direct, industrial and consumption effects from the 383 jobs results in a total estimated rise in output of \$114m in the Northern Tasmania region economy, and \$188m to the wider Australian economy, per year.

From the direct employment of 383 people at the airport currently, it is estimated that the flow-on effects into other related intermediate industries creates or supports an additional 120 jobs.

The addition of a further 69 employees at the airport over the next eight years, to a total of 452 employees, is estimated to result in a rise in total output of \$21m in the Northern Tasmania region and \$34m in the wider Australian economy. From this direct expansion in the economy it is anticipated that there would be flow-on effects into other related intermediate industries, creating an additional 22 jobs. The combination of all direct, industrial and consumption effects would result in a total estimated increase of 102 jobs located in the Northern Tasmania region. The combined effect of economic multipliers in the Northern Tasmania region and the wider Australian economy is estimated to be an addition of 151 jobs.

The addition of a further 176 employees at the airport over the next 20 years, to a total of 559 employees, is estimated to result in a rise in total output of \$53m in the Northern Tasmania region and \$87m in the wider Australian economy. From this direct expansion in the economy it is anticipated that there would be flow-on effects into other related intermediate industries, creating an estimated additional 55 jobs. The combination of all direct, industrial and consumption effects would result in a total estimated increase of 259 jobs located in the Northern Tasmania region.

The combined effect of economic multipliers in the Northern Tasmania region and the wider Australian economy is estimated to be an addition of 385 jobs.

2.2.2 CAPITAL EXPENDITURE

Launceston Airport has a forecast \$60 million capital investment program over the next 10 years. The airport's preference to use local contractors and suppliers where possible when carrying out works ensures the maximum economic benefit to the state economy flows from such infrastructure and maintenance projects.

2.2.3 TOURISM

The economic value of Launceston Airport can also be measured by way of catalytic impact - that is, trade or tourism spend facilitated by the airport. This impact is significant given the airport's role as a major gateway for tourism, passenger and freight movements. In particular, Tasmania needs a strong tourism industry and Launceston Airport is a key contributor in maintaining and growing this industry which is vital to both the regional and state economies.

Tourism Tasmania's quarterly *Tourism Snapshot* contains a summary of the latest Tasmanian Visitor Survey (TVS) results, along with additional data from Tourism Research Australia.

For the year ending March 2019, there were a total of 1.32m visitors to Tasmania, up three per cent from 1.28 million visitors for the previous year. These visitors spent \$2.49 billion, up five per cent from the previous year.

A substantial proportion of these visitors can be attributed to Launceston Airport as one of Tasmania's two major airports. For the year ending March 2019, 89 per cent of all visitors to Tasmania travelled by scheduled air services. The total number of visitors travelling by scheduled air services was up three per cent and sea services was showing no significant change at one per cent from the previous year.

YEAR ENDING MARCH 2019 THERE WAS A TOTAL OF





1.32 MILLION VISITORS TO TASMANIA



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In the year ending March 2019 approximately 370,000 visitors travelled by air through Launceston Airport.

In the Northern Tasmania region, surrounding Launceston Airport, approximately 4,500 people, or around seven per cent of the workforce, are directly employed in tourism.

2.2.4 OTHER IMPACTS

The economic value of airports can also be measured by other types of impacts including indirect (activity fostered in the supply chain of industries servicing airport operations) and induced impacts (consumer spending of wage earners associated with an airport and its supply chain industries).

The impact on value added of the 383 jobs currently at the airport is estimated to be in the order of \$44m in the Northern Tasmania region and \$76m in the wider Australian economy. The addition of 69 jobs over the next eight years would result in an estimated addition in value added of \$8m in the Northern Tasmania region and \$14m in the wider Australian economy.

The economic impact of airports can also be calculated as a 'productivity dividend' – that is, the role of the airport in improving the connectivity of the region to the national and world economy, and the sharing of ideas and knowledge that this connectivity facilitates. The degree of connectivity is reflected by the range, frequency of service and economic importance of destinations, and the number of onward connections available through the aviation network.

Launceston Airport has a relatively high productivity dividend for Tasmania given its role as an integral part of the principal air route network for southeastern Australia.

The airport also provides a range of facilities and office accommodation to ancillary businesses which, although not directly related to the aviation sector, are attracted to the benefits of operating in an environment which has excellent connectivity and logistics links.

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Large, flat, open sites are available adjacent to the airport with direct access to the Hobart-Launceston Highway and close to rail main lines offering significant development potential as the state's major air freight gateway and storage-handling facility. Further investment in infrastructure in key locations (e.g. the Translink Estate) and into increasing critical capacity will have benefits across the whole region and strengthen the whole Tasmanian economy.

The role of Launceston Airport in the regional and state economy has grown in significance and considerable potential exists for further development of this role as the principal tourist, passenger and freight exit/entry point for the state.

2.3 SOCIAL IMPACTS

Launceston Airport assists in maintaining the region's liveability and is important for productivity, profitability and investment in the region. Transport is the lifeline of the region, as it is for the whole of Tasmania.

Launceston Airport represents social infrastructure of regional and state significance. It adds to the physical and social capital that makes the region an attractive place to live, work and visit.

Invariably the airport's primary social value is that of access. Key access drivers include tourism, freight, business travel, events and conferences, education (student arrivals, family support visits and future tourism), sporting and cultural events, and visiting friends and relatives. The societal value of access in a regional area such as Northern Tasmania is many and varied; it enhances the region's liveability in that affordable and easily accessible air transport is available to quickly and efficiently make journeys from Tasmania; it broadens residents' leisure and cultural experience; it affords residents the opportunity to live a regional lifestyle whilst remaining in contact with family and friends outside Tasmania; and it facilitates regular two-way travel for residents to visit interstate and for friends/family to visit Tasmania.

The presence of a well-connected and accessible major airport in the region is also a significant factor in attracting population growth through relocation from the mainland.

APAL's engagement with the community also benefits a range of local charitable causes and cultural activities including sponsorship of the Glover Prize, one of Australia's premier landscape art awards, and of a number of festivals and events attracting significant interstate visitation.

2.4 CONCLUSION

Launceston Airport is a significant economic and social contributor to both the northern region and the State of Tasmania as a whole. While the inputs from direct employment and capital expenditure are substantial in a local context, the wider contribution in the facilitation of tourism, trade and connection of the community to mainland Australia is vital to the social and economic health and development of the region and Tasmania as a whole. Launceston Airport recognises that maintaining airport operations and facilitation of increased services to match demand is important. To achieve this Launceston Airport will work with relevant business. trade and tourism stakeholders to maximise opportunities for the State and the region.

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3.1 OVERVIEW

This Master Plan establishes the short, medium and long-term planning concepts for Launceston Airport to fully realise its potential as a domestic gateway and hub for passengers and freight, and to safeguard its future operations.

One of APAL's overarching objectives is to efficiently and sustainably use and develop the airport site. This involves balancing the need to maintain and expand aviation facilities safely and effectively whilst achieving an acceptable commercial return to shareholders. It is also important that future plans continue to consider the interests of stakeholders and the community.

3.2 PREVIOUS PLANNING AND CONSULTATION

Early planning and public consultation commenced with the 1990 Master Plan under the FAC. This required extensive consultation with airlines, state and local government as well as a full public consultation process.

Further master plans were undertaken as part of the requirements of the Airports Act. These included the 1999, 2004, 2009 and 2015 master plans. The consultation was conducted in accordance with the provisions of the Airports Act applicable at the time.

Over the period of the 2015 Master Plan, APAL has:

 Liaised with Commonwealth Government departments and agencies including the Department of Infrastructure, Transport, Regional Development and Communications (DITRDC); Airservices; and the Civil Aviation Safety Authority

- Liaised with state government including the Department of State Growth; the Tasmanian Planning Commission; Tourism Tasmania and the Office of the Coordinator General
- Liaised with local government including the Northern Midlands, Launceston City, West Tamar, Meander Valley, Dorset and Flinders councils
- Consulted with airlines on developing aviation infrastructure
- Liaised with the Launceston Airport Community Aviation Consultation Group
- Engaged with Chamber of Commerce and other business and service associations.

3.3 REVIEWS AND STUDIES

The first stage in the preparation of this Master Plan involved a number of planning reviews and studies to inform the development of the Master Plan concepts.

The Master Plan concepts were developed based on a number of drivers, including passenger, aircraft movement and freight forecasts, and specialist studies examining the airfield, terminals and landside capacity for ongoing growth and development. These studies also informed the timing of the developments and capacity enhancement activities.

Specific planning reviews and studies that informed the Master Plan included a terminal study, aircraft noise forecasts, traffic impact assessment, grass runway study, ecological assessment, and Aboriginal and historic heritage studies.

3.4 DEVELOPMENT OF FUTURE PLANS, STRATEGIES AND CONCEPTS

A series of future land-use and facility development plans and management strategies were developed, based on the outcomes of the above reviews and studies. Details of these plans and strategies are provided in sections 5 to 12 of this Master Plan.

When developing future plans and strategies, a key focus was to ensure that planning for the airport's future development adequately accommodated forecast growth projections and appropriately safeguarded the future implementation of related infrastructure requirements, while ensuring that environmental and off-site impacts were minimised where possible.

The key concepts and requirements arising from the plans and strategies were then encapsulated in the concept plan previously outlined in Section 1 and Figure 1.5.

3.5 COMMUNITY AND STAKEHOLDER CONSULTATION

During the preparation of this Master Plan, Launceston Airport established a consultation program with a wide range of government, industry and community representatives. This consultation was critical in developing the various Master Plan elements.

The consultation process included initial correspondence to key stakeholders, state and local governments, airlines, industry, neighbours and tourist groups advising that the 2015 Master Plan was being reviewed and requesting input into the review process. Launceston Airport also conducted a number of surveys of travellers and stakeholders to help inform the planning process.

Launceston Airport held meetings and discussions with the following:

- Airlines
- Airport Building Controller
- Airport Environment Officer
- Airservices
- Civil Aviation Safety Authority
- Commonwealth Government officers
- Community Aviation Consultation Group
- General community
- Industry groups
- Local government
- State government.

3.6 PUBLIC EXHIBITION

In accordance with Section 79 of the Airports Act, Launceston Airport advised, in writing, the following persons of the Preliminary Draft Master Plan:

- a) the Minister, of the state in which the airport is situated, with responsibility for town planning or use of land
- b) the authority of that state with responsibility for town planning or use of land
- c) each local government body with responsibility for an area surrounding the airport.

The Preliminary Draft Master Plan was publicly exhibited for 60 business days as required under the Airports Act. Newspaper notices were published inviting members of the public to make written comments about the proposed Master Plan. СЛ Н The Preliminary Draft Master Plan was available for viewing from 3 December 2019 until 6 March 2020 at the following locations:

- The Launceston Airport website www.launcestonairport.com.au
- In person at Launceston Airport, 201 Evandale Road, Western Junction Tasmania
- The Northern Midlands Council and Launceston City Council offices.

Comments were required to be submitted before the end of the public comment period which ended on Friday 6 March 2020.

Comments could be submitted to Launceston Airport by:

MAIL

Planning & Development Manager PO Box 1220 Launceston, Tasmania 7250

2020masterplan@lst.com.au

3.7 **COMMENTS AND SUBMISSIONS**

Launceston Airport considered all comments received during the public exhibition period. After the public exhibition period, Launceston Airport reviewed and assessed all comments and, if appropriate, changes were made to the Preliminary Draft Master Plan to address those comments.

Comments posted on social media such as Facebook or Twitter were not be recorded as formal submissions.

3.8 SUBMISSION TO MINISTER

After the comments were reviewed, the Draft Master Plan was submitted to the Commonwealth Minister for Infrastructure, Transport and Regional Development for approval.

In accordance with the requirements of the Airports Act, the submission to the Minister was accompanied by the following documents:

- Copies of comments received from members of the public
- A written certificate signed on behalf of the airport containing:
 - A list of names of the people or organisations that provided written comments on the Preliminary Draft Master Plan
 - A summary of the comments received
 - Evidence that Launceston Airport has given due to regard to those comments.

3.9 PUBLICATION OF FINAL MASTER PLAN

This Master Plan was approved by the Minister for Infrastructure, Transport and Regional Development on 22 July 2020.

In accordance with Section 86 of the Airports Act, Launceston Airport will undertake the following notifications regarding the approved Master Plan:

- Publish newspaper notices advising that the Master Plan has been approved
- Make copies of the approved Master Plan available for inspection in person at Launceston Airport
- Make a copy of the approved Master Plan available on the Launceston Airport website.

The final Master Plan will also be disseminated to sub-lessees, licensees, other airport users and local communities through a range of stakeholder engagement mechanisms including the Launceston Airport website and Community Aviation Consultation Group.



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PLANNING CONTEXT

4.1 OVERVIEW

This section outlines the planning context for the Master Plan. The planning context comprises a number of aspects that influence and guide future use and development at Launceston Airport. This context also forms the basis of the Master Plan's strategic directions and concepts. They are:

- The policy framework
- Launceston Airport's vision and development objectives
- Global, national and local development drivers
- Growth forecasts
- Planning criteria and standards.

In implementing the Master Plan, relevant policies at Commonwealth, state and local levels will be taken into consideration.



4.2 POLICY FRAMEWORK

4.2.1 NATIONAL AIRPORTS SAFEGUARDING FRAMEWORK

The National Airports Safeguarding Framework (NASF) is a national land-use planning framework that aims to:

- improve community amenity by minimising aircraft noise-sensitive developments near airports including through the use of additional noise metrics and improved noise-disclosure mechanisms
- improve safety outcomes by ensuring aviation safety requirements are recognised in land-use planning decisions through guidelines being adopted by jurisdictions on various safetyrelated issues.

The National Airport Safeguarding Advisory Group (NASAG), comprising high-level Commonwealth, state, territory and local government transport and planning officials, was formed to develop a National Airports Safeguarding Framework.

In February-March 2012, industry, local government and other interested stakeholders were invited to comment on a draft version of the NASF, which comprised several guidelines relating to particular airport safeguarding topics. Commonwealth, state and territory ministers subsequently agreed to the NASF principles and six guidelines at the Standing Council on Transport and Infrastructure meeting on 18 May 2012. Since then, three additional NASF guidelines have been adopted. Refer to Section 12.2 for further details.

The NASF, when fully implemented into the state planning system, will help ensure that existing and future airport operations and their economic viability are not constrained by incompatible development. It is the responsibility of each state jurisdiction to implement the NASF in their respective planning systems, which is discussed further in Section 12 of this Master Plan.



LAUNCESTON AIRPORT MASTER PLAN 2020





4.2.2 NORTHERN MIDLANDS INTERIM PLANNING SCHEME 2013

The preparation of this Master Plan has been sensitive to the State of Tasmania planning policies and planning provisions, in particular the Northern Midlands Interim Planning Scheme 2013.

The Northern Midlands Interim Planning Scheme (the Planning Scheme) recognises the importance of Launceston Airport. In clause 2.2.2.7 of the Planning Scheme, a stated objective is to:

Protect Launceston Airport from encroachment by incompatible uses or developments that compromise its operations in recognition of its importance and contribution to the Launceston Region and State economy.

Furthermore, in clause 3.2.1 the Planning Scheme states:

NMC hosts the preferred heavy road transport link (Illawarra Rd) from the North South corridor to the North West coast ports. Launceston Airport is the most central to destinations in the state, and is located near the hub of the road transport system.

All these transport factors are also significant to NMC's relationship to tourist movement in Tasmania.

The Planning Scheme contains a code in Part E relating to airport safeguarding: E12 Airports Impact Management Code. The purpose of this code is to:

a) ensure that use or development within identified areas surrounding airports does not unduly restrict the ongoing security, development and use of airport infrastructure

b) provide for management of the land-use implications of those areas relevant to use and development under the scheme.

This code applies to use or development of land:

a) within Australian noise exposure forecast contours on the maps

b) within prescribed air space.

The code further stipulates land-use standards relating to noise impacts, and development standards relating to obstacles to aircraft.

The Planning Scheme also details, in Section F1.4, height requirements of buildings, lighting requirements, and environmental quality protection to ensure the safety of Launceston Airport.

Under the scheme, the airport is designated a Utilities Zone (although as Commonwealth land this zone does not technically apply). The area immediately surrounding the airport is largely zoned Rural Resource, except to the northwest, west and south where there are a number of land parcels zoned General Industrial

which comprise the Translink Industrial Precinct.

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The strategies set out for each zone under the Northern Midlands Interim Planning Scheme address a range of matters including land use. impact on adjacent zones, landscaping, access and parking, and design, and these are considered by Launceston Airport, even though they do not strictly apply to the airport site given that it is Commonwealth land.



4.2.3 TASMANIAN PLANNING REFORM

Under the Tasmanian Government's planning reform program, the Northern Midlands Interim Planning Scheme will soon be replaced with a new planning scheme, the Tasmanian Planning Scheme (TPS).

The TPS comprises two parts:

- i. the State Planning Provisions (SPPs) which includes the identification and purpose; the administrative requirements and processes, including exemptions from the planning scheme and general provisions that apply to all use and development irrespective of the zone; the zones with standard use and development provisions; and the codes with standard provisions
- ii. the Local Provisions Schedules (LPSs) that apply to each municipal area and include zone and overlay maps; local area objectives; code lists; particular purpose zones; specific area plans; and any site-specific qualifications.

The SPPs and the relevant LPSs will together form all of the planning provisions that will apply to a municipal area (the local application of the TPS). These will be administered by planning authorities. Local councils are the planning authorities responsible for implementing the TPS through the preparation of LPSs.

The TPS includes a Safeguarding of Airports Code (C16.0) which will apply when the TPS comes into effect in the Northern Midlands municipality. The purpose of this code is:

C16.1.1 To safeguard the operation of airports from incompatible use or development.

C16.1.2 To provide for use and development that is compatible with the operation of airports in accordance with the appropriate future airport noise exposure patterns and with safe air navigation for aircraft approaching and departing an airport.

Like the current Airports Impact Management Code, the Safeguarding of Airports Code applies to:

- (a) a sensitive use within an airport noise exposure area
- (b) development within an airport obstacle limitation area.

The code further stipulates land-use and subdivision standards for sensitive uses in airport noise exposure areas and development standards for buildings and works in airport obstacle limitation areas.

There is no reference to NASF in the Safeguarding of Airports Code. This is discussed further in Section 12 of the Master Plan.

4.2.4 NORTHERN REGIONAL FUTURES PLAN

In 2015 the Northern Tasmania Development Corporation (NTDC) published the Northern Regional Futures report, which identified three main industries as pillars of the regional economy. These industries were:

- Food and agribusiness
- Tourism
- Competitive manufacturing.

The report listed four main foundations of regional prosperity, namely:

- Human capital
- Regional dynamics
- Natural resources
- Infrastructure.

The report emphasised the importance of local knowledge and decisions in building on these foundations, and set three main targets for 2025-26:

- A 50 per cent increase in gross regional product, implying a growth rate of 5.2 per cent a year
- An increase in average take-home pay of \$100 a week, implying a growth rate of 1.4 per cent a year
- An increase in employment of 8,000 jobs, implying an increase of 1.5 per cent a year.

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4.2.5 LAUNCESTON CITY DEAL

Signed in April 2017 by the Commonwealth Government, the Tasmanian Government and the City of Launceston, the Launceston City Deal is a five-year plan (until 2022) to position Launceston as one of Australia's most liveable and innovative regional cities.

The three levels of government will work with local partners to achieve this shared vision for Launceston.

The collaborative five-year plan will maximise Launceston's potential by focusing on:

- Jobs and skills growth
- Business, industry and population growth
- A vibrant, liveable city

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- Innovation and industry engagement
- A healthy Tamar Estuary.

4.2.6 GREATER LAUNCESTON PLAN

The Greater Launceston Plan (GLP) is a community vision and evidence-based framework for the sustainable development of Launceston and its surrounds over the next 20 years and beyond.

The GLP embraces the Launceston municipality together with the municipalities of George Town, Meander Valley, Northern Midlands and West Tamar.

The GLP is directed to achieve five principal outcomes for the participating councils and broader communities they represent:

- Provide a unified vision and consistent policy framework to support prosperity and sustainable development for existing and future communities in the greater Launceston area
- Provide an overarching metropolitan regional framework to coordinate planning and development in the municipalities that together make up the greater Launceston area

- Provide a regional view of development priorities within the greater Launceston area
- Identify key city projects to be undertaken by the participating councils which will act as a focus for new investment and sustainable development opportunities in the greater Launceston area
- Facilitate a consistent approach to the implementation of planning and development policy and initiatives within the greater Launceston area.

Based on community input, the GLP provides a long-term strategy for sustainable land-use planning and management to inform a coordinated approach for municipal planning and investment in the greater Launceston area built on:

- A unifying greater Launceston vision
- A clear statement of strategic principles and directions that reflect National Urban Policy and best practice in regional urban planning
- The dynamics and needs of the communities that comprise the greater Launceston area
- An understanding of the land and water ecology and the conservation and heritage values that provide the environmental and cultural context for the strategy
- An understanding of the economic resources, competitive advantages and opportunities of greater Launceston
- The long-term transport needs of the region within a state and national context.

The GLP recognises Launceston Airport as an important strategic asset and gateway for the region, which needs to be recognised and protected. In this regard the plan states:

Launceston Airport and the Translink industrial precinct are located on Evandale Road, Western Junction in Northern Midlands between the Midland Highway and Leighlands Road. Translink is located north of the airport predominately on the western side of Evandale Road. The precinct is ideally positioned at the intersection of the rail network, state highway network and the airport. Launceston Airport and the Translink precinct play a significant gateway role for tourism and freight movements in the northern region. Both are forecast to grow.

Translink and the airport play a crucial freight role for the northern region. The GLP sees both precincts as interconnected and proposes an integrated planning framework to provide a development strategy for the Launceston Gateway Precinct.

Section 5 of this Master Plan details the linkages between the local planning scheme and the airport land-use plans and describes the manner in which a consistent land-use planning approach is achieved.





PLANNING CONTEXT

TARGETS FOR THE ECONOMY OF NORTHERN TASMANIA:

50% INCREASE IN GROSS REGIONAL PRODUCT

BLOOD ADDITIONAL JOBS

A WEEK INCREASE IN AVERAGE TAKE-HOME PAY

4.2.7 KEY DIRECTIONS FOR NORTHERN TASMANIA

The report Key Directions for Northern Tasmania (June 2018) was prepared for the NTDC by the National Institute of Economic and Industry Research (NIEIR).

The report comprises four parts:

- Part A: The Northern Tasmanian economy now and in the recent past
- Part B: How the Northern Tasmanian economy can meet its development targets
- Part C: The degree of integration of LGAs within the Northern Tasmanian economy with Launceston
- Part D: The economic outlook for the world and Australian economies.

The report highlights NTDC's three targets for the economy of Northern Tasmania:

- A 50 per cent increase in gross regional product
- 8,000 additional jobs
- An increase of \$100 a week in average takehome pay.

The primary target is the increase in gross regional product. Like all other regional economies, Northern Tasmania depends on trade - trade with other Australian regions and trade with the rest of the world. Over the past two decades its trade has become imbalanced and it now imports considerably more goods and services from the rest of Australia and from the rest of the world than it can pay for from its export earnings.

The report also highlights that a key issue to be addressed is the ageing of the population. Without a significant increase in net immigration, the working age population will contract significantly. The report states that NTDC is considering three major interventions in pursuit of its targets. These comprise:

- The Launceston City Deal, with its centrepiece the new University of Tasmania campus at Inveresk
- A strategy to attract young and skilled migrants from the rest of Australia and probably also from overseas
- A strategy to augment private and public nondwelling investment.

4.2.8 REGIONAL ECONOMIC DEVELOPMENT PLAN

The NTDC has been appointed as the lead agency to develop and be the custodian of a Regional Economic Development Plan (the Plan) as outlined in the City Deal of April 2017, with completion due in 2019.

The Plan will update and therefore become a natural revision of the 2015 Northern Regional Futures Plan. It will also consider regional value chains to increase the tradable sectors, investigate the potential of developing industry clusters, encourage the development of human capital development, productivity measures, and entrepreneurial and innovation capability.

The Plan will recognise and build on the competitive advantages of the region's economic base and specifically our growth sectors: food and agribusiness, tourism, competitive manufacturing, health, education, and entrepreneurship/innovation.

The development of the Plan will align with the City Deal vision and objectives of jobs and skills growth; business, industry and population growth; a vibrant liveable city; innovations; and industry engagement.

4.2.9 CITY OF LAUNCESTON SUSTAINABILITY STRATEGY

This City of Launceston Sustainability Strategy outlines the City of Launceston's approach to creating a more sustainable city, for now, and for the future.

The strategy consists of the three sections:

- A position statement for climate change and sustainability
- A direction forward outlines how the City of Launceston is setting about curating ideas and implementing actions
- The implementation action plan a live document, to be updated on a rolling basis, which collates input and directs key actions to be implemented.

The position statement includes the following statement:

The City of Launceston aspires to greater sustainability, acknowledging the reality of our changing climate and other forms of environmental degradation as urgent matters to be addressed. Council commits to seeking positive solutions for climate change mitigation and adaptation under the implementation action plan, to work towards improved community resilience and natural capital, and to create a more sustainable future for our people and our environment.

Having made a commitment to a more sustainable Launceston, Council is building on its investment in organisational energy efficiency and solar power, by broadening its approach to sustainability. The goal is to achieve the aspirations outlined in Council's position statement:

- Seek positive solutions for climate change mitigation and adaption
- Work towards greater community resilience in the face of local environmental threats
- Create a more sustainable future for our people and our environment.

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4.3 **VISION AND** DEVELOPMENT **OBJECTIVES**

4.3.1 MASTER PLAN VISION

Tostrengthen Jaunceston Airport's position as the tourism gateway to Tasmania through continuous growth and development in line with increasing passenger and freight demand while maintaining economic and social benefits for Northern Tasmania.

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4.3.2 **DEVELOPMENT OBJECTIVES**

Under Section 71 (2)(a) of the Airports Act, APAL is required to outline its development objectives for Launceston Airport, which are:

Growth



stakeholders.



Economic Benefit

Deliver economic benefits to shareholders, the local community and Tasmania as a whole, through sustainable long-term development and investment.



Connectivity

Enhance the airport's role as the northern gateway to Tasmania by facilitating the needs of airlines and increasing connectivity and flexibility for the community.



Standards and Guidelines

Ensure development of the airport and surrounding land meets appropriate quality, planning and environmental standards, safeguarding guidelines and lease requirements to minimise adverse effects and enhance airport infrastructure.



Safety, Security, Efficiency and the Environment

Provide a safe, secure and efficient operating environment for the flow of passengers and freight through the airport while maintaining sustainable environmental practices.

Deliver timely and cost-efficient infrastructure to enhance the operating environment for airlines, businesses, passengers and staff, and maximise growth potential for all

0-

4.4 DEVELOPMENT DRIVERS

Launceston Airport's development is underpinned by the current and forecast number of passenger trips, aircraft movements and air freight volumes.

These aviation traffic measures are driven by a range of global, national and local drivers.

The aviation traffic forecasts prepared for this Master Plan are based on econometric modelling techniques that analyse the relationship between multiple development drivers and aviation traffic measures. Scenarios are built around different assumptions relating to the passenger traffic drivers, however, the following overarching drivers were considered:

Australian Economy

- Strong macroeconomic conditions supporting demand for travel but housing downturn is an emerging risk to consumer spending
- Strong labour market conditions and increased immigration have supported demand.

Tasmanian Economy

- Strong growth in construction work spending and equipment spending when compared against decade average
- Significant investment planned in the northern region to drive economic activity and growth
- Tourism has been a key driver of Tasmania's strong economic growth in recent years
- Growth in tourist numbers remains solid, but has slowed following a period of strong increases.

Tasmanian Tourism

• Several strategies in place to keep tourism at the forefront of the state's economic growth, underpinned by significant capital investment in Northern Tasmania

- International visitor growth projected to outpace domestic growth over the next decade
- Recent trends in international visitation to Tasmania are more than twice the growth seen at the national level.

Strategy

- T-21: a plan for keeping tourism at the forefront of the state's economic growth
- Access 2020 Strategy: a specific plan for growing Tasmania's air and sea access capacity, supporting T-21 vision.

Interstate Transport

- Hobart Airport is undergoing expansion
- Spirit of Tasmania is expected to add significant new capacity by FY22.

Airlines

- Domestic carriers have delivered strong results largely through yield management strategies and constrained fleets
- Majority of Tasmanian passenger growth has been into Hobart since 2014
- Fare growth into Launceston Airport suggests there is underlying demand not being met.

Global Environment

• Global economic growth remains stable at around 3.3 per cent in 2019.

China's Economy

 China growth slowing but still in line with government forecasts and above most other major economies.

Climate Change

Climate change and societal sustainability choices may favour Tasmania in the future.

4.5 GROWTH FORECASTS

4.5.1 HISTORICAL AIR TRAFFIC PERFORMANCE

The planning for aviation-related facilities (runways, terminals and transport linkages) in the Master Plan is based on a range of factors, including forecast aviation traffic growth.

During the period from 1997/98 to 2017/18 passenger numbers through Launceston Airport increased from just over 544,000 to 1.36 million (at a compound annual growth rate of 4.7 per cent).

A number of significant airline/capacity developments have influenced the past periods of growth and decline which can be attributed to:

- The period from 1997 through to 2002 represented a period of tight capacity and the collapse of Ansett in 2001
- The introduction of low-cost carrier (LCC) capacity into Launceston with Virgin Australia in 2001 was followed by the addition of further LCC capacity with the introduction of Jetstar services in 2004. Tiger Airways also operated between November 2007 and August 2010

- Qantas introduced jet services in May 2004, replacing QantasLink, but this position was reversed from August 2006
- Over the last three years Launceston Airport traffic has grown at approximately 1.3 per cent. This result has been impacted by a number of factors, including low domestic seat capacity growth, more direct flights to Hobart Airport and additional sailings from the Spirit of Tasmania ships from 2015.

During the period from 2007/08 to 2017/18 aircraft movements at Launceston Airport increased from approximately 17,000 movements to nearly 20,000 movements. This excludes circuit training 'touch-and-go' operations. Approximately 70% of the movements at Launceston Airport are Regular Public Transport (RPT) operations with the balance being general aviation, helicopter or military aircraft movements.



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4.5.2 PASSENGER MOVEMENT FORECAST

Forecasts for total passenger movements are based on econometric modelling of Launceston Airport's business.

The forecasts indicate that domestic passenger growth will be moderate over the next 20 years. The number of passenger movements is expected to increase to 1.9 million in 2028 and 2.5 million in 2040.

Passenger numbers are forecast to grow by 2.8 per cent per annum (2018-40) versus actual growth of 2.2 per cent for 2008-18.

In addition to the broader drivers outlined earlier in section 4.4, some more specific factors and assumptions behind the passenger forecast are:

- Weak underlying demand on MEL-LST route and lack of capacity on SYD-LST route
- Growth of HBA and SPIRIT (two new SPIRIT ships enter service in 2022, a 40 per cent capacity increase)
- Hotel and accommodation constraints will be reduced from FY19
- Airline fleet constraints ease from 2022 (Virgin) and 2021 (Jetstar)
- Airport runway constraints will be removed in 2020 (Brisbane), 2025 (Melbourne) and 2026 (Western Sydney)
- The anticipated re-entry of Tiger on LST routes in the next five years
- Domestic visitors to Tasmania are the key traffic segment:
 - Victoria remains the largest source of visitors but its growth is modest
 - New South Wales and Queensland are smaller sources of traffic but are growing fastest
 - Other markets will grow rapidly as direct air connections are created
- UTAS Inveresk Campus student places will grow from 2022 with associated accommodation.

Total passenger movements forecast is shown graphically in Graph 4.1.

Note: At the time of publication COVID-19 was having a significant impact on passenger movements at Launceston Airport. Whilst this will have a short-term impact on passenger movements at the airport, the medium- to long-term effect is unclear at this stage. In the past, when there have been major global events impacting on aviation, passenger movements have generally returned to normal within a relatively short period of time. Nevertheless, it is possible that APAL's long-term forecast (2.5 million passengers by 2040) will be affected and it may look more like the low forecast shown in Graph 4.1. APAL will continue to monitor developments in this regard and will adjust its planning according to any updated forecasts.

4.5.3

AIRCRAFT MOVEMENT FORECAST

The primary driver of aircraft movements is passenger demand. Assumptions regarding frequency and aircraft size lead to an assumed number of passengers per movement. The assumption is that the average numbers of passengers per movement will increase. This could be achieved by a combination of increasing load factors and the utilisation of larger aircraft types where currently smaller turbo propeller aircraft are used. As a result, the growth in aircraft movements serving the passenger market is slower than that of passenger traffic.

The number of aircraft movements at Launceston Airport is expected to increase to approximately 23,000 in 2028 and just over 26,000 in 2040. This excludes circuit training 'touch-and-go' operations.

Aircraft movements are forecast to grow by 1.6 per cent per annum (2018-40) versus actual growth of 1.2 per cent for 2008-18. The total aircraft movements forecast is shown graphically in Graph 4.2.





FINANCIAL YEAR

GRAPH 4.1 ANNUAL PASSENGER MOVEMENTS FORECAST

TOTAL RPT

REGIONAL & NON-RPT


4.5.4 FREIGHT

The numbers of freighter movements are assumed to grow modestly over the forecast period in line with growth in population and the local economy.

It should be noted that domestic freight data is held by cargo terminal operators and is not available publicly or to Launceston Airport and therefore accurate details of current freight volumes and forecasts of future volumes are difficult to produce. Projections have relied on trend analyses and benchmarking against other airports.

Air freight through Launceston Airport is carried as belly freight on RPT aircraft and by some dedicated freight aircraft. It is estimated that approximately 0.5 tonnes of domestic belly cargo is carried on each domestic RPT aircraft on average, based on benchmarking against other airports.

There are currently approximately three dedicated freighter movements per day on average at Launceston Airport, which generally occur at night. The main freight operators are Qantas and Virgin Australia, with Qantas freighters accounting for approximately 80 per cent of the movements. Three aircraft types are used, the Boeing 737-300/400F and the British Aerospace Bae-146, which carry 10-12 tonnes of freight per movement.

In 2018 it is estimated that approximately 19,000 tonnes of freight passed through Launceston Airport as either belly freight on RPT aircraft or in dedicated freight aircraft. Assuming modest growth, domestic air cargo tonnage is expected to grow to 25,800 tonnes by 2040, equivalent to 1.4 per cent compound annual growth rate (CAGR). It is projected that 35-38 per cent of the cargo will be carried on passenger aircraft as belly cargo going forward.

There are currently three freighter stands available at the airport (all Code C). Based on current experience and the above projections, it is not considered there will be a need for any additional freighter stands in the foreseeable future based on the modest growth forecast. APAL will continue to monitor freighter movements and stand demand, in consultation with operators, to ensure that adequate freight infrastructure is available to meet demand.



4.6 PLANNING CRITERIA

To define the Master Plan concepts for the airport's airside, terminal and landside areas, it was necessary to define and adopt a set of critical planning criteria.

4.6.1 AIRSIDE

The term 'airside', also referred to as 'airfield', covers the runway system, the taxiway/taxilane system, the apron infrastructure and the aircraft parking bays – all areas where operational aircraft movements or handling activities can take place. Airfield infrastructure planning typically incorporates the classification schemes adopted by the International Civil Aviation Organization (ICAO) and the United States Federal Aviation Administration (FAA). These schemes are based on a two-element reference code for each airport.

The first element of the ICAO code relates to the aircraft reference field length. This is the minimum field length required for a particular aircraft type to take off at its maximum certified take-off weight (MTOW) at sea level, in standard atmospheric conditions, in the absence of wind and using a level runway. The second element of the ICAO code is defined by the most demanding physical characteristics of that particular aircraft type (either its wingspan or the outer main gear wheel span). Noting that the FAA scheme uses different characteristics to define the airport reference code, under both schemes the reference code corresponds to the so-called 'Critical Aircraft' or 'Design Aircraft' – the most demanding type of aircraft served by a particular airport. Both the ICAO and FAA apply six airframe design group codes (Codes A-F). Launceston Airport's planning criteria is based around the Code C category, which includes the Airbus A320 and Boeing 737-800.

4.6.2 TERMINAL FACILITIES

The planning for future terminal building development aims to balance the often-competing interests of different stakeholders, including but not limited to:

- Passengers, who appreciate efficiency, reliability and convenience
- Airlines, which expect the terminal to meet their requirements in terms of product differentiation and operational efficiency, yet keep capital costs low
- Authorities, who monitor compliance to legislative requirements and procedural standards, including building safety, security regulations and border control procedures
- Airport operators, which will need to balance all of the above interests while running the airport business in a commercially viable manner.

In pursuing the optimum long-term balance of these matters, Launceston Airport has carefully mapped strategic planning objectives that longterm terminal development should ideally aim to satisfy. These include:

- Maximising Launceston Airport's attractiveness to airlines
- Maximising Launceston Airport's sense of place and retail opportunities
- Maximising passenger amenity
- Maximising efficient movement of passengers and bags
- Smooth future capital expenditure profiles
- Designing safe and secure facilities.

Putting this into practice, the future terminal's planning largely depends on satisfying future space requirements. The amount of space available for an activity inside the terminal establishes the guarantee of future processing capacity growth, at a good level of service offered to the travelling public. The International Air Transport Association (IATA) has published generally accepted standards that help inform terminal planning and design. These guidelines assist in achieving the planning objectives above, whilst incorporating the primary aviation flow processes that every passenger will encounter when moving through the terminal. These best practice approaches to terminal planning, published in the Airport Development Reference Manual, were liberally used in planning Launceston Airport's long-term terminal needs.

Of particular interest in the update of this Master Plan is the additional space requirements induced by changes in security regulations. These demand the implementation of new generation screening equipment and processes, which mandates larger footprint requirements.

Additionally, it is standard practice to plan terminal facilities for a moderated busy day and not the peak day/busiest day or lowest day in the year. This best practice approach ensures that facilities are not over-built or over-utilised, and hence become economically non-justifiable. This is particularly true for Launceston Airport, which experiences significant seasonal peaks, based on tourism patterns. Once again, APAL has adopted guidelines offered by FAA, IATA and industry experts to suitably moderate the future terminal peak impacts.

4.6.3 LANDSIDE LAND-USE AND DEVELOPMENT

Under Section 71 of the Airports Act, landside land-use and development must (where possible) be consistent with the Tasmanian Planning Scheme and surrounding local planning schemes. This is discussed further in Section 5 of this Master Plan. Landside development also takes place within a commercial setting, in which the intention is that supply and demand are matched. The commercial terms and conditions that Launceston Airport negotiates will underpin the business case for any new land development. In this respect, landside development is not dissimilar to commercial property development in a non-airport environment.

4.6.4 AIRPORT ROADS

The airport's internal road network is built on Commonwealth land. As the airport-lessee, APAL is responsible for funding, developing and constructing the internal road network. The development of the airport road network must ensure safe, secure, efficient and convenient access to and from the terminals and landside development areas, and involve a thorough analysis of long-term traffic forecasts.

Road development plans must also meet the requirements of relevant codes, standards and accepted engineering practices. The relevant standards include the Austroads guides, including the *Guide to Road Design* and the *Guide to Traffic Management*, which refer to relevant Australian standards, guidelines and codes of practice.

Roads and access planning will follow state road standards, which encompass the following principles:

- Transport modes are seen as complementary rather than competing
- Transport plans are integrated with land planning strategies
- Roads contribute to an integrated transport system that strengthens the economy, liveability, social inclusion and environmental outcomes.



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AIRPORT LAND-USE PLAN



5.1 **OVERVIEW AND OBJECTIVES**

Planning requirements for the Launceston Airport site are administered under the Airports Act. State planning laws generally do not apply to the site. However, Regulation 5.02(2) of the *Airports Regulations 1997* requires the Master Plan to, where possible, describe proposals for land-use planning and zoning (in relation to the landside part of the airport) in a manner consistent with that used by the state or territory in which the airport is located.

As required under Section 71 of the Airports Act, this section demonstrates how the land-use plan is consistent with planning schemes in force under Tasmanian law. It has considered the Tasmanian planning system and has used zones, overlays and other planning provisions derived from the Tasmanian Planning Scheme.

5.2 **REGIONAL CONTEXT**

Launceston Airport is one of Northern Tasmania's most strategically important sites and a critical piece of transport infrastructure.

The airport is located 15 kilometres from the Launceston central business district and is well situated relative to major transport links. The land adjoining the north, east and south boundaries is rural land supporting primarily grazing and cropping activity. The land to the west forms part of the Northern Midlands Translink Estate. This estate supports a range of commercial and industrial activities. The area has seen significant growth over the last five years and is now a major regional centre for industry, transport and storage.

Under the Northern Midlands Interim Planning Scheme, the airport is designated as a Utilities Zone (although as Commonwealth land this zone does not strictly apply). The Translink Estate is contained within a General Industrial Zone with a Specific Area Plan and the agricultural areas are designated as a Rural Resource Zone. The strategies set out for each zone under the Northern Midlands Planning Scheme address a range of matters including land use, impact on adjacent zones, landscaping, access and parking, and design, and these are considered by Launceston Airport, even though they don't strictly apply to the airport site.



5.3 LAND-USE STRATEGY

The land-use strategy for Launceston Airport designates five land-use precincts that each have a different focus or function. The details of the precincts are set out in Section 5.5. These precincts form the basis of the Airport Specific Area Zone, discussed in Section 5.4.1.

The land-use precincts are the primary land-use planning tool. The concept plans discussed in Section 1.9 indicate possible land-uses within the precincts. However, proposed land-uses that are not in strict accordance with the concept plans may still be considered provided they align with the objectives of the precincts. This approach provides an appropriate level of certainty and the flexibility to respond to market opportunities and business expectations.

There have been no major changes to the overall land-use direction compared to the 2015 Master Plan, but some minor amendments have been made in relation to land-uses within the precincts. However, the overall allocation of land for airside, terminal and landside (including non-aviation) purposes is essentially the same as the 2015 Master Plan.

The 2015 Master Plan reserved an airside area on the east side of the airport for Operational Support and long-term freight. This area, now designated Aviation Support and Freight Precinct, has increased in size due to the area provided by the anticipated decommissioning of the grass runways, but this does not represent a major change to the land-use strategy.

5.4 PLANNING ZONES

Regulation 5.02(2) of the *Airports Regulations 1997* states:

For Section 71 of the Act, an airport Master Plan must, in relation to the landside part of the airport, where possible, describe proposals for land-use and related planning, zoning or development in an amount of detail equivalent to that required by, and using terminology (including definitions) consistent with that applying in, land-use planning, zoning and development legislation in force in the State or Territory in which the airport is located.

In this Master Plan, Launceston Airport has endeavoured to align with the concepts contained within the Northern Midlands Interim Planning Scheme 2013 (NMIPS) and the new Tasmanian Planning Scheme (TPS). The utilisation of Particular Purpose Zones and Specific Area Plans within both schemes, which provide for the planning of differing areas or precincts within the site, provides a useful model for the management of land-use planning on the airport site. The Particular Purpose Zone and Specific Area Plan provisions enable planning controls to be tailored to special circumstances or complex sites. A Specific Area Plan applies to the Translink Precinct on the west side of Evandale Road, opposite the airport.

Given these facts, and after considering a number of zoning options, Launceston Airport has chosen a combination of the Particular Purpose Zone and Specific Area Plan provisions of the NMIPS and TPS, as the primary zone to apply to the airport site, namely the 'Airport Specific Area Zone'. This is essentially the same approach that was adopted in the 2015 Master Plan.

5.4.1 AIRPORT SPECIFIC AREA ZONE

In this Master Plan, the Airport Specific Area Zone applies to the entire airport site.

The generic purposes of the Airport Specific Area Zone are to:

- Facilitate land-use and development in accordance with the Launceston Airport Master Plan 2020
- Advance Launceston Airport as one of Northern Tasmania's key infrastructure assets
- Provide for the airport's long-term growth requirements
- Support a range of uses, including complementary business and shopping activities, employment, travellers' accommodation and transport
- Support sustainable urban outcomes that optimise the use of infrastructure
- Create an attractive, pleasant, safe, secure and stimulating environment through good urban design
- Support good environmental practice to minimise the impact on the environment and protect environmentally-sensitive heritage areas.

The land-use precincts, form part of the Airport Specific Area Zone. The land-use precincts contain provisions consistent with the purposes of the zone and serve to more closely define the potential landuses in the various parts of the airport.

For the Landside Business Precinct, the zoning provisions are essentially equivalent to the General Business Zone or the Commercial Zone in the TPS State Planning Provisions. For the Aviation Support and Freight Precinct, the zoning provisions are essentially equivalent to the General Industrial Zone or Utilities Zone in the TPS.

5.5 LAND-USE PRECINCTS

Figure 5.1 shows the five existing land-use precincts. Figure 5.2 shows the five future land-use precincts.

The precincts are:

- Airside Operations Precinct
- Terminals Precinct
- Landside Main Precinct
- Landside Business Precinct
- Aviation Support and Freight Precinct.

5.5.1 AIRSIDE OPERATIONS PRECINCT

Situated to the east of the airport terminal, this is a critical precinct and is not accessible to the general public. It accommodates airfield facilities, including the runways, taxiways, aprons and associated navigation aids, and the airport's fire station.

The role of the Airside Operations Precinct is to:

- Provide for safe, secure and efficient airfield activities, including aircraft landing, take-off, taxiing, handling and parking
- Accommodate the provision of aircraft navigation aids, aviation rescue and firefighting services, and other facilities essential for safe and efficient aircraft operations
- Provide for 24-hours-a-day, seven-days-a-week aircraft operations.

This precinct will continue to be used and developed for the aircraft services and facilities described above. It will not be used or developed for any purpose that may interfere or conflict with safe and secure airport and aircraft operations.



FIGURE 5.1 EXISTING LAND-USE PRECINCTS

FIGURE 5.2 FUTURE LAND-USE PRECINCTS

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LEGEND



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--- Airside Boundary

This plan has been prepared to illustrate the Master Plan and is not intended to serve any other purpose.

LEGEND

Terminals Precinct Landside Main Precinct Landside Business Precinct Airside Operations Precinct Aviation Support and Freight Precinct Airport Boundary Airside Boundary

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This plan has been prepared to illustrate the Master Plan and is not intended to serve any other purpose.



Launceston Airport has five land-use precincts all catering for different uses.

5.5.2 TERMINALS PRECINCT

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This precinct encompasses the site of the Main and Sharp passenger terminals and contains land required to expand the passenger terminals in the future. With the exception of the Sharp terminal, the existing terminal is integrated under one roof in a multi-level building combining domestic airline facilities and commercial activities including restaurants, cafes, shops and car rental operators.

This precinct excludes the related landside facilities, such as car parks, which are included in the Landside Main Precinct. The main terminal forecourt is also in the Landside Main Precinct.

The role of the Terminals Precinct is to:

 Provide for the operation, use and development of land for passenger and baggage processing, enabling the terminal facilities to operate safely, securely, efficiently and cost-effectively

- Provide appropriate facilities for airlines and passengers, including efficient terminal facilities with adequately located and sized commercial areas
- Provide an integrated terminals facility with ample commercial and retail uses
- Provide for the flexible expansion of passenger terminal facilities to meet forecast demand.

The precinct's future use and development will focus on enhancing and expanding the terminal complex, so it can continue to provide essential passenger and baggage handling services.

The Terminals Precinct will not be used or developed for any purpose that may interfere or conflict with safe and secure airport and aircraft operations in the Airside Operations Precinct.

The Terminals Precinct caters for the terminal developments identified in Section 7 of this Master Plan with further capacity for growth once these developments have come to fruition.

5.5.3 LANDSIDE MAIN PRECINCT

This precinct adjoins the western boundary of the Airside and Terminals precincts. Its primary purpose is to provide services and facilities relating to these adjoining precincts, including freight, general aviation, ground transport, car rental facilities and car parking. The RFDS, Tasmanian Aero Club, Airservices, Qantas and Virgin Freight all have facilities within this precinct. The airport's main entry and exit roads run through this precinct. The role of the Landside Main Precinct is to:

- Provide a range of airport support activities, services and facilities for use by airlines, passengers, government agencies, freight businesses and transport providers
- Provide for the establishment of a possible future flight training academy
- Provide integrated car parking, commercial, retail or accommodation uses that support the airport



- Provide an attractive and functional gateway to the airport
- Provide ground transport facilities and services for efficient access to the airport
- Provide for future expansion of passenger facilities to meet forecast demand.

The precinct's future use and development will focus on making the most of its prime location, including enhancing passenger drop-off/pick-up facilities, freight transport, car parking, offices, commercial uses and retail premises.

The precinct must provide for safe, secure and efficient ground transport access and a high level of visual amenity.

It will not be used or developed for any purpose that may interfere or conflict with safe and secure airport and aircraft operations in the Airside Operations Precinct or the Terminals Precinct.

5.5.4 LANDSIDE BUSINESS PRECINCT

This precinct is situated to the north of the Airside and Landside Main precincts and includes an area to the west of Evandale Road which was the old village site. All land comprising this precinct is currently vacant. The role of the Landside Business Precinct is to:

- Provide land for a range of aviation and nonaviation uses
- Provide a range of aviation-related services, including aircraft and ground support equipment maintenance and servicing, and freight terminals
- Provide for a range of non-aviation uses, including industrial, commercial, retail, accommodation, office, recreational, manufacturing, warehousing and associated activities.

The Landside Business Precinct's future use and development will remain focused on mixed-use purposes in keeping with the adjoining Translink Estate, and will provide for safe and efficient ground transport access and a high level of visual amenity. This precinct will not be used or developed for any purpose that may interfere or conflict with safe and secure airport and aircraft operations in the Airside Operations Precinct or Landside Main Precinct.

5.5.5 AVIATION SUPPORT AND FREIGHT PRECINCT

The Aviation Support and Freight Precinct comprises an area of land to the east of the main runway, which currently includes the two grass runways and Airservices leased land (former fire training ground and a former Airservices radar site).

Currently the designated area is located in an airside area, however it is envisaged that part of this land may become landside in the longerterm. The area presently has limited access and infrastructure provision.

The role of the Aviation Support and Freight Precinct is to:

- Provide a range of airport support activities, services and facilities for use by airlines, passengers, government agencies, freight businesses and transport providers
- Provide for the establishment of a possible future flight training academy and/or a solar farm on the airport site
- Provide for the flexible expansion of freight and operational support facilities to meet forecast demand.

While it is not envisaged that this precinct will be required for freight in the short-to medium-term, it may be required for other ancillary airport uses, such as a possible future flight academy and/or a solar farm. These uses are compatible with the purpose of the precinct but would be subject to further detailed investigations.

Access to the precinct for more intensive development will likely require the upgrading of the existing perimeter roads which pass around the northern and southern airport boundary.

- CONSISTENCY-WITH THE LOCAL PLANNING SCHEMES **UNDER STATE LAW**

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5.6 PARTICULAR PROVISIONS

Where applicable, the particular provisions (codes) contained in the Northern Midland Interim Planning Scheme are considered in the assessment of on-airport development proposals. These provisions have also been considered when developing the Launceston Airport Master Plan. This may include the Car Parking and Sustainable Transport Code, the Flood Prone Areas Code and the Airports Impact Management Code.

5.7 SENSITIVE DEVELOPMENTS

Section 71A of the Airports Act requires a Master Plan to identify any proposed 'sensitive developments', defined as development or redevelopment that increases the capacity of the following:

- A residential dwelling
- A community care facility
- A pre-school
- A primary, secondary, tertiary or other educational institution
- A hospital.

A sensitive development does not include the following:

- An aviation educational facility
- Accommodation for students studying at an aviation educational facility at the airport
- A facility with the primary purpose of providing emergency medical treatment and which does not have in-patient facilities
- A facility with the primary purpose of providing in-house training to staff of an organisation conducting operations at the airport.

Sensitive developments are prohibited except in exceptional circumstances and require an airport to apply to the Minister for approval to prepare a draft Major Development Plan (MDP) for the proposed development. The Minister may approve the preparation of the draft MDP only if he or she is satisfied that there are exceptional circumstances that support its preparation.

There are no specific proposals for sensitive development in this Master Plan. However, the provisions of the Airport Specific Area Zone enable a sensitive development to be considered subject to the Minister's approval to prepare a draft MDP.

5.8 CONSISTENCY WITH PLANNING SCHEMES UNDER STATE LAW

The Airports Act requires a Master Plan to describe the extent to which the proposals contained in the Plan are consistent with planning schemes in force under state law. This includes how the proposed developments fit within the planning schemes for commercial and retail development in the area adjacent to the airport.

Like many airports, non-aviation development occurs on the Launceston Airport site. Non-aviation property development is complementary to the airport's operations and consistent with general planning arrangements in the Northern Midlands. It provides employment and other economic benefits for the local area. This pattern of development is complementary to the Translink Estate near the airport and makes good use of available infrastructure. Section 8 of this Master Plan provides further information regarding Launceston Airport's non-aviation development plan.

While the Master Plan and Airport Specific Area Zone provide for complementary retail and commercial development to occur on land not required for aviation uses, there are no specific developments proposed in this Master Plan that are likely to conflict with surrounding planning schemes, particularly having regard to the Northern Midlands Interim Planning Scheme.

5.9 PRE-EXISTING INTERESTS

In developing this Master Plan, all interests existing at the time the airport lease was created were considered, including easements, licences, leases and sub-leases. There are no known conflicts or inconsistencies existing between these interests and any proposals in the Master Plan. Launceston Airport will continue to ensure that any airport development contemplated will not interfere with the rights granted under any pre-existing interest.

5.10 DEVELOPMENT APPROVAL PROCESS

If a use or development is proposed on Commonwealth land within Launceston Airport, a four-step approval process must be followed:

• The proponent must obtain from Launceston Airport a Planning and Design Approval in accordance with the provisions of this Master Plan



- If required, MDP approval from the Minister must be obtained under the provisions of the Airports Act
- Building Activity Consent must be obtained from Launceston Airport under the provisions of the *Airports (Building Control) Regulations 1996*
- A Building Permit, if required, must be obtained from the Airport Building Controller (ABC) under the provisions of the *Airports (Building Control) Regulations 1996.* The ABC is advised by the Airport Environment Officer (AEO). Both the ABC and AEO are independent officers employed by the Commonwealth Government.

In assessing a development proposal, Launceston Airport requires proponents to consider the National Airports Safeguarding Framework and matters such as building heights, acoustic treatments, safety and security, use of nonreflective materials, illumination levels, landscaping, signage and environment. The potential impacts of on-airport commercial and industrial developments on neighbouring properties must also be considered, including issues such as privacy, noise levels and building setbacks.

For any major airport development or sensitive development, as defined in the Airports Act, an MDP must be prepared, placed on public exhibition and submitted to the Minister for approval, prior to obtaining Building Activity Consent. Part 5, Division 4 of the Airports Act sets out the MDP requirements.



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AIRSIDE DEVELOPMENT

6.1 **OVERVIEW AND OBJECTIVES**

Existing aircraft movement area facilities include a single north-west/south-east sealed 45m-wide runway with a full length 23m-wide taxiway servicing the runway and aprons areas. There are two grass runways suitable for light aircraft of 2-4 seat size located to the east of the main runway, currently closed and in the process of being decommissioned. The existing airfield layout is shown on the aerodrome drawing Figure 6.1.

As part of the preparation of this Master Plan a number of studies were undertaken to identify weak points in the airfield system that may hinder growth or create unnecessary restriction on operations. In addition, the studies identify early trigger points for airfield facility upgrades.

The Master Plan is based on aircraft movements derived from passenger growth forecasts provided in Section 4. It is based on retaining the current Code C aircraft as the Design Aircraft (as described in Section 4.6) and takes into account the future aircraft mix and potential impacts from the aircraft peaking profile. The peaking profile is the pattern of demand and typically varies through the day. The average busy day currently comprises around 40 Regular Public Transport (RPT) aircraft movements with two main peaks between 09:00-11:00 and 16:00-18:00, the current busy hour being 16:00-17:00.

The background studies have highlighted that the runway and taxiway system has significant capacity and is not a limiting factor for projected growth. Rather, apron space will become a limiting factor and based on the present forecasts additional apron space is likely to be required around 2028.

The principal objective of the Airside Development Plan is to ensure that appropriate airfield infrastructure is provided to accommodate Launceston Airport's existing aviation activities and the forecast growth in those activities.

The proposed future airfield layout is shown in Figure 6.2.

6.2 RUNWAYS AND TAXIWAYS

6.2.1 NORTH-WEST/SOUTH-EAST SEALED RUNWAY (14R/32L)

The existing runway 14R/32L is 1,981m long and 45m wide. The runway has sufficient capacity to service the airport and is not a limiting factor to the forecast growth. The runway can handle unlimited Code 4C (A320 and B737) and Code 3D (e.g. Dash 8-400 series by virtue of its main undercarriage width) operations, and Code 4D aircraft to B767 size with restricted operating and airfield conditions in the case of the B767.

The runway direction 32L is equipped with an Instrument Landing System (ILS) and compliant Category 1 high-intensity lighting system and there is a medium-intensity lighting system on Runway 14L. Visual aids including PAPI (Precision Approach Path Indicator) and lighting facilities to support the runway system are also provided. The airport has a Pilot Activated Airport Lighting Control System (PAALC) which allows pilots to turn on the airport lighting system when operating under Common Traffic Advisory Frequency provisions after tower hours.



FIGURE 6.2 FUTURE AIRSIDE DEVELOPMENT PLAN



Future General Aviation Apron

- Future RPT Apron
- Airport Boundary
 Airside Boundary

This plan has been prepared to illustrate the Master Plan and is not intended to serve any other purpose. A single full-length parallel taxiway (Alpha) services the RPT apron, freight and general aviation (GA) parking areas. This taxiway is 23m-wide and capable of handling Code 3D aircraft including the Dash 8-400 series (by virtue of its main undercarriage width, not wingspan).

Apart from general maintenance, and a possible runway overlay in the foreseeable future, there are no requirements to extend or modify the main runway and taxiway layout in the short-term.

It is noted that Launceston Airport was designed and constructed in accordance with previous standards in force at the time, some of which have changed over time. This includes the runway strip width and Taxiway Alpha separation. All matters relating to variations from current standards are noted in the Launceston Airport Aerodrome Manual, as required by CASA. These issues do not affect the capacity of the movement area to service the airport and are not a limiting factor to growth.

6.2.2 GRASS RUNWAYS 18/36 AND 14L/32R

Launceston Airport has two unrated grass (unsealed) runways that are currently not in use. They consist of the north-west/south-east parallel Runway 14L/32R and the north/south Runway 18/36 cross runway. They are connected to the main runway taxiway system via a short gravel taxiway.

These runways are only suitable for small 2-4 seater GA aircraft. GA movements at Launceston Airport have decreased significantly over the last 20 years, and the usage of the grass runways reduced to an almost negligible level before they were both closed several years ago. Approval has been granted by the Minister for Infrastructure, Transport and Regional Development to permanently decommission both of the grass runways on the grounds of safety, efficiency and the economic viability of maintenance of these runways.

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a. Grass Runway 14L/32R

The (currently not in use) grass Runway 14L/32R runs parallel to the main sealed runway 14R/32L. It is 700m long and has a width of 18m.

Whilst this runway has not been permanently decommissioned as yet, it has been closed since 2008 and the runway markings have been removed.

At the time of writing, APAL was part-way through the process for permanently decommissioning the grass Runway 14L/32R.

b. Grass Runway 18/36

The (currently not in use) grass Runway 18/36 is 690m long and 18m wide. The runway was generally only open for approximately nine months of the year due to poor surface conditions in the winter months caused by wet weather. Over recent years wide seasonal variations in soil moisture content have resulted in ground surface irregularities and, due to the extent of these irregularities, the runway has been closed since 2013 and the runway markings have been removed.

As a result, at the time of writing APAL was part-way through the process for permanently decommissioning Runway 18/36.

The main Runway 14R/32L will continue to be available for the GA community wishing to operate at Launceston Airport.

6.3 APRONS

The airport is serviced by two aprons. The main RPT apron, with the exception of Bay 1, is a high strength (80,000kg) concrete apron with six dedicated aircraft parking positions and is illustrated in Figure 6.1. The southern apron provides a range of aircraft parking positions for freight, commercial and general aviation aircraft.

Bays 7, 8 and 9 have been constructed to cater for B737 aircraft and are used regularly for freight operations.

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Further to the south, parking is available for itinerant commercial aircraft, adjacent to an area in front of the Royal Flying Doctor Service (RFDS) hangar which is reserved for RFDS use.

At the extreme south of the apron there exists GA parking on both sealed and gravel surfaces. Limited parking for approximately 8-10 GA aircraft is also provided at the extreme north end of the southern apron.

6.3.1 **TERMINAL RPT APRON**

The main RPT apron, with the exception of Bay 1, is a security-restricted apron servicing RPT passenger aircraft. Bay 1 has a capacity of 10,000kg and is limited to use by the Sharp Airlines Fairchild Metroliner aircraft or similar sized aircraft. The remainder of the apron has five dedicated aircraft bays capable of handling up to A321 or B737-800 size Code C aircraft in a 'power in/power out' mode. The apron is suitably sized for present operations and peak periods. The apron's aircraft parking positions were reviewed with the introduction of the B737-800 series aircraft. The present layout is an optimised one for the available space, aircraft types and power-in/power-out manoeuvring.

Forecasting activities undertaken throughout the Master Plan study have included an outlook on likely aircraft stand requirements. This has considered the annual passenger demand, load factor evolution, potential up-gauging of aircraft and frequency increases amongst others. This has been calibrated against various methodologies which included reference to peak seasonality, buffer times, stand productivity and the like. In summary, these efforts have indicated that Launceston Airport stand demand is to grow from five RPT core stands (excluding Bay 1) to seven by 2040. The analyses also agree that by 2028 an additional Code C stand may be required to meet demand.



The current apron configuration and operation involves aircraft parked at an angle and maneuvering under their own power (powerin/power-out). This is driven by the need to keep operator costs down as well as minimise infringement on the transitional surface that forms part of the Obstacle Limitation Surfaces (OLS). For the purposes of safeguarding, and to provide ample capacity for supporting ground service equipment (GSE) activity growth, the Master Plan indicates apron growth towards the south plus further strengthening of the existing northern apron areas.

If desired by airlines, a power-in/push-back arrangement for aircraft parking could be explored to increase apron capacity. The implications of this arrangement on the transitional surface of the OLS would need to be considered.

6.3.2 SOUTHERN APRON

The southern apron is effectively broken into a number of areas by virtue of the pavement strength. The northern section is sealed high strength to 80,000kg with three aircraft parking positions.

The southern medium-strength section (50,000kg) was constructed for freight activities servicing Building 85. This area now services the RFDS, GA and some itinerant medium-size charter jet and turboprop aircraft.

With the apron rationalisation, GA aircraft parking is contained to the very south of apron previously used by regional airlines activities with additional aircraft parking available on a small gravel area south of the sealed apron and an area to the extreme north of the apron which includes tie down points for 8-10 aircraft.

It is planned that further provision of sealed apron for GA aircraft will be constructed on the gravel area to the south of the freight apron (refer Figure 6.2).



6.4 SUMMARY OF AIRSIDE DEVELOPMENT **PROPOSALS**

Airside development proposed over the next 20 years, in response to demand, is likely to comprise:

- Utilisation of Bay 7 as a stand-off RPT parking bay
- Additional RPT apron based on demand
- Decommissioning of both grass runways
- Additional GA sealed apron and parking areas to the south of the current southern freight apron
- Provision of new fire-fighting training facilities



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FIGURE 7.1 TERMINALS DEVELOPMENT PRECINCT

7.1 OVERVIEW AND OBJECTIVES

Over the past 20 years, Launceston Airport has experienced a compound annual growth rate of 4.7 per cent in passenger numbers. This constant, strong growth has led to APAL developing terminal facilities in order to meet this growth and provide infrastructure and planning that will foster future development plans

According to the International Air Transport Association (IATA) worldwide passenger numbers are expected to grow by 3.5 per cent over the next 20 years up to 2037. This growth is estimated to lead to a doubling of global traffic. In comparison, forecast demand for Launceston Airport is predicted at 2.8 per cent up to 2040, still indicating growth over the planning horizon. In response to the continual increase in demand, APAL intends to respond and develop terminal facilities in order to facilitate continued safe operational effectiveness and further enhance the passenger journey experience by adding to the already existing comfort and amenity.

To prepare for the expected increase in passenger numbers, during the next eight years the airport plans to undertake a number of developments to support aviation growth, much of which will be directed towards upgrading and expanding the existing terminal building. This includes expanding apron level passenger boarding and airline lounge facilities and provision for expansions of the groundlevel security point and the departures and arrivals hall areas.

This section outlines how Launceston Airport intends to facilitate and ensure long-term sustainable growth through its planned development of the terminal infrastructure. Figure 7.1 shows the eventual long-term footprint of the terminal precinct responding to this growth.



FURNDALE ROAD LEGEND Ν Existing Terminal Buildings Terminals Precinct Airport Boundary --- Airside Boundary

This plan has been prepared to illustrate the Master Plan and is not intended to serve any other purpose.





7.2 PASSENGER TERMINALS

7.2.1 MAIN TERMINAL

Launceston Airport's main passenger terminal caters for domestic traffic in a common-use terminal layout.

The main passenger terminal has experienced an innovative transformation over the last decade. Since 2008, the main passenger terminal has seen the introduction of mandatory checked baggage screening (CBS), reconfiguration of the terminal from a joint-user arrangement to a common user layout and the construction of additional gates on the apron level to accommodate passenger growth.

More recently, the terminal has introduced two significant changes that have allowed for heightened efficiency of airport operations and an overall enhancement of the passenger journey experience. In 2016 the terminal frontage was expanded to accommodate additional retail footprint. By expanding the departures hall towards the airside, passengers and staff alike were granted access to a panoramic, floor-to-ceiling view of the airfield and surrounding Tasmanian landscape, while enjoying their favourite coffee or locally-sourced food and beverages at new retail outlets. In addition, in 2017 the existing departing passenger security screening process and terminal arrangement was reconfigured. This change allowed for optimisation of the departure process but also heightened the level of service and amenity within the departures hall, simultaneously allowing for easy wayfinding, providing enhanced opportunity to access retail offerings and delivering a relaxed, comfortable environment to prepare for travel. The reconfiguration also enhanced security operations, airline punctuality and overall aviation safety.

An additional feature was added to the Flight Information Display system in the form of a 'call-togate' function. This screen catalogues scheduled departing flights and provides the traveller with prompts close to the flight departure time. The feature advises travellers of their nominated departure gate at an appropriate time after informing travellers to relax and enjoy the departure experience.

Moving forward, the passenger terminal is earmarked to undergo further expansion in response to passenger demand and operational needs.



In particular, the airport must respond to the recent changes in regulations related to the screening of passengers. In the pursuit of increased passenger security and safety, these new regulations imply a bigger terminal footprint area being required to accommodate new-generation screening equipment. The Master Plan puts forward an orderly development path towards accommodating the first round of security upgrades and guaranteeing safeguarding for future expansion as and when demand levels increase.

The planned expansions will be considered and developed with flexibility and sustainability as a prime consideration, while also maintaining the 'sense of place' concept which showcases the best of Launceston and Tasmania's northern region. Figures 7.2 and 7.3 depicts areas for future expansion. Over the ultimate horizon of this Master Plan (i.e. 2040), the planned expansions accommodated in the overall concept include the following:

- Additional gate lounges complementing the existing areas, thus allowing for expanded passenger seating and boarding circulation on departure
- Provision for further checked baggage screening facilities
- Increased departures hall area with the inclusion of additional retail offerings

- Expanded check-in facilities, providing capacity to process increased peak hour departing loads and accommodation of self-check-in/ automation technology
- Facilitation of an expanded security area delivering continued compliance to changing legislative requirements
- Expansion of arrivals hall to remove congestion and allow airfield views and further retail offerings
- Increased baggage reclaim length to meet anticipated passenger demand
- A covered arrivals to departures thoroughfare for easy access to and from check-in to baggage claim.

The existing terminal precinct, with long-term growth areas, is indicated in Figures 7.2 and 7.3.

During the design of any proposed terminal expansion consultation will occur with relevant government and non-government stakeholders, including but not limited to CASA, Airservices and Biosecurity Tasmania. Detailed analysis of the prescribed airspace surfaces will be undertaken to ensure compliance with relevant standards. In addition, APAL recognises that any upper level terminal expansion may have an impact on the line of sight from the air traffic control tower to the northern airside movement areas. In planning the expansion APAL will consult closely with Airservices to ensure that line of sight requirements are met.

FIGURE 7.2 FUTURE TERMINAL LAYOUT - APRON LEVEL



LEGEND

Proposed Expansion

This plan has been prepared to illustrate the Master Plan and is not intended to serve any other purpose.

Existing Terminal

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Additionally, there is flexibility to include other services within the terminal such as a larger baggage trolley storage area, expanded landside and airside amenities, additional retail in the departures hall, relocation and enlargement of arrivals hall toilets, and the provision for additional airline lounge facilities.

Within the first eight years of the master planning period (i.e. by 2028), APAL expects to deliver the following developments:

- At least one additional gate lounge to complement the existing two
- Airline lounges
- Expanded checked baggage screening area to meet demand
- Expanded, reconfigured and equipped security screening area to meet evolving regulatory requirements
- Arrivals hall expansion involving adjusted rental car desk layout and additional retail offerings
- Relocated and larger arrivals amenities
- Additional expansion to the departures hall with flexibility to facilitate retail, airline lounges and intuitive wayfinding
- Progressive upgrade of facilities in accordance with the Disability Standard for Accessible Public Transport 2002 by December 2022.

The expansion of the checked baggage screening area is expected to influence changes to the landside contractor parking and airside access road to the north of the passenger terminal.

Current expansion plans have been designed to cater for the existing scheduling patterns and future • Further retail offerings dependent on growth. Retail expansion will be based on market demand and relevant commercial considerations. Operational needs will be catered for when triggers identify the need to do so.

7.2.2 **REGIONAL TERMINAL**

The Regional Terminal is located to the north of the main terminal building and primarily services flights to Flinders Island and King Island. The terminal handles approximately 21,000 passengers per year. The building, which was originally constructed as a maintenance facility for Qantas, provides the current operator, Sharp Airlines, with passenger and freight handling facilities as well as hangar capacity to accommodate multiple Metroliner aircraft. The facility also houses the Sharp Airlines national call centre which was relocated to Launceston in 2018. Sharp Airlines also occupies the former Qantas amenities building adjacent to the hangar for the purposes of engineering offices.

7.2.3 SUMMARY OF PASSENGER TERMINAL DEVELOPMENT PROPOSALS

Passenger terminal development in the next 20 years potentially includes:

- Additional gate lounges
- Expanded checked baggage screening area
- Expansion and additional airline lounge facilities
- Expansion and reconfiguration of security screening
- Provision for expanded departures and arrivals halls
- Changes to landside access road and waste management
- market demand.

7.3 **FREIGHT TERMINALS**

Current freight capacity for Launceston Airport is catered for through freight warehouses housed within Hangar 14 located adjacent to the southern apron (approximately 1,300m² footprint) and Hangar 10 (approximately 1,300m² footprint). Supporting the freight operation, there are currently three freight aircraft stands located on the southern apron (all Code C). Freight forecasting analysis suggests that domestic air cargo tonnage is expected to grow to 25,000-26,000 tonnes by FY40. It is assumed that approximately one-third of this cargo will be carried on passenger aircraft as belly cargo.

For the purposes of the Master Plan, this likely demand has been converted into potential developmental needs. Firstly, it is expected that the number of freight aircraft stands will remain at three by 2040. Consideration has been given to requirements associated with warehouse and land provision for freight operations. The following factors have affected APAL's assessment:

- Dedicated freighter aircraft are limited to equipment that require no specific dedicated ramp area
- Most handling is performed manually, requiring no specific space for GSE equipment specifically dedicated to cargo operations
- Cargo vehicles are mostly comprised of vans and small freight trucks
- Most of the air freight demand is for timesensitive freight and perishables.

Forecasting identifies a required storage capacity building footprint of 2,500-3,000m² by 2040, with a 5,000-6,000m² site size deemed adequate.



Although the need is considered unlikely within the 20-year planning horizon, land on the north-eastern side of the runway can be reserved for any future large freight development requiring additional apron space and facilities or to accommodate evolving cargo security capacity. The sites northwest of Hangar 14 are the most suited locations to cater for the forecasted storage requirements. Conservative preliminary evaluation shows the available area can meet the desired level for 2040. The Master Plan therefore does not identify more spatial reserves as being required, as further freight storage and distribution management strategies can mitigate any shortfalls.

7.3.1 SUMMARY OF PROPOSED FREIGHT DEVELOPMENT

The proposed development for the short- to medium-term will include a rationalisation of the existing freight area on the southern apron and may include:

- Possible extension of Hangar 14 to accommodate freight facilities and rationalisation of other existing facilities
- Reservation of land on the east of the airport for future freight facilities and support if required.





7.4 GENERAL AVIATION FACILITIES

The general aviation sector is located adjacent to the southern apron intermingled with freight operations, the Royal Flying Doctor Service operation and itinerant commercial operators. There is a slow but steady increase in large (up to B737 size) charter/VVIP flights using the apron and these aircraft tend to restrict manoeuvring of other aircraft on the apron to maintain operational clearances.

The upgrading of the low-strength apron areas has provided an opportunity to increase parking areas for larger aircraft and required the relocation of GA activities to the very south and north of the apron.

The Tasmanian Aero Club operates from a building situated next to Hangar 14. The building is owned

by the club which has a site lease. In the mediumto longer-term this building will likely be relocated or removed and the club accommodated elsewhere at the airport to facilitate freight expansion. Any new facility for the Aero Club will adhere to current building requirements and standards, including for accessibility and fire safety.

In the medium- to longer-term it is desirable that all GA facilities be consolidated at the southern end of the apron. The current dispersion of light and heavy aircraft does not advantage any of the operators, however, lack of pavement to the south prevents short-term rationalisation. It is planned that further provision of sealed apron for GA aircraft will be constructed on the gravel area to the south of the freight apron.

Initial discussions between Launceston Airport and the Tasmanian Aero Club have canvassed a range of options for the club's accommodation following the expiry of their lease. The identification of a final solution will need to consider a number of factors which can only be determined by the club itself. APAL will continue to engage with the club over the remaining period of the lease in an effort to find a resolution which will cater for the club's requirements while providing for the medium- to long-term planning for the area.

There is space for approximately 4-5 hangars south of the RFDS hangar with a small adjacent apron area. The site has potential for future development should there be sufficient interest.

There has been some interest shown in the possible establishment of a flying school/flight academy at Launceston Airport. Whilst there are no firm plans for such a facility at this stage, the Airport Land-use Plan in this Master Plan (Section 5) makes provision for this potential use in the Aviation Support and Freight Precinct located on the east side of the main runway and in the Landside Main Precinct close to Evandale Road.

7.4.1 SUMMARY OF PROPOSED GENERAL AVIATION DEVELOPMENT

The proposed changes to the general aviation facilities are subject to further commercial negotiation, but in broad terms are summarised next:

- Remove or relocate the Tasmanian Aero Club building
- Possible GA hangar development and apron to the south of RFDS
- Additional GA parking area should there be sufficient demand
- Possible establishment of a flying school/flight academy.

7.5 AVIATION SUPPORT FACILITIES AND SERVICES

7.5.1 AIRCRAFT REFUELLING FACILITIES

Aircraft refuelling is currently provided by Mobil using dedicated tankers operating from their fuel farm adjacent to Gate 3. A small self-serve Avgas bowser is operated by BP on the southern apron.

The current demand for fuel is low due to a number of factors and it appears unlikely that additional facilities will be required in the near future. Changes to the present facilities are likely to be caused by space requirements for expansion by other facilities such as additional apron space (Mobil depot) or aircraft parking changes on the southern apron (BP bowser).

There is space for additional or relocated facilities such as near the southern grounds compound.





7.5.2 AIR NAVIGATION FACILITIES AND SERVICES

Air navigation facilities and services on the airport are owned and operated by Airservices Australia. These facilities include:

a. Control Tower

This Air Traffic Management facility provides vital air traffic control services at Launceston Airport and surrounding airspace. Upgrades to existing systems within the Control Tower could occur during this Master Plan's long-term planning horizon.

b. Satellite Communication Facilities

This landside facility is utilised for communications between Northern Tasmania and Melbourne Air Traffic Management Centre. Its current location is not appropriate for the medium- or longer-term as it is surrounded by public car parking. Airservices Australia holds a long-term lease over the site. Launceston Airport and Airservices plan to work together to find a more suitable site for the facility.

c. Fire Station

The existing fire station at Launceston Airport is a Category 7 fire station with 25 operational staff and hours of operation covering RPT movements (currently 05:30 to 21:40). The existing fire station is likely to be satisfactory for the foreseeable future but may need to be upgraded if aircraft of a higher category (Category 8) utilise the airport in the future.

d. Hot Fire Training Ground

The hot fire training ground located at Launceston Airport has been decommissioned due to environmental issues. This leaves Launceston Airport's Aviation Rescue Fire Fighting Service (ARFFS) with no dedicated hot fire training capability, however, Airservices is reviewing the requirement for a new hot fire training ground in consultation with Launceston Airport.





e. Maintenance Facility

The Airservices maintenance facility provides accommodation for resources that provide technical services to maintain aeronautical navigation, surveillance and communication equipment for the safe operation of the air traffic management system throughout Tasmania. There are no plans to relocate these facilities over the next five years.

f. Navigational Aids

Airservices maintains several navigational aids on the airfield. These aids are located on sites leased to Airservices for a nominal rental. The aids include the:

- Doppler Very High Frequency Omni-Directional Range (DVOR)
- Distance Measuring Equipment (DME)
- Instrument Landing System (ILS).

g. Bureau of Meteorology

The Bureau of Meteorology (BoM) has equipment on the airport. BOM has no plans for major changes at Launceston Airport other than a plan to upgrade the wind profiler. It is important that the operational integrity of this equipment is maintained to support BoM's ongoing provision of observations and forecasting services to the aviation industry. To this end, APAL will consult with the BoM regarding any development work near BoM facilities on the airport site, if there is a possibility that such development could interfere with the operation of equipment.

7.5.3 SUMMARY OF PROPOSED AVIATION SUPPORT DEVELOPMENT

- Upgrade to existing systems within the Control Tower
- Develop a plan for the relocation of the satellite facility to an alternative site
- Establish a new ARFFS fire drill ground.



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NON-AVIATION DEVELOPMENT PLAN

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At Launceton Airport, non-aviation development has co-existed with aviation operations since before the airport was privatised in 1998.

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8.1 **OVERVIEW AND OBJECTIVES**

Non-aviation development plays an important role in Launceston Airport's economic viability and complements its key functions. It supports the airport's growth; is complementary to the aeronautical business; provides enhanced customer amenity within the terminal; and provides a strong contribution to the local and broader community by stimulating economic activity and employment outcomes.

At Launceston Airport, non-aviation development has coexisted with aviation operations since before the airport was privatised in 1998. Launceston Airport sits on only 180 hectares of land, the majority of which is located in airfield areas, limiting the opportunity for commercial developments on the scale that other Commonwealth-leased airports may enjoy.

To date non-aviation development has been largely restricted to some commercial tenancies and retail outlets in the main terminal building, car rental facilities and utilisation of disused hangars for storage or light industrial use.

The objectives regarding non-aviation development are to:

- Protect the long-term viability of the airport
- Deliver high-standard facilities that will benefit all airport users and stakeholders
- Encourage developments that achieve the highest standards in sustainable environmental practice, safety and security
- Encourage developments that complement the airport's key functions and can support aeronautical activities and enhance the passenger experience.

The rest of this section will describe current non-aviation developments and explain the airport's vision for future nonaviation development.

The airport has defined a number of areas within the two landside precincts where non-aviation development will be undertaken.

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8.2 LANDSIDE BUSINESS PRECINCT

The Landside Business Precinct comprises two areas of land: the 2.8 hectare 'old village site' to the west of Evandale Road and 4.5 hectares to the north of the new airport entrance (refer to Figure 5.2). This precinct currently comprises vacant land and in APAL's view will not be required for aviation-related development in future years.

The type of development considered appropriate for this precinct would include commercial premises such as restaurants, take-away/fast food outlets, shops, service stations or garage, offices, car rental facilities, car dealership, hotel/motel or other accommodation facility catering to airport customers and light industry.

8.3 LANDSIDE MAIN PRECINCT

The Landside Main Precinct is bordered by Evandale Road (refer Figure to 5.2). This precinct is currently utilised for a range of both aviation and non-aviation facilities including car parking, maintenance, freight and storage. This precinct can support a range of non-aviation activities which would be considered short- to mediumterm, allowing for the longer-term utilisation of the precinct to primarily service aviationrelated uses.

It is important to the economic viability of the airport that a flexible approach be employed to the use of this precinct in the medium-term. Existing facilities, which are vacant or in poor condition, may be utilised in a variety of ways which enables the maintenance or enhancement of the existing asset, provides an economic return to the airport and allows for reservation for aviation use in the longer-term. Typical non-aviation developments in this precinct would include freight, warehousing, light industrial, commercial facilities and small-scale manufacturing.

8.4 IMPACTS OF NON-AVIATION DEVELOPMENTS

Non-aviation development on the Launceston Airport site is complementary to the airport's operations and consistent with general planning arrangements in the Northern Midlands Interim Planning Scheme, in particular the Translink Specific Area Zone which applies immediately to the west of the airport site.

While the Master Plan and Launceston Airport Specific Area Zone provide for complementary retail and commercial development to occur on land not required for aviation uses, there are no specific developments proposed in this Master Plan that are likely to adversely impact on the local or regional economy or conflict with surrounding planning schemes.



GROUND TRANSPORT PLAN

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9.1 OVERVIEW AND OBJECTIVES

Based on detailed analysis of the existing conditions and projected future conditions, the Launceston Airport Ground Transport Plan outlines the potential actions and provisions for the development of the ground transport systems facilities and infrastructure to enable safe, efficient and reliable ground transport to, and within, the airport's precinct into the future.

In recent years Launceston Airport has experienced a steady increase in passenger growth, with the number of passengers expected to almost double by the year 2040. Such growth would have an impact on ground transport access, movement and facilities within the airport precinct. To adequately support and accommodate the anticipated growth, APAL has strategically planned for the ground transport system to be developed over time in accordance with key objectives, consistent with other provisions within this Master Plan.

The objectives of the Ground Transport Plan are to:

- Provide a safe, efficient and reliable ground transport system capable of accommodating projected demand over a 20-year period
- Provide a road system which provides a high level of service through minimising congestion and potential areas of conflict
- Integrate the airport's road network into the local and state-wide networks
- Provide ground transport facilities and infrastructure to support a range of anticipated travel modes and technological changes for airport users over a 20-year period
- Support safe, secure and sustainable transport solutions.

APAL recognises that it can only influence certain aspects of the ground transport system around the airport precinct. Nevertheless, APAL is committed to ensuring that the quality and efficiency of the ground transport system provides access for all airport users, while making provision for growth and supporting the needs of the community and the environment.

Achieving these objectives will require ongoing stakeholder engagement.

9.2 EXISTING GROUND TRANSPORT SYSTEM

On a typical weekday in 2019, there were approximately 6,000 vehicle movements in and out of the airport precinct, with vehicles entering the precinct via the external road network, circulating through the internal road network and leaving via the external road network.

The ground transport system users typically consisted of passengers, staff/employees, commercial operators and freight operators. Vehicle types included private vehicles, taxis, ride share vehicles, rental vehicles, Launceston CBD to Launceston Airport bus, rental vehicle shuttle buses, tour operator buses and bicycles.

There is currently no dedicated external pedestrian access to the airport precinct, other than from the car park on the opposite side of Evandale Road, and there are internal pedestrian walkways from all internal car parks to the terminal.

ON A TYPICAL WEEKDAY IN 2019 THERE WERE APPROXIMATELY

6,000

AVIS

VEHICLE MOVEMENTS IN AND OUT OF THE AIRPORT PRECINCT



9.2.1 EXTERNAL ROAD NETWORK

The classification and function of the external road network is shown in Table 9.1 and Figure 9.1.

Evandale Road is used for all vehicle access to Launceston Airport. The growth of Launceston Airport and the nearby Translink Estate has resulted in the Department of State Growth considering the duplication of Evandale Road between the Breadalbane roundabout and Launceston Airport to satisfy the anticipated future vehicle traffic demands. While it is understood that no timelines have been confirmed for the potential duplication, APAL will continue to closely liaise and work with the Department of State Growth. This aims to ensure any planned duplication between the Breadalbane roundabout and Launceston Airport considers how the airport precinct may develop in the future in accordance with the 20-year Ground Transport Plan and how such works may affect existing infrastructure such as stormwater drainage.

Once completed, it is anticipated that the duplication of Evandale Road will provide two lanes in each direction between the Launceston CBD

and the Launceston Airport main entrance, further decreasing travel times to the airport precinct and enhancing road safety.

The Midland Highway has recently been upgraded in the vicinity of the airport precinct as part of the Midland Highway Upgrade Program. A dual lane carriageway is now provided between Launceston and Perth. The Midland Highway is classified as a Primary State Road and remains the major road link between Launceston and Hobart, with a connection to the Bass Highway which links Launceston to Devonport and Burnie. The Midland Highway and Bass Highway are critically important tourist and road freight transfer routes.

There are no additional major upgrades expected on the Midland Highway between Launceston and the airport for the 20-year Master Plan horizon.

The Perth Link Roads Project is currently under construction and will result in the Midland Highway bypassing Perth and creating a better transition between the Midland Highway and Bass Highway. The Perth Link Road will improve travel times from Launceston Airport to Devonport, Burnie and Hobart, as vehicles will have the option to bypass the Perth town centre.

ROAD NAME	CLASSIFICATION	ACCESS	LAYOUT	MANAGEMENT AUTHORITY	CURRENT TRAFFIC VOLUME (Vehicle Movements per day)
Evandale Road	Major Regional State Road (north of Translink Avenue) Connecting State Road (south of Translink Avenue)	Midland Highway (at Breadalbane), Evandale	Two lanes, two-way	State	9,500 (north of Translink Avenue) 5,000 (south of Translink Avenue)
Midland Highway	Primary State Road	Launceston CBD, Perth, Hobart	Four lanes, two-way in vicinity of Launceston Airport	State	13,000 (between Perth and Breadalbane)
Perth Mill Road	Local Collector Road	Perth	Two lanes, two-way	Council	800

TABLE 9.1 EXTERNAL ROAD NETWORK



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FIGURE 9.2 **EXISTING INTERNAL ROAD NETWORK AND CAR PARKING**

9.2.2 INTERNAL ROAD NETWORK

There are two public access points to Launceston Airport: the Main Airport Access opposite Hudson Fysh Drive and the Southern Airport Access adjacent to the southern end of the Saver Car Park. There are several vehicle routes within the airport precinct as illustrated in Table 9.2 and Figure 9.2.

9.2.3 **VEHICLE PARKING**

There are 1,782 vehicle parking spaces at Launceston Airport for the public, employees and rental vehicles. The vehicle parking spaces consist of 399 short-term parking spaces, 269 long-term parking spaces, 117 undercover parking spaces, 725 long-term saver parking spaces, 160 car rental parking spaces and 112 employee parking spaces.

The Long-Term Car Park includes a recently completed extension with provision for the Sharp Airlines terminal drop-off and pick-up zone. The Long-Term Car Park extension has provided an additional 45 parking spaces.

The long-term car parks are generally busier than the short-term car parks at the busiest time of the week, which is typically Friday afternoon.

9.2.4 PUBLIC TRANSPORT

9.2.4.1 Bus and Shuttle Bus

A commercial shuttle bus service operates between the Launceston CBD and Launceston Airport on a schedule which is coordinated with flight departure and arrival times. In addition, shuttle buses provide transfers to the off-site rental vehicle offices and car park located outside the airport along Evandale Road and are scheduled based on passenger demand.

Bus stands are located outside the arrivals area at the southern end of the Terminal Building with bus staging areas provided adjacent to the Undercover Car Park.

TABLE 9.2 INTERNAL ROAD NETWORK

ROAD NAME	OPERATION	KEY USE	LAYOUT
Primary Vehicle Route	Road from Main Airport Access to the Terminal Building	 Entry and exit at the Main Airport Access Provides access to Long-Term, Short-Term, Undercover and Sharp Airline car parks, Commercial Lane entry and exit, Public Vehicle Lane entry and exit, Southern Access Route entry and exit 	One lane, one-way Two lanes, one-way (between Short-Term Car Park exit and Short- Term Car Park entry)
Public Vehicle Lane	Road along Terminal Building frontage	• Pick-up/drop-off for public vehicles	One lane, one-way
Commercial Lane	Road along Terminal Building frontage	 Pick-up/drop-off for taxis, ride share and buses 	One lane, one-way
Southern Access Route	Road between Primary Vehicle Route and Southern Airport Access	 Entry and exit at the Southern Airport Access Provides access to the Saver and Rental car parks, Commercial Lane exit and Primary Vehicle Route entry and exit 	Two lanes, two-way





9.2.4.2 Taxis

Taxi customer drop-off occurs in the Public Vehicle Lane located along the Primary Vehicle Route with public pick-up and drop-off. Taxis can recirculate after dropping off customers to access the Commercial Lane for customer pick-up. Taxi customer pick-up is located between the arrival and departure areas of the Terminal Building. If taxi customer pick-up spaces in front of the Terminal Building are exhausted, taxis gueue and hold on the right-hand side of the Commercial Lane, northwest of the Terminal Building.

9.2.4.3 Ride Share

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Ride share customer drop-off occurs in the Public Vehicle Lane located along the Primary Vehicle Route along with public pick-up and drop-off. A designated ride share (Uber) customer pickup zone is located on the left-hand side of the Commercial Lane to the north of the Terminal Building, adjacent to the taxi gueue and hold area.

9.2.5 **RENTAL VEHICLES**

There are several rental vehicle companies located within the airport precinct, with some rental vehicle offices (predominantly car washing facilities) located outside the airport along Evandale Road, adjacent to Launceston Airport. The Rental Car Park is located south of the Terminal Building and adjacent to the Saver Car Park. Rental vehicles can enter and exit the airport precinct by either the Main Airport Access or the Southern Airport Access.



9.2.6 ACTIVE TRANSPORT

Active transport is a transport mode that involves physical activity and typically focusses on walking and cycling networks.

A bike port is located within the Short-Term Car Park which currently provides rider information, free and secure undercover bike parking for up to 12 bikes, and two bike service stations complete with bicycle mounts and tools for bicycle assembly, disassembly and minor maintenance.

There is limited cycling infrastructure in the vicinity of Launceston Airport. A separated bicycle path is located adjacent to Haggerston Road (old Midland Highway alignment) between Breadalbane and Perth.

The Department of State Growth Principal Urban Cycling Network for Launceston has designated Hobart Road and Evandale Road as cycling routes. There are no designated bicycle paths/lanes on these roads, however, there is road shoulder space for cyclists to use. The current cycling routes are shown in Figure 9.3.

It is anticipated that the future Evandale Road duplication will include widened shoulders which will allow more space for cyclists.

Pedestrian access from the car parking facilities on-airport and off-airport is provided by dedicated footpaths. Numerous urban studies have identified that the maximum desirable walking distance is in the order of 400 metres and APAL have considered this when developing pathways to the Terminal Building.

9.2.7 FREIGHT

The freight facilities are accessed through two give-way access points on Evandale Road, located south of the Southern Airport Access. Freight vehicle traffic does not have a material impact on the operation of Evandale Road due to the relatively low percentage of freight in Tasmania generally carried by air.



9.3 GROUND TRANSPORT SYSTEM DEMAND

This section considers the existing and future ground transport system demands of Launceston Airport. The following data sources and information were considered to project the future ground transport demand:

- Passenger forecasts (contained within this Master Plan)
- Evandale Road historic growth rates provided by the Department of State Growth
- Traffic count data collected in March 2019.

The existing passenger vehicle modes currently comprise the following (approximately):

- 90 per cent private and rental vehicles
- Eight per cent taxis
- Two per cent buses and other heavy vehicles.

In FY18 over 1.35 million passengers visited Launceston Airport. On a typical weekday in 2019, there were approximately 6,000 vehicle movements in and out of the airport precinct resulting in a demand for 1,090 car parking spaces at the busiest time of day.

The passenger numbers are expected to grow to 1.9 million by 2028 and 2.5 million by 2040, resulting in approximately 10,000 vehicle movements in and out of the airport precinct and demand for 1,950 car parking spaces at the busiest time of day on a typical weekday in 2040.

The expected passenger growth is anticipated to result in increased traffic and parking demands as summarised in Table 9.3.

The increased ground transport system demand from the forecast passenger growth will directly result in increased vehicle movements, primarily on Evandale Road and the Midland Highway between Launceston Airport and the Launceston CBD. As the Translink Estate is further developed, this is also expected to contribute to increased vehicle movements on Evandale Road.

TABLE 9.3 GROUND TRANSPORT SYSTEM DEMAND BY PASSENGER FORECAST

YEAR	PASSENGER FORECAST (Yearly)	TOTAL TRAFFIC DEMAND (Vehicle movements per day)	PRIVATE AND RENTAL VEHICLE DEMAND (Vehicle movements per day)	TAXI DEMAND [Vehicle movements per day]	BUSES AND OTHER HEAVY VEHICLE DEMAND [Vehicle movements per day]	PARKING DEMAND (At busiest time on typical weekday)
2019	1.4 million	6,000	5,505	425	70	1,090
2028	1.9 million	7,000	6,360	550	90	1,400
2040	2.5 million	10,000	9,120	760	120	1,950

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LAUNCESTON AIRPORT MASTER PLAN 2020





9.4.2 EXTERNAL ROAD NETWORK AND ACCESS

The proposed Department of State Growth project to duplicate Evandale Road ends at the Main Airport Access roundabout. The portion of Evandale Road from the Main Airport Access to the Southern Airport Access is not earmarked for any changes.

The existing Southern Airport Access is a give-way access point to Evandale Road and currently there are no dedicated turning lanes at the access point. This arrangement is considered by APAL to present a high risk of vehicle conflict.

It is APAL's view that the Southern Airport Access intersection with Evandale Road should be upgraded by either adding dedicated turning lanes or converting the access point to a three-leg roundabout so that the access point has similar safety and speed conditions to that of the Main Airport Access. The introduction of the Main Airport Access roundabout has resulted in significant improvements in vehicle safety and flow, both for vehicles entering the airport and for through traffic along Evandale Road. Launceston Airport will periodically review the southern intersection in terms of its safety performance and capacity and will consider appropriate improvements as needed.

There are potential modifications that can be implemented at the freight access points on Evandale Road, similar to the Southern Airport Access, which would improve vehicle safety. Based on the density of driveways along Evandale Road, available sight distances at driveways and observations of poor pedestrian behaviour on Evandale Road adjacent to the airport precinct, APAL believes that the existing 80km/h speed limit should be reviewed by the relevant local and state government agencies, and potentially reduced to increase public safety. APAL's opinion on the speed limit reduction also considers the number of originating international passengers who rent vehicles from Launceston Airport who may not be familiar with Australian driving conditions.

Without dedicated bicycle lanes or external pedestrian access to the airport precinct, bicycle and pedestrian safety also remains a concern to APAL and the local community.

APAL will continue to liaise, consult and work with the local and state governments, relevant authorities, stakeholders and the community to assist in the implementation of safety improvements to the existing external road network. APAL will continue to advocate for any initiatives which improve public safety. It is envisaged that the Department of State Growth will continue to monitor traffic flows and the quality of the road network around the airport precinct and continue to implement improvements for public safety as necessary.

It is envisaged that vehicle movement patterns on the external road network will remain the same or improve based on recent upgrades such as the Midland Highway Upgrade Program, Perth Link Roads Project and the proposed further duplication





of Evandale Road between the Breadalbane roundabout and Launceston Airport. It is anticipated that the further development of the Translink Estate will not adversely affect vehicle access to Launceston Airport once the proposed duplication to the Main Airport Access is complete.

As such, no other major external road upgrade projects are anticipated to be required to service the airport precinct for the duration of this Master Plan. Further, it is not anticipated that the Midland Highway will require any further major upgrades to service the airport precinct for the duration of this Master Plan.

Launceston Airport will consult with the State if new access points onto Evandale Road are required in the future.

9.4.3 INTERNAL ROAD NETWORK

It is forecast that the current internal road network capacity will be sufficient for the next eight years, other than for the area on the east side of the airport if it is to be developed, which is addressed in section 9.4.10.

With minor modifications to allow for additional car parking and forecourt expansion (by relocating the existing Commercial Lane and Public Vehicle Lane further away from the terminal frontage), the internal road network capacity is anticipated to be adequate to accommodate the projected 10,000 vehicle movements per day in and out of the airport precinct by 2040. It is anticipated that minor changes to existing signage and some new signage will also be required.

9.4.4 VEHICLE PARKING

The vehicle parking demand at Launceston Airport during the busiest period on a Friday afternoon is expected to grow from the current level of demand to require 300 additional vehicle parking spaces by 2028, with almost 1,000 additional vehicle parking spaces required by 2040.

Based on the existing vehicle parking occupancy levels it is anticipated that the demand for additional long-term vehicle parking spaces will be greater than the demand for additional short-term vehicle parking spaces in the short- to mediumterm. There is immediate demand for additional staff/employee vehicle parking spaces.

Areas for potential additional vehicles spaces have been identified within the airport precinct to satisfy the anticipated future demand. The identified locations for the future expansion of car parking within the airport precinct are shown in Figure 9.4. APAL will work with any current tenants that may be affected to provide alternative accommodation.

FIGURE 9.4 FUTURE GROUND TRANSPORT PLAN



9.4.5 PUBLIC TRANSPORT

9.4.5.1 Bus and Shuttle Bus

The current Launceston CBD to Launceston Airport shuttle bus service provides a reliable alternative for those people who are seeking to use public transport to access the airport.

Shuttle bus services for tour operators and rental vehicle office transfers are anticipated to grow in a linear manner with passenger growth.

APAL will continue to encourage the adoption of sustainable modes of public transport access to the airport. Currently there are no dedicated public bus stops on Evandale Road in the vicinity of the airport and there are no public bus stops within the airport precinct. APAL will support the implementation of a regular scheduled public bus stop in the future, should it be required in the 20-year horizon. Should a regular scheduled public bus stop be provided within the airport precinct, it is anticipated that there would be a small reduction in future vehicle parking space demand.

9.4.5.2 Taxi and Ride Share

It is anticipated that the demand for taxis and ride share transport modes will grow in line with passenger growth. The potential for dedicated taxi and ride share lanes has been identified should demand require such facilities in the future. The provision of dedicated lanes or areas has been identified as a possible method for reducing conflict between transport operators and increasing clarity for visitors. Further amenities for taxi and ride share drivers will be provided based demand. APAL will maintain the ability to accommodate such demand as required, through regularly reviewing the functionality of the existing process.

9.4.6 RENTAL VEHICLES

It is anticipated that the demand for rental vehicles will also grow in line with passenger growth. Adequate space within the airport precinct has been identified to potentially expand the rental vehicle parking areas as required to satisfy demand.

9.4.7 ACTIVE TRANSPORT

APAL supports the adoption of sustainable modes of transport and will continue to facilitate the uptake of active transport options where possible, based on demand. APAL will actively support and encourage the state government, together with local councils, cycling advocacy groups and other communitybased organisations, to identity suitable cycling and external pedestrian routes to connect to the airport.

The current Department of State Growth Principal Urban Cycling Network for Launceston has designated Hobart Road and Evandale Road as cycling routes and it is anticipated that the Evandale Road duplication will include widened shoulders which will allow additional space for cyclists. However, there are no designated bicycle paths/ lanes anticipated for Hobart Road or Evandale Road, which limits their attractiveness to regular cyclists.

APAL will continue to encourage and support any initiatives that promote and work towards providing safe active transport modes. This may include dedicated bicycle paths to and from the airport precinct along Evandale Road and Perth Link Road, similar to the separated bicycle path which is located adjacent to Haggerston Road (old Midland Highway alignment) between Breadalbane and Perth. It may also include the establishment of safe external routes for pedestrians to access the airport precinct by foot.

Pedestrian access from the internal public car parks is via dedicated footpaths and APAL will continue to ensure that travel distances from public car parks remain reasonable for our passengers, visitors and staff, maintaining a maximum 400m walking distance to the terminal. Car parking facilities will remain within close proximity to the terminal, with short-term vehicle parking located closest to the terminal.



9.4.8 FREIGHT, GENERAL AVIATION AND ROYAL FLYING DOCTOR SERVICE ACCESS

APAL understands that freight, general aviation and the Royal Flying Doctor Service (RFDS) are vitally important activities, and APAL will continue to examine options and opportunities to facilitate improved access to these facilities south of the Southern Airport Access, including engaging with the local and state governments and other key stakeholders.

APAL has been working with the local councils regarding the potential for establishing a future freight interchange (intermodal hub), in the Translink estate, for air, road and rail, which may lead to the upgrade of Evandale Road therefore improving the access to the southern part of the airport.

As previously stated, there are potential modifications that can be implemented to the southern access points on Evandale Road, similar to the Southern Airport Access, which would improve vehicle safety.

APAL will continue to liaise, consult and work with the local and state governments, relevant authorities, stakeholders and the community to assist in the implementation of such safety improvements to the existing external road network in the near future. APAL will continue to advocate for any initiatives which improve public safety for the freight, general aviation and RFDS sites.

9.4.9 FORECOURT

Based on the global movement towards integrated forecourt planning and development to improve circulation and enhance the passenger experience, APAL is allowing for the provision of a potential pedestrian forecourt immediately west of the existing Terminal Building within the 20-year horizon. It is anticipated that a dedicated forecourt at Launceston Airport will offer the following advantages:

- Improved passenger transfer and movement experience
- Potential to improve the sense of place and showcase Launceston and Tasmania more broadly
- Improved vehicle and pedestrian movement and circulation
- Reduction in potential vehicle and pedestrian conflict points
- Improved emergency service access
- Improved passenger safety
- Improved security through the provision of enhanced setback.

To accommodate the potential forecourt, the Commercial Lane and Public Vehicle Lane will be relocated and integrated to the west, within the area that is currently occupied by the existing Short-Term Car Park.

9.4.10 AVIATION SUPPORT AND FREIGHT PRECINCT

In respect of possible future development in the Aviation Support and Freight Precinct, ground transport access requirements will be dependent upon the nature of the development. APAL will develop appropriate arrangements for servicing this area as the need arises, taking into account airspace and safeguarding considerations.

9.4.11 FUTURE TECHNOLOGY AND SYSTEMS

Due to the rapid advancement in ground transport, it is anticipated that APAL will need to be flexible by making provision for the development and adaption of new ground transport technologies and systems such as:

 'Smart City' initiatives and linking into the Greater Launceston Transformation Project which includes traffic monitoring, vehicle tracking, and virtual sensing and tracking



- Vehicle 'smart parking' systems
- Licence plate recognition systems
- Increased uptake of low or zero emission vehicles
- Increased use of biometrics for vehicle driver recognition
- Advances in computing which change vehicle driver processes, such as the collection of a rental vehicle
- Autonomous vehicles
- Accommodating changes in passenger processing such as biometric security, improved passenger wayfinding and disability access
- Accommodating changes in bag processing such as the adoption of remote bag drop facilities.

Based on future demand and established global trends, APAL will continue to plan for, support and embrace the adoption of new technologies and systems through considered integration and development within the airport environment.

9.5 GROUND TRANSPORT DEVELOPMENT PLAN (0-8 YEARS)

The Launceston Airport eight-year Ground Transport Development Plan identifies potential upgrades and provisions that could be implemented to accommodate the projected ground transport demands. Figure 9.4 and Table 9.4 provide a summary of the potential upgrades, identified by general area.

9.6 LONG-TERM GROUND TRANSPORT DEVELOPMENT PLAN (9-20 YEARS)

The Launceston Airport Long-Term Ground Transport Development Plan identifies potential upgrades and provisions that could be implemented to accommodate the projected transport demands beyond the eight-year plan. Figure 9.4 and Table 9.5 provide a summary of the potential upgrades, identified by general area.



TABLE 9.4 GROUND TRANSPORT DEVELOPMENT PLAN POTENTIAL UPGRADES

AREA OF AIRPORT	POTENTIAL UPGRADE
Access	Southern Airport Access point sa Freight, General Aviation and RF
Vehicle parking	Long-Term Car Park expansion Staff Car Park expansion
Buses	Expansion of the Launceston CB
Rental vehicles	Rental Car Park expansion
Freight and logistics	Freight access point safety modi
Forecourt	Development of a terminal build

TABLE 9.5 LONG-TERM GROUND TRANSPORT DEVELOPMENT PLAN POTENTIAL UPGRADES

AREA OF AIRPORT	POTENTIAL UPGRADE
Vehicle parking	Multi-storey car park incorporat drop-off, buses, taxis and ride s Long-Term Car Park expansion Staff Car Park expansion
Buses	Dedicated bus zone to allow for
Taxis	Dedicated taxi zone to allow for
Rental vehicles	Rental Car Park expansion
Future technology	Adopted and implemented within developed

afety modifications

DS access point safety modifications

BD bus service

ifications

ling forecourt

ting short and/or long-term parking, public pick-up/ hare

expanded services

expanded services

n specific ground transport facilities as they are

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INFRASTRUCTURE DEVELOPMENT PLAN

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The unconstrained development of existing airport infrastructure is paramount to Launceston Airport's planned long-term growth. APAL is committed to ensuring the water, sewerage, stormwater drainage and electrical supply infrastructure can support this future growth. Strategic planning for risk management, maintenance, extensions and renewing this infrastructure has been a key focus during this master planning process.

The objectives of the Infrastructure Development Plan are to provide an overview of:

- Information on existing supplies
- System management and maintenance
- Risk mitigation measures

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- Proposed extensions and works
- Strategies for the introduction of new technologies.

In respect of possible future development in the Aviation Support and Freight Precinct, infrastructure requirements will be dependent upon the nature of the development. APAL will develop appropriate arrangements for servicing this area as the need arises, in consultation with relevant utility providers.

10.2 WATER SUPPLY

10.2.1 EXISTING INFRASTRUCTURE

Water is supplied from the TasWater trunk main on Evandale Road via multiple connection points to two main areas of the airport:

- The terminal and maintenance compound and the Sharp Hangar (Building 92) which is supplied via two main domestic feeds
- Most of the buildings along the southern apron which are supplied individually.

The terminal area has a dedicated fire ring main servicing the terminal building and Airservices Aviation Rescue Fire Fighting facility. This supply is backed by a 225kL reserve tank and two 90kL reserve tanks. Launceston Airport has recently separated the fire mains from the domestic supply to improve reliability and compliance with fire safety standards.

A reticulated ring main supplies the terminal area and maintenance compound which includes some remnant fire hydrants not covered by the dedicated fire mains. These will eventually be replaced as the fire mains are extended throughout the built up areas. A hydrant replacement program will be actioned if required in the future.





10.2.2 SYSTEM MANAGEMENT AND MAINTENANCE

APAL has an asset management system in place to maintain the water supply for the airport. This system includes routine inspection, testing, maintenance and cleaning of water supply infrastructure. Asset condition and usage is used to prioritise infrastructure enhancement or upgrade, and informs plans to replace ageing infrastructure. Under this system, APAL has identified and subsequently undertaken a number of water infrastructure improvements over recent years to ensure continuity of water supply.

10.2.3 RISK MITIGATION

APAL's maintenance strategy is risk-based and is developed to manage the risk of infrastructure failure.

A secondary domestic water tank exists on-site to provide a backup water supply should the main from TasWater fail.

A strict maintenance program exists in accordance with Australian Standard AS1851. This includes pressure testing of the fire main every five years and maintenance of the valves every six months.

10.2.4 ACCOMMODATING GROWTH

For future airport expansion, additional TasWater connections will be investigated as necessary. TasWater is undertaking domestic water supply growth works periodically to ensure the Translink Precinct and airport are appropriately accommodated.

10.2.5 WATER CONSERVATION MEASURES

Launceston Airport seeks to be a responsible water user through managing its water resource sensibly and efficiently. While the region is not affected to the extent of other states by water shortages, there is a moral responsibility to reduce water wastage. There exists a programmed watering system which feeds the main gardens. This is a water-saving initiative and this is now the standard for all new landscaping. Water-saving initiatives that have recently been introduced include:

- Ongoing evaluation of water use for general garden and grassed areas to minimise water consumption
- Automatic taps in bathrooms
- Sensors in urinals and water-saving toilets installed throughout the terminal
- Landscaping proposals consider the utilisation of native species which need limited water.

10.3 SEWERAGE

10.3.1 EXISTING INFRASTRUCTURE

The airport system consists of four pump stations and one large gravity system feeding to a sewage transfer station located adjacent to Taxiway Alpha. The transfer station delivers raw sewage by rising main to the TasWater sewerage main on Evandale Road. A new terminal sewer was installed in 2014 to improve efficiency. This additional capacity will remove a portion of the load from the existing sewer and provide capacity for future growth. Further upgrades will be implemented as required.

10.3.2 SYSTEM MANAGEMENT AND MAINTENANCE

APAL has an asset management system in place to maintain the sewage supply for the airport. This system includes routine inspection, testing and maintenance of sewerage infrastructure. Asset condition and usage data is used to prioritise infrastructure enhancement or upgrade.

10.3.3 RISK MITIGATION

APAL's maintenance strategy is risk-based and is developed to manage the risk of infrastructure failure. APAL has an alternative procedure to manage catastrophic failure of the system.

10.3.4 ACCOMMODATING GROWTH

The system has capacity to handle forecast development demand for the medium-term and only major developments could precipitate alternative direct connection to the TasWater sewerage main.

10.4 STORMWATER DRAINAGE

10.4.1 EXISTING INFRASTRUCTURE

Launceston Airport's stormwater catchment, including inflows from the off-airport subdivisions west of Evandale Road, discharges directly into Kellys Creek and Springvale Creek.

Refer to Figure 11.2 for details of the drainage systems.

90 per cent of the airport's stormwater catchment discharges to Kellys Creek.



The Kellys Creek catchment comprises three subcatchments including the following:

- The Translink industrial development and land to the crest of Devon Hills west of Evandale Road draining through the airport property to the north of the terminal
- Farmland adjoining the Translink development but draining south of the terminal via Hangar 10 drains
- Parts of the airport movement areas including the terminal and southern apron.

Stormwater from off-airport catchments enters the airport stormwater system via unlined drains along Evandale Road and three main piped inlets onto the airport land, two north of the terminal and one south. Thereafter, they are transferred via unlined drains to a central collection point to enter the airport trunk system.

The airport drainage system is an extensive series of open lined and unlined drains. Hardstand runoff is delivered by two trunk pipes located under the runway flowing to the outflow on the airport's north-eastern boundary, creating the headwaters of Kellys Creek.

The southern area of the airport, including parts of the runway and taxiway runway, drains via two outlets onto open paddocks and ultimately into Springvale Creek.







10.4.2 SYSTEM MANAGEMENT AND MAINTENANCE

APAL has an asset management system in place to maintain the stormwater assets for the airport. This system includes routine inspection and maintenance of the stormwater infrastructure. Asset condition and usage data is used to prioritise infrastructure enhancement or upgrade.

10.4.3 RISK MITIGATION

APAL's maintenance strategy is risk-based and has been developed to manage the risk of the stormwater system infrastructure failure.

A number of studies have identified limitations of the airport's stormwater drainage system to handle off-site rainfall events greater than five-year average recurrence interval (ARI). This means that the airport is subject to rare short duration flooding during extreme weather events around the Sharp Hangar area, spreading across the apron toward a low point on Taxiway Delta. APAL is investigating options of retention basins to slow flow and reduce the risk to airfield infrastructure.

The airport invests in upgrading stormwater capacity to meet its development needs, and actively monitors construction and development activity occurring beyond its boundaries which may give rise to increased stormwater inflow. The majority of sites in the Translink industrial development have now been required to fit retention basins to help mitigate the initial flow through to the airport system.

The state-owned and operated Evandale Road drains near the freight precinct have insufficient capacity to handle the storm surge resulting in potential flooding to hangars 10 and 17 and across the southern apron. APAL continues to maintain on-airport drains to reduce the risk as far as practicable. APAL will continue to work with Northern Midlands Council to improve the stormwater quality and quantity inflow onto airport property to improve the water quality flowing onto the airport site and subsequently to Kellys Creek. APAL has continued to provide support to the Council in seeking grant funding for improvements in stormwater detention infrastructure upstream of the airport.

10.4.4 CLEAN WATERWAYS

As part of the airport entrance and car park upgrade, litter traps were installed and are subject to regular maintenance. This has significantly reduced the rubbish and litter flowing off-airport into Kellys Creek.

Further information on stormwater quality and management can be found in Section 11: Environment Strategy.

10.4.5 ACCOMMODATING GROWTH

APAL continues to monitor development both on- and off-airport and continues to work with stakeholders to limit the impact of major flooding events. APAL will continue to upgrade on-airport infrastructure to better manage airport stormwater flows where necessary.





10.5 **ELECTRICITY**

10.5.1 EXISTING INFRASTRUCTURE

The existing electricity supply for buildings and assets north of Building 1 is supplied by a single 22kV feed from TasNetworks' distribution system. Buildings south of Building 1 have individual connection points to the TasNetworks feeder.

APAL operates and maintains its own high voltage electrical distribution infrastructure within the airport site. The network consists of a central switchboard feeding five main substations.

10.5.2 SYSTEM MANAGEMENT AND MAINTENANCE

Launceston Airport has an asset management system in place to maintain the electricity assets for the airport. This system includes routine inspection, testing and maintenance of electricity infrastructure. Asset condition and usage is used to prioritise infrastructure enhancement or upgrade.

10.5.3 **RISK MITIGATION**

APAL's maintenance strategy is risk-based and has been developed to manage the risk of infrastructure failure.

Four diesel generators are installed at the airport to provide backup power to essential operational areas including the terminal building, airfield lighting, navigational aids and critical maintenance areas for loss of the 22kV supply.



10.5.4 ACCOMMODATING GROWTH

The existing 22kV supply has sufficient capacity to handle forecast incremental development. Consideration will be given to installing a second 22kV supply point, should capacity increase to a point where the load could not be sustained by an upgrade to the existing supply point. Significant development on the airport site may require additional off-airport network capacity and associated infrastructure, with government support. APAL will work with relevant agencies/providers to facilitate this as the need arises.

10.5.5 ENERGY EFFICIENCY AND RENEWABLE ENERGY

The Environment Strategy sets a target to reduce energy consumption and greenhouse gas emissions, to enable APAL to progress toward carbon neutrality. Section 11.4 of the Master Plan further details APAL's Energy Management and Climate Change response.

10.6 TELECOMMUNICATIONS

10.6.1 EXISTING INFRASTRUCTURE

In addition to multiple Telstra copper connections between the exchanges and the airport, multiple independent optical fibre connections exist to supply communication services to the airport. Onsite, the communications network is utilised for telephone, LAN, security and other services and is regularly extended and upgraded to suit the needs of the airport and its tenants.

Launceston Airport is currently covered by multiple mobile network towers, located within close proximity to the airport. Multiple mobile reception connection points are located within the terminal. NBN infrastructure has been installed along Evandale Road for use by businesses within the area.

10.6.2 SYSTEM MANAGEMENT AND MAINTENANCE

APAL has an asset management system in place to maintain the communications assets for the airport. This system includes routine maintenance of communications infrastructure. Asset condition and usage data is used to prioritise infrastructure enhancement or upgrade.



10.6.3 RISK MITIGATION

APAL's maintenance strategy is risk-based and has been developed to manage the risk of infrastructure failure. APAL has multiple backup systems and redundancy built in to ensure system stabilisation and to maintain connections.

10.6.4 ACCOMMODATING GROWTH

APAL will upgrade communication network systems as required to accommodate growth including servicing internal airport user needs. APAL continues to work with mobile providers to satisfy their growth.

10.7 GAS

10.7.1 EXISTING INFRASTRUCTURE

Launceston Airport currently uses LPG gas for terminal heating and food preparation within the retail zones. Gas is stored in tanks on-site. Mains gas has been investigated and is not currently a viable option.

10.7.2 SYSTEM MANAGEMENT AND MAINTENANCE

APAL has an asset management system in place to maintain the assets that belong to the airport. The tanks are maintained and inspected by the supplier.

10.7.3 RISK MITIGATION

APAL's maintenance strategy is risk-based and has been developed to manage the risk of infrastructure failure. In an effort to minimise supply risk and reduce greenhouse emissions, APAL is currently investigating options to replace the terminal gas heating system with an integrated electricitypowered heating and cooling system.

10.7.4 ACCOMMODATING GROWTH

APAL will continue to work with the supplier to ensure tank capacity meets the airport demand, both now and into the future.





ENVRONMENT STRATEGY



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11.1 **OVERVIEW AND OBJECTIVES**

The Environment Strategy is the principal document to ensure the responsible management of environmental risks and resources at Launceston Airport. This strategy is divided into categories of environmental aspects. Within each of these categories, objectives are outlined and measurable actions and targets are identified.

Final responsibility for environmental management at Launceston Airport lies with the APAL Board, the General Manager and appointed employees. All airport staff and businesses are required to meet the requirements of the Airports Act as part of their daily operations.

This Environment Strategy is the fifth strategy developed for managing environmental issues arising from the activities and operations at Launceston Airport. This Environment Strategy replaces the 2015 strategy developed by APAL in accordance with the Airports Act and the *Airports* Regulations 1997 and the Airports (Environment Protection) Regulations 1997.

While Launceston Airport has a legislated and social responsibility to effectively manage broad environmental issues across its precincts, airport tenants that sub-lease sections of the airport land and/or building space from APAL are directly responsible for their organisation's environmental performance, including their sub-lessees, contractors and subcontractors.

Figure 11.1 provides an overview of the environmental and heritage values of Launceston Airport.

11.1.1 LAUNCESTON AIRPORT'S **ENVIRONMENT STRATEGY OBJECTIVES**

The objectives of the Environment Strategy are to:

- Continually improve environmental management practices
- Ensure Aboriginal and historic heritage sites are protected
- Ensure strong stewardship of the physical environment
- Meet all compliance obligations and maintain the goodwill of regulators, passengers and the community
- Future-proof the environmental value of the site.

These objectives have been developed to provide overall direction to the strategy and encompass multiple environmental aspects over which the airport has an impact (in Table 11.1). Each environmental aspect represents a grouping of environmental management considerations with a common focus that are used to manage the airport's environmental impacts. These aspect groupings are useful for day-to day implementation of the strategy via the airport's Environmental Management Framework.

FIGURE 11.1



TABLE 11.1 RELATIONSHIP BETWEEN OVERALL STRATEGY OBJECTIVES AND ENVIRONMENTAL ASPECTS

ASPECTS	OVERALL OBJECTIVES				
	Continually improve environmental management practices	Ensure Aboriginal and historic heritage sites are protected	Ensure strong stewardship of the physical environment	Meet all compliance obligations and maintain the goodwill of regulators, passengers and the community	Future-proof the environmental value of the site
Environmental management	V	V	V	V	v
Energy management and climate change	~			V	~
Water consumption management	V		V	V	v
Water quality – surface water and groundwater	~		V	V	~
Waste management	V		V	V	~
Biodiversity and conservation management	V		V	V	~
Land management	V		V	V	v
Ground-based noise	~		~	~	~
Air quality	~		~	~	v
Cultural and historic heritage	~	~		~	
Hazardous materials	V		~	V	~

Note: any air quality impacts, noise impacts and greenhouse gas emissions that are directly attributable to aircraft are subject to different legislation and are outside of the airport's direct operational control. These aspects are therefore outside the scope of the Environment Strategy.

11.1.2 HISTORY

The original inhabitants of the airport site and surrounds were Aboriginal people known to belong to the North Midlands Nation. This 'tribe' or 'language unit' consisted of several bands who ranged from the mouth of the Tamar Estuary in the north, to St. Peters Pass in the South.

The district was first visited by Europeans in 1806 and land granted to David Gibson in 1809. The land was primarily used for grazing sheep.

The Home Territories Office purchased the airport site (Western Junction Aerodrome) in 1929, becoming the first official Commonwealth aerodrome in Tasmania. The first commercial flights were made by Holyman Bros Ltd in 1932 to Flinders Island.

The aerodrome became a Royal Australian Air Force (RAAF) training base in 1940 and trained more than 1,800 personnel until the RAAF departure in 1946 after World War II.

A major redevelopment was undertaken by the Commonwealth Government in the early 1960s that included a new terminal, apron and lengthening of the runway and taxiway system. The works included extensive landscaping of the terminal area.

The airport was corporatised in 1988 under the Federal Airports Corporation. In May 1998, with the privatisation of airports in Australia under the Airports Act, the lease was purchased by APAL.

11.1.3 REQUIREMENTS OF THE AIRPORTS ACT 1996

In accordance with the requirements under the *Airports Act 1996*, the Launceston Airport Environment Strategy must include:

- Launceston Airport's objectives for the environmental management of the airport
- The areas (if any) within the airport site which Launceston Airport, in consultation with state

and federal conservation bodies, identifies as 'environmentally significant'

- The sources of environmental impact associated with airport operations
- The studies, reviews and monitoring to be carried out by Launceston Airport in connection with the environmental impact associated with airport operations
- The time frames for completion of those studies and reviews, and for reporting on that monitoring
- The specific measures to be carried out by Launceston Airport for the purposes of preventing, controlling or reducing the environmental impact associated with airport operations
- The time frames for completion of those specific measures
- Details of the consultation undertaken in preparing the strategy (including the outcome of the consultation)
- Such other matters (if any) as are specified in the relevant regulations.

The environmental aspects addressed in the Environment Strategy are:

- Environmental management
- Energy management and climate change
- Water consumption management
- Water quality surface water
- Water quality groundwater
- Waste management
- Biodiversity and conservation management
- Land management
- Air quality
- Cultural and historic heritage
- Ground-based noise
- Hazardous materials.

11.1.4 LEGAL BASIS FOR AIRPORT ENVIRONMENT STRATEGY (AES)

Once the AES is approved by the Minister for Infrastructure, Transport and Regional Development (the Minister), Launceston Airport and all airport-based businesses including tenants and contractors are required to take all reasonable steps to meet the requirements outlined in the AES. The Commonwealth's Airport Environment Officer (AEO) can enforce these requirements.

A copy of the AES is available for all tenants, contractors and current business partners once approved by the Minister and during the strategy period for all new tenants, contractors and business partners wishing to operate on Launceston Airport.

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11.2 STAKEHOLDER CONSULTATION

As part of the formal Master Planning process, Launceston Airport has sought input from the following stakeholders for the Airport Environment Strategy:

- The Commonwealth Department of Infrastructure, Transport, Regional Development and Communications, whose representative

 the Airport Environment Officer – provided detailed feedback on an early exposure draft of this document
- The Commonwealth Department of Agriculture, Water and the Environment was present when a presentation of the exposure draft of the document was made in August 2019, and through formalised feedback on the exposure draft
- The Tasmanian Department of Primary Industries, Parks, Water and Environment, who have provided feedback on an early exposure draft of this document
- The Community Aviation Consultation Group
- Community, state and Commonwealth agencies

- Local government authorities
- Airservices and CASA
- PFAS Round Table that includes state department representation, APAL and Airservices.
- Meetings with local environmental groups
- Through the development of the Launceston Airport Aboriginal Heritage Management Plan (Aboriginal Land Council Tasmania; Aboriginal Elders Council of Tasmania; Aboriginal Heritage Tasmania).

Further, this strategy has drawn extensively on the ongoing stakeholder engagement that forms a vital component of the operation of Launceston Airport's Environmental Management System (EMS). Specifically, this has involved:

- Consultation with Department of Infrastructure, Transport, Regional Development and Communications in relation to managing approvals and referral processes
- Regular discussions with Tasmanian EPA, the Tasmanian Department of Primary Industries, Parks, Water and Environment in relation to managing environmental impacts
- Discussions with Aboriginal Heritage Tasmania in relation to reviewing (Cultural) Heritage Management Plan and implementing recommendations
- Consultation with contractors, tenants, monitoring professionals and technical advisors.

A copy of the final Environment Strategy will be available to tenants, contractors, airport users and the local community via the Launceston Airport website. This will be undertaken within three months of the Master Plan's approval by the Minister.

All groups will be notified of its finalisation via internal and external communications that will include relevant web links. A limited number of hard copies will also be made available. More information about the consultation in the development of the Airport Master Plan is provided in Section 3 of the Master Plan.



11.3 ENVIRONMENTAL MANAGEMENT

Key Objective:

Launceston Airport will continue to develop and implement an EMS aligned with the requirements of the international standard ISO 14001:2015-Environmental Management Systems. This standard helps organisations comply with the relevant environmental legislation, minimise negative environmental impacts and provide for continuous improvement in their environmental performance.

11.3.1 OVERVIEW

The goal of Launceston Airport's Environment Policy is for the airport to be an environmental leader in the port sector (airport and maritime) throughout Tasmania.

This strategy has been developed to provide direction to Launceston Airport in achieving its Environmental Policy goal and in doing so, satisfy the relevant requirements of the Airports Act.

11.3.2 ENVIRONMENTAL LEGISLATION

Launceston Airport is situated on Commonwealth land and as such, is subject to Commonwealth environment legislation to regulate both its own business operations and those of its business partners including airlines, tenants and retail concessionaires. The principal Commonwealth Acts and Regulations relevant to the airport are:

- Airports Act 1996 (Cth)
- Airports (Environment Protection) Regulations 1997(Cth)
- Airports (Building Control) Regulations 1996 (Cth)

- Airports Regulations 1997 (Cth)
- Environment Protection and Biodiversity Conservation Act 1999 (Cth)
- Environment Protection and Biodiversity Conservation Regulations 2000 (Cth).

11.3.2.1 Airports Act 1996

The *Airports Act 1996* (Airports Act) sets up a system for regulating airports and the airport-lessee companies (ALCs) whose business is to run the airports. The ALCs are required to adhere to the requirements of the Airports Act that deal with environmental management and standards at airport sites.

11.3.2.2 Airports (Environment Protection) Regulations 1997

The Airports (Environment Protection) Regulations 1997 (AEPR) outline the general duties that must be undertaken by an airport-lessee company. Some of the activities undertaken by APAL to meet the regulations include the completion of the Annual Environment Report (AER), adoption of a comprehensive EMS, and monitoring of surface water, soil and groundwater quality.

11.3.2.3 Environment Protection and Biodiversity Conservation Act 1999 and Environment Protection and Biodiversity Conservation Regulations 2000

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) and Environment Protection and Biodiversity Conservation Regulations 2000 are the primary legislation for the protection of environmental matters on Commonwealth land. They outline the responsibilities and implications for management of significant flora, fauna species and heritage on Commonwealth airports.

11.3.2.4 Applicable State Legislation

In addition to Commonwealth requirements, Launceston Airport is required to comply with Tasmanian state legislation to the extent its activities impact surrounding Tasmanian air, land and waterways. The principle legislation is the *Environment Management and Pollution Control Act 1994.* This is applicable for receiving bodies of surface water, waste, ground-based vehicle emissions and hazardous materials.

11.3.3

DEPARTMENT OF INFRASTRUCTURE, TRANSPORT, REGIONAL DEVELOPMENT AND COMMUNICATIONS

The Commonwealth Department of Infrastructure, Transport, Regional Development and Communications (DITRDC) provides policy advice to its Minister and delivers a variety of programs on behalf of the Commonwealth Government. It is DITRDC's role to advise the government on the policy and regulatory framework for federallyowned Australian airports and the aviation industry.

The Commonwealth Government has appointed an AEO and an Airport Building Controller (ABC) to Launceston Airport. The roles of these position holders are as follows:

11.3.3.1 Airport Environment Officer

The AEO is the Authorised Officer under the Airports Act, appointed by the Secretary of DITRDC to administer the AEPR. DITRDC oversees the AEO and retains overall responsibility for the enforcement of the Airports Act and the associated Regulations.

11.3.3.2 Airport Building Controller

The role of the ABC is to administer the Airports (Building Control) Regulations 1996, ensure that the National Construction Code is adhered to and advise airport operators on building control issues.

11.3.4 ENVIRONMENTALLY SIGNIFICANT AREAS

The Airports Act 1996, does not define 'environmentally significant areas'. While there are a number of locations across the airport estate that are considered to have some ecological or heritage value, for the purposes of this Environment Strategy, and this Master Plan, only Building 26 (the Launceston Air Traffic Control tower) is considered to be 'environmentally significant'. This building was listed as a Commonwealth Historic Heritage Place (place ID: 106121) in 2016. The tower 'is of historical significance in a national context as a rare and representative surviving example of a post-World War II era control tower equipped to an international standard following guidelines devised by the International Civil Aviation Organization.

Areas previously identified as 'environmentally significant' in the 2015 Master Plan are now described in their respective sections of this Environment Strategy. These include:

- The Airservices ARFFS former fire training ground pond that is the location of previous recordings of the Green and Gold Frog *(Litoria raniformus)* (Section 11.9.3)
- A small area (likely individual specimen) northeast of the main runway that is the site of the state listed Silky Bush Pea *(Pultenaea prostrata)* (Section 11.9.4)
- The northern area of the southern apron is the location of several hangars and buildings that have some historical heritage value (Section 11.12)
- The terminal gardens which are considered to have some historical heritage value as the first formally designed industrial native gardens (Section 11.12).

While the above areas are not considered 'environmentally significant' for the purposes of this Environment Strategy, or this Master Plan, APAL will have due regard for their ecological and heritage values whenever their locations will potentially be affected by building or development works.

11.3.5 LAUNCESTON AIRPORT ENVIRONMENT MANAGEMENT

11.3.5.1 Environment Policy

The Launceston Airport General Manager and the Airport Safety and Environment Committee (made up of internal management and environment staff) are responsible for annually reviewing the Environment Policy. The policy aligns with the APAL environmental philosophy and the most recent policy is dated August 2018.

All Launceston Airport employees and agents are responsible for compliance with the Environment Policy.

The policy is made available to all airport staff, tenants and the general public via the Launceston Airport website.

APAL maintains an EMS to manage environmental impacts at Launceston Airport. The Launceston Airport EMS is not independently certified but is aligned with the ISO14001:2015 standard.

The EMS consists of the following elements:

- Context of the organisation
- Leadership
- Authorities
- Planning
- Support
- Operation
- Performance evaluation

11.3.5.2 Environmental Planning – Setting **Objectives and Targets**

Setting objectives and targets enables APAL to meet its Environmental Policy commitments.

The environmental objectives of Launceston Airport are linked to the environmental aspects of airport operations, the APAL Code of Environmental Practice and Environment Policy. These are supported by Operational Environmental Management Plans (OEMPs) and Construction Environmental Management Plans (CEMPs) which are prepared for operations and construction projects across the airport.

Environmental objectives and targets are contained in OEMPs and CEMPs. These objectives and targets are subject to management review at frequencies relevant to the scale and risk profile of the operation or project.

11.3.5.3 Implementation and Operation

Implementation of the EMS is the responsibility of the General Manager at Launceston Airport with implementation undertaken by the Manager Environment and Sustainability, Melbourne and Launceston, and the APAL Environment Advisor. APAL department managers and employees have clear responsibilities and reporting requirements under the EMS.

Launceston Airport engages contractors to undertake a wide range of activities and services on the airport site. It is the responsibility of the APAL departmental managers to ensure that sound environment practices are followed by such contractors. This is enforced through the APAL Code of Environmental Practice, Environment Policy, Environment Strategy contractual arrangements for services or tenancies, the contractor management system, the Aerodrome Manual, and the Launceston Airport induction procedures. These documents provide advice on the environmental requirements of the airport, policy, emergency contact numbers and location of spill equipment.

Environmental monitoring is a critical component of Jaunceston Airport's Environmental Management System.

LAUNCESTON AIRPORT MASTER PLAN 2

For construction projects with a potential for environmental impact, the contractor is required to prepare a CEMP that satisfies the requirements of Launceston Airport and the AEO. The CEMP is reviewed by the Environment, Health and Safety Advisor before work begins. The CEMP is the overarching document to manage environmental risk during the life of the project and refers to the environmental management aspects listed in the Environment Strategy.

There are some areas of the airport which are not operated in connection with airport operations. The environmental performance and compliance of these areas is managed via the EMS and corresponding inspections.

11.3.5.4 Environmental Management Plans

A risk-based approach has been applied to identify the operations requiring a level of environmental management or OEMPs. Two tenants require OEMPs for their activities; these are the ExxonMobil bulk refuelling site and Airservices Australia. The OEMPs are required to be reviewed, revised annually and submitted to APAL for approval.

Tenant activities, Launceston Airport maintenance facilities and construction projects may also require EMPs to manage environmental risk from time to time; dependent on the complexity of the project and specific activities involved.

11.3.6 ENVIRONMENTAL MONITORING

Under Regulation 6.02 of the AEPR, the airport is required to monitor the levels of pollution (if any) present in the air, water or soil at the airport and the level of ground noise generated at the airport in accordance with the Environment Strategy. Environmental monitoring is a critical component of Launceston Airport's EMS to evaluate compliance, identify issues and opportunities, obtain information about environmental performance and encourage continual improvement.

The Environment Strategy reflects the framework of the AEPR and includes the monitoring and targeted audits to manage risks and inform airport decisionmaking. If monitoring identifies non-compliance, Launceston Airport undertakes necessary corrective actions. Where appropriate, the public display of data will demonstrate the airport's efforts to mitigate environmental impacts.

Launceston Airport continues to refine and implement its environmental monitoring program. All monitoring activities and monitoring advice is provided by a range of suitably qualified technical specialists. In addition to monitoring effects within the airport site, Launceston Airport also monitors some aspects that can affect the surrounding environment.



Monitoring programs undertaken in accordance with the Environment Strategy are listed in Table 11.2.

11.3.6.1 Environmental Site Registers

In accordance with Regulation 6.02(3) of the AEPR, APAL has developed and is maintaining an Environmental Site Register. The register comprises a number of tables that include results of water, soil and air monitoring, environmental site assessment details, Aboriginal and historic heritage sites, information on any remedial plans, and any other details on occurrences of environmental significance.

Launceston Airport has also developed an aspects impact register as part of the EMS. This involved a review of operations and tenants and included a risk assessment to determine where site-specific OEMPs were required.





TABLE 11.2 LAUNCESTON AIRPORT'S ONGOING ENVIRONMENTAL MONITORING PROGRAM

ENVIRONMENTAL ASPECT	MONITORING TYPE	SPECIFIED FREQUENCY
Environmental management	Reporting to Safety, Security and Environment Steering Group and APAC Board	2-monthly
	Internal EMS conformance audit	Annual
Sustainability in planning and design	Qualitative review of the implementation of the sustainable development principles in new developments with a value over \$10M	Following project completion
	Potable water use	Monthly
En annual annhan	Gas use	Monthly
Energy and carbon	Fuel use	Monthly
	Electricity use (overall)	Monthly
	Electricity use (sub-meters)	Ongoing
	Fuel use (vehicles)	Monthly
Hazardous materials	Underground storage tank (UST) integrity testing by tenants which have USTs	Annual
	Inspections of hazardous materials storage areas	Annual
Cultural and historical heritage	Site monitoring	As required
Land and water management	Soil contamination testing of major construction activities (project value over \$10M)	Prior to works commencing
	Soil erosion	Monthly during CEMP inspections
	Stormwater quality	6-monthly
	Groundwater quality	Annual
Biodiversity and	Airside wildlife monitoring	Daily
conservation	Sitewide flora and fauna update survey	End 2023
Air quality and	Air quality	As required
ground-based hoise	Ground-based noise	As required
Waste management	Bin room inspections	6-monthly
	APAL internal office waste audit	6-monthly

11.3.7 TRAINING, AWARENESS AND COMPETENCE

APAL promotes environmental awareness through training, staff meetings, the Airport Safety and Environment Committee, tenancy inspections, and inductions. The airport administers an effective environmental training program through environmental inductions, environmental awareness training and job-specific environmental training.

APAL employees whose work may result in a significant impact to the environment are expected to be competent in that work and to have received appropriate training. An effective environmental awareness and training program is essential for achieving good environmental performance.

APAL delivers two levels of environmental training:

1. Environmental Induction Training – to introduce new employees to APAL's Environment Policy, the EMS and the Environment Strategy.

2. Environmental Awareness Training – to update employees with developments in APAL's Environment Policy, the EMS, the Environment Strategy and key environmental management initiatives.

To support the ongoing commitment to the environment, an environmental awareness program has been developed and is presented to staff and tenants. The program covers issues such as:

- Environment and heritage awareness
- Environmental legislation
- Key environmental issues
- Biodiversity and conservation
- Contaminated land management (hydrocarbons and per- and poly-fluoroalkyl substances (PFAS))
- Environmental performance
- Emergency response
- Discharges to surface water and sewer
- Hazardous materials and storage
- Reporting requirements.

APAL's tenants and other operators are required to undertake relevant training related to the environmental risks associated with their operations. These requirements are documented within tenants'/operators' OEMPs and/or CEMPs. Compliance is verified via APAL's inspection and audit program.

Contractor managers (i.e. APAL employees who oversee work undertaken by a contractor) are responsible for obtaining assurance that contractors undertaking work at Launceston Airport are appropriately trained and competent. Contractors working at the airport must undergo an induction, which includes a section that outlines their responsibilities under the EMS.

11.3.8 AIRPORT ENVIRONMENTAL DOCUMENTATION AND COMMUNICATION

APAL has procedures in place to make sure that environmental awareness and procedural information is received and responded to by staff and tenants. Environmental progress (e.g. progress of the Environment Strategy, legislative requirements and airport environmental initiatives), emergency procedures and operational changes are made available through electronic mail-outs, and the Launceston Airport website.

11.3.9 ENVIRONMENTAL INCIDENTS AND EMERGENCY RESPONSE

Launceston Airport has a series of environmentspecific contingency plans in the airport emergency response procedures for accidents and spills for both on-airport grounds and along Evandale Road. The plans are periodically updated to ensure they are relevant to the current operating procedures and/or distributed to relevant staff and tenants. An Environmental Response Unit (ERU) consisting of a large towable trailer is fitted with oil absorbent material, booms, protective clothing and equipment to cater for spills and emergencies.

11.3.10 CHECKING AND CORRECTIVE ACTION

APAL uses a number of systems to manage and monitor performance, non-conformance and corrective action. These include:

- Internal audits to verify implementation of the EMS and EMPs
- Regular inspections to verify implementation of CEMPs during construction works
- Environmental compliance inspections of tenant operations
- Reviews that monitor the progress of the Environment Strategy action items, the effectiveness of the Environment Policy, the EMS, tenants' environmental performance and compliance with legislation
- Management review of environmental and heritage reports and actions.

11.3.11 ENVIRONMENTAL REPORTING REQUIREMENTS

11.3.11.1 Annual Environmental Reports

Under the AEPR the airport-lessee company is required to report on the environmental performance of the airport on an annual basis. The report is provided to the Secretary of DITRDC for review.

11.3.12 STRATEGY ACTIONS

The eight-year Action Plan lists the key environmental issues identified in this strategy (Table 11.4). The strategy actions provide continuity as required from the previous 2015 strategy. Key actions completed during the previous Environment Strategy can be viewed in Table 11.3 with the 2020 Strategy Actions in Table 11.4.



11.4 ENERGY MANAGEMENT AND CLIMATE CHANGE

Key Objective:

To reduce energy consumption and greenhouse gas emissions and enable APAL to progress towards carbon neutrality.

11.4.1 OVERVIEW

Launceston Airport uses a low to medium amount of energy for a site that integrates semi-industrial and transport uses.

Major sources of energy use relate to electricity and gas used for the operation of terminal building which is significantly influenced by the relative outside air temperature and numbers of passengers.

11.4.2 ENERGY USE

Similar to the last Environment Strategy, the primary energy uses at Launceston Airport remain:

- Airfield operations, including lighting
- Baggage handling systems
- Car park and street lighting
- Lighting, heating and cooling of buildings and terminals.

Other energy uses include:

- Fuel usage for APAL vehicles (diesel)
- Backup generators (diesel).

ENVIRONMENT STRATEGY

TABLE 11.3 COMPLETED ENVIRONMENTAL MANAGEMENT ACTIONS FROM THE 2015 AES

SUMMARY OF KEY ACTIONS COMPLETED FROM THE 2015 AES

Appointment of a dedicated environment resource to provide immediate assistance and advice to APAL staff, tenants and contractors on matters relating to the environment.

Development and implementation of an APAL Waste Management Plan.

The firefighting and domestic water mains were separated.

Separation of circulation of the Environment Strategy to all staff and tenants, and to all those people and agencies involved in the consultation program.

Update of progress of the Environment Strategy and advised tenants and staff of performance.

Annual review of the strategy against the performance indicators with the AEO.

Provided Environmental training for staff, which included:

- Environment and heritage awareness
- Discharge to surface water and sewer • Hazardous materials and storage
- Environmental legislation • Key environmental issues

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• Reporting requirements.

Reported the results of environmental testing regimes and unusual events to the AEO.

Held Airport Safety and Environment Committee meetings.

Monitored water quality of the inflow and outflow drains on the airport and cooperated on water quality objectives with regulatory authorities.

Completed a flora and fauna assessment in early 2019 to verify compliance with the EPBC Act and State Department of Primary Industries, Parks, Water and Environment's Threatened Species List.

Assessed all fill materials before acceptance onto Launceston Airport land with the requirement to provide 'clean fill' certificates.

Formation of and participation in the PFAS Round Table meetings, with Airservices and applicable regulators.

	2020 ACTION NUMBER	PROPOSED ACTIVITY	TIME FRAME
	1	Continue to maintain EMS in alignment with IS014001:2015.	Ongoing
- Andrews	2	Undertake an internal audit of the EMS to drive continuous improvement.	Annual
	3	Ensure copies of Environment Strategy are available to employees, tenants, contractors and other stakeholders, via the APAL website.	2020 onwards
WER -	4	Prepare an Annual Environment Report.	Annual
	5	 Undertake annual environmental awareness training for APAL employees that includes: incident reporting and spill response procedure hazardous material storage and handling waste management biodiversity and heritage pest plants and animals wildlife management dust and noise management erosion and sediment control progress reports on performance. 	Annual
	6	Conduct quarterly Airport Safety and Environment Committee Meetings.	Quarterly
1	7	Undertake annual inspections of tenants to ensure their environmental compliance with the AEPR.	Annual
S. W.	8	Develop an APAL Environment Management Plan that documents APAL's minimum environmental management requirements.	2020

TABLE 11.4 STRATEGY ACTION PLAN 2020

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11.4.3 ENERGY MANAGEMENT

Despite an increase in passenger and business activity at Launceston Airport, greenhouse gas (GHG) emissions have declined 5.4 per cent (in absolute numbers) over the period 2013/14 to 2017/18 (Graph 11.1). The kgCO2 equivalent per passenger has reduced by 15 per cent over the same period.

The reduction would have been greater were it not for several factors contributing to a 25 per cent increase in APAL attributable carbon emissions in 2017/2018, including:

- The majority of the Qantas portion of LPG consumption has transferred to APAL due to terminal lease changes
- The terminal expansion and reconfiguration project have led to higher consumption of space heating
- The electricity grid factor for Tasmania increased by 60 per cent during the 2017/2018 reporting period. The grid factor is the default emissions factor for purchased electricity as per the National Greenhouse and Energy Reporting (NGER) Scheme method. For Tasmania, the grid factor varies each year depending on how much power Tasmania imports from the mainland.

In the previous Environment Strategy period APAL has undertaken numerous built environment and operational initiatives to reduce energy use and increase energy efficiency. This includes measures such as:

- Installation of upgraded automated window shades in the main terminal
- LED lighting replacement across the airport precinct, including but not limited to:
 - Departure lounges, toilets and corridors
 - Car parks
 - All gate areas

- The RPT apron, Sharp apron and freight aprons
- Main terminal central core, emergency lighting system, Movement Area Guidance signs.

APAL will continue to review its major sources of energy use and undertake relevant initiatives to reduce this where possible. Initiatives under consideration include a potential solar field project and more LED replacements, particularly the approach lights and taxiway lighting.

11.4.4 **OFFSETTING EMISSIONS**

Every year, APAL offsets its carbon emissions associated with its vehicles and staff flights through the purchase of carbon offsets. Where possible, these offsets are purchased from local (Tasmanian) accredited offset programs.

11.4.5 **REPORTING EMISSIONS**

Although Launceston Airport's carbon footprint is less than the National Greenhouse and Energy Reporting Act 2007 (NGER Act) reporting threshold, it is included as part of the APAC collective corporation performance, as per legislative requirements.

11.4.6 CLIMATE CHANGE

As well as managing the airport's current contribution to climate change, APAL acknowledges that it must adapt to current and future climate change risks, vulnerabilities and likely impacts.

APAL is committed to working toward a better understanding of climatic events that may potentially impact airport asset management and operations. Energy management and climate actions completed during the previous Environment Strategy can be viewed in Table 11.5 with the 2020 Strategy Actions in Table 11.6.



	TIME FRAME
e and investigate measures to	Ongoing
rt business partners and tenants to	Annual
for airside equipment, including in consultation with internal and	Ongoing
iciency strategies using information se assessment. Adopt actions dentified.	As required
ational Pollutant Inventory (NPI)	Annual

11.5 WATER CONSUMPTION MANAGEMENT

Key Objective:

Launceston Airport will continue to develop strategies to reduce and manage potable water consumption.

11.5.1 **OVERVIEW**

Launceston Airport seeks to be a responsible water user by managing its water resource sensibly and efficiently. While the region is not affected to the extent of other states by water shortage, there is a social responsibility to reduce water use.

11.5.2 MAJOR USES OF POTABLE WATER

The major uses of potable water on Launceston Airport include:

By APAL:

- Garden watering
- Bathrooms
- Cleaning and hygiene
- Kitchen facilities
- Construction and maintenance.

By tenants:

- Car rentals and washing
- Fire training activities.

11.5.3 WATER MANAGEMENT

Because the terminal gardens contain exotic species (azaleas, rhododendrons, etc.) they require watering through the summer months. A water timing system provides greater control of watering times and enables a small reduction in water usage. Watering timing has been changed to nighttime only, to reduce evaporation rates.

The potential for rainwater harvesting to water the gardens has been considered but is extremely difficult due to layout constraints.

The potential for rainwater tanks is being investigated at the light vehicle car wash station, in the compound area. This rainwater tank would allow the capture of 100kL of rainwater annually to supplement 500L per day of water used in the car wash. Water management actions completed during the previous Environment Strategy can be viewed in Table 11.7 with the 2020 Strategy Actions in Table 11.8.

ACHIEVEMENTS IN THE PREVIOUS FIVE YEARS SINCE 2015

Continued to monitor and implement water conservation measures. The firefighting and domestic water mains were separated. A main terminal water mains upgrade was executed. Watering of the terminal gardens changed to night-time only timers. TABLE 11.8 STRATEGY ACTION PLAN 2020 **2020 ACTION** NUMBER **PROPOSED ACTIVITY**

> Continue to investigate ways to minimise potable water consumption in collaboration with Launceston Airport business partners and tenants.



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TABLE 11.7 COMPLETED WATER MANAGEMENT ACTIONS FROM THE 2015 AES



TIME FRAME

Ongoing

11.6 WATER QUALITY – SURFACE WATER

Key Objective:

To identify and implement opportunities identified to improve water quality both upstream and downstream of Launceston Airport.

11.6.1 OVERVIEW

Waterways are an integral part of the natural environment. APAL aims to minimise the impact on both surface and groundwater by ensuring all reasonable and practical measures are undertaken during operations and development activities.

The majority of surface water leaves the airport into Kellys Creek and ultimately to the North Esk River, via Rose Rivulet. Both the inflows and outfall are regularly monitored and water quality tested. There is also a flow off-site from the south-east of the airport, which discharges into Springvale Creek.

Launceston Airport (along with the off-site Translink development to the west of the airport) forms the headwaters of Kellys Creek. Operations at the airport therefore have the potential to impact on the water quality flowing through the system.

APAL ensures that staff, contractors and tenants working at the airport are aware of their responsibility to alleviate the risks to surface water quality arising from their activities through contractual arrangements, environmental awareness training, OEMPs, CEMPs, environmental inspections and environmental incident response.

11.6.2 SURFACE WATER SYSTEM

Launceston Airport has two main outfalls that form the headwaters for Kellys Creek and to a lesser extent Springvale Creek. Both headwaters are usually dry over summer.

The Kellys Creek outfall receives approximately 90 per cent of the airport's surface water run-off while Springvale Creek receives the balance via the southern runway outlet and a number of small drains exiting the property from the grass strips to the north-east of the main runway. Both receive runoff from the catchment area rising to Devon Hills.

Stormwater run-off at Launceston Airport is managed through an extensive drainage network that includes vegetated swales, drainage pits, subsurface pipes and open drains. Site management practices such as effective spill response, construction site audits, erosion and sediment control, street sweeping and stormwater pit maintenance are implemented to minimise potential contaminants leaving the airport site.

Run-off from the Translink light industrial estate (not associated with the airport) flows through the airport via two main drains to combine at a single culvert on-airport before flowing beneath the runway system to exit to Kellys Creek. Figure 11.2 illustrates the airport surface water drainage layout.

Surface water pollutants are primarily associated with certain firefighting foams previously used at the airport (PFAS), heavy metals from aircraft operations, the road network, and fuel storage and use. APAL's surface water monitoring program found that levels of some contaminants were above adopted guidelines at a number of locations across the site. No unacceptable human health risks have been found on-airport and APAL continues to monitor water quality at and surrounding the airport to inform future management.

11.6.3 SURFACE WATER MONITORING

Regular monitoring of surface water inflows and the single outflow to Kellys Creek began in 1997.

Appropriately qualified professionals, trained in collection of samples, undertake monitoring of surface water. These are forwarded to a NATA accredited laboratory for analysis.

As the Translink development has grown, the potential impact on surface water quality has increased and is evident in recent testing of stormwater flowing into the airport. An increase in levels of oils and greases in surface water samples plus water-borne litter and turbidity has been noted.

To minimise the impact both on-airport and at the main Kellys Creek discharge point, APAL has installed a litter trap at one of the main drains inflowing the airport.

Figure 11.2 shows the location of the existing surface water quality monitoring sites and litter traps.

A dedicated covered vehicle wash down bay has been installed in the APAL maintenance compound. This facility has a triple interceptor to treat the waste water to remove oils, greases and surfactants and discharges to sewer.

11.6.4 KEY LEGISLATION

An airport must monitor the quality of surface water discharged at the airport, as stipulated in Regulation 6.02 of the AEPR, APAL continues to monitor the inflows and outflows. The Tasmanian EPA is the statutory regulator for the receiving waters, where Launceston Airport surface water is discharged.

Surface water quality actions completed during the previous Environment Strategy can be viewed in Table 11.9 with the 2020 Strategy Actions in Table 11.10.



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FIGURE 11.2 DRAINAGE & WATER MONITORING LOCATIONS



TABLE 11.9 COMPLETED SURFACE WATER QUALITY ACTIONS FROM THE 2015 AES

ACHIEVEMENTS IN THE PREVIOUS FIVE YEARS SINCE 2015

Completed site-wide investigation to identify sources and pathways for pollutants, including surface water sampling of PFAS.

Continued to monitor water quality of the inflow and outflow drains on the airport.

Cooperated with regulatory authorities on water quality objectives including the AEO and EPA Tasmania.

TABLE 11.10 STRATEGY ACTION PLAN 2020

2020 ACTION NUMBER	PROPOSED ACTIVITY	TIME FRAME
15	Continue to monitor surface water and cooperate with regulatory authorities in achieving water quality objectives.	6-monthly
16	Continue to upgrade and maintain the drainage system as necessary using a water-sensitive urban design, treatment train approach wherever possible.	Project- based
17	Ensure all CEMPs on projects identify environmental risks to water quality and the appropriate mitigation measures are in place to prevent/minimise environmental harm.	Ongoing



11.7 WATER QUALITY -GROUNDWATER

Key Objective:

To protect and monitor groundwater quality at Launceston Airport.

11.7.1 **OVERVIEW**

Launceston Airport has groundwater, subject to location, ranging from 2m to 12m below ground surface. The groundwater flow is predominantly to the north-east with a low seepage velocity. The nearest licensed water bore is located 2.4 kilometres to the north-west of the airport.

11.7.2 POTENTIAL SOURCES OF IMPACT **UPON GROUNDWATER**

The potential activities that could impact upon groundwater include:

- Aircraft and vehicle maintenance, fuel storage and fuelling activities (including those undertaken at hangars and ancillary workshops)
- Fuel storage and other sources of petroleum hydrocarbons
- Construction and refurbishment-related works
- Existing solid waste disposal areas and areas with interim containment of impacted soils
- Surrounding land-uses (industrial areas, agricultural uses).

Launceston Airport has two sites (commercial fuel areas) with underground storage tanks (USTs), neither of which are operated by APAL. There are four active above-ground storage tanks (ASTs) onsite associated with MobilExxon (1) and APAL (3), containing Avgas and diesel respectively.

APAL has a management procedure that requires all USTs to be monitored and regularly tested by the respective owners (ExxonMobil and Air BP) for leakage, as prescribed within their operations procedures and verified during annual APAL environmental inspections. A register of all existing and decommissioned tanks on-site is maintained.

To mitigate potential impacts on groundwater, Launceston Airport undertakes the following measures:

- Review of tenants' OEMPs to assess whether appropriate emergency response (including spill response) and management measures are in place
- Regular inspections and operational audits of active areas to verify existing management measures that are in place to mitigate potential risks
- Compulsory spill response training to relevant personnel
- Maintenance of existing infrastructure to minimise spills and uncontrolled discharges that could reach groundwater
- Ongoing monitoring of areas that are known to have contaminated groundwater
- Ongoing development and implementation of CEMPs that include measures to prevent groundwater contamination during construction projects
- Communication of existing groundwater information and identified sources of contamination to business operators and future operators.



11.7.3 MONITORING OF GROUNDWATER

Monitoring and managing groundwater is a key focus of Launceston Airport due to the longterm use of the site and historical use of firefighting foam chemicals (PFAS), oils and fuels. There are approximately 40 groundwater bores at the airport to monitor groundwater quality. APAL maintains and monitors 16 of these groundwater bores on an annual basis. Monitoring is also regularly conducted by tenants at high-risk sites where current or historical activities have led to groundwater contamination. Groundwater pollutants are primarily associated with PFAS, some metals, and hydrocarbons.

Groundwater management actions completed during the previous Environment Strategy can be viewed in Table 11.11 with the 2020 Strategy Actions in Table 11.12.

11.8 WASTE MANAGEMENT

Key Objective:

To reduce waste disposed to landfill from FY18 levels and optimise recycling at APALoperated facilities.

11.8.1 **OVERVIEW**

Waste is generated by both Launceston Airport and the operators on the precinct, including tenants, airlines, retailers, ground handlers, maintenance. engineering, construction and development.

11.8.2 WASTE MANAGEMENT

All operators on-airport are responsible for the correct storage, handling and disposal of their waste.

The waste types produced at Launceston Airport include guarantine waste, controlled waste (liquid and solid), foreign object debris, organic waste (food and vegetation), paper, cardboard, and food and beverage containers. Ad hoc waste types include scrap metal, construction and demolition waste, concrete and asphalt, electronics and computers, furniture, and office fittings.

APAL has implemented a recycling program to divert waste from landfill. The major contributors to this waste are retail concessionaires and the public using the terminal facilities.

TABLE 11.11 COMPLETED GROUNDWATER QUALITY ACTIONS FROM THE 2015 AES

ACHIEVEMENTS IN THE PREVIOUS FIVE YEARS SINCE 2015

Installation of 16 new groundwater monitoring bores to improve monitoring of site contaminants.

Annual groundwater monitoring has occurred at sites of known contamination.

Maintenance of the site register of groundwater monitoring bores.

TABLE 11.12 STRATEGY ACTION PLAN 2020

2020 ACTION NUMBER	PROPOSED ACTIVITY	TIME FRAME
18	Continue to complete annual groundwater monitoring; maintain and update the site register of groundwater bore locations.	Annual



APAL developed a Waste Management Plan in 2018 and its implementation is ongoing in collaboration with all airport users. Waste generated during FY19 is shown in Graph 11.2.

Due to the operations required at an airport, there are a number of potential waste-related issues:

- Inconsistent solid waste disposal by Launceston Airport operators, contractors and tenants
- Inappropriate storage of waste oils, chemicals and other hazardous waste materials
- Limited options and regulatory restrictions for the recycling and reuse of certain waste streams
- Waste water run-off from airport operations such as aircraft and vehicle wash down
- Generation of waste in an environment where many products must be used once then disposed of.



GRAPH 11.2 APAL WASTE MANAGEMENT ACTIONS FROM THE 2015 AES

LAUNCESTON AIRPORT MASTER PLAN 2020

Launceston Airport's Waste Management Plan documents the airport's commitment to reducing the quantity of waste generated. The plan covers all airport operations and applies to all individuals, employees and contractors conducting business activities at the airport.

There are limited on-site options for the management and treatment of most waste streams. Construction waste is recycled where possible, as is waste (non-weed) vegetation used as mulch across site. For projects on a large scale, concrete is crushed and reused on site as fill material or road base for gravel road upgrades.

Quarantine Risk Material is waste material (primarily food) discharged from interstate aircraft. It is transported by a registered operator to Remount Road landfill, operated by Launceston City Council.

Waste management actions completed during the previous Environment Strategy can be viewed in Table 11.13 with the 2020 Strategy Actions in Table 11.14.

11.9 **BIODIVERSITY AND** CONSERVATION MANAGEMENT

Key Objective:

To conserve and actively manage biodiversity values at Launceston Airport.

Launceston Airport supports a flora species listed as vulnerable under the Tasmanian legislation Threatened Species Protection Act 1995 - the Silky Bush Pea (Pultenaea prostrata).

Recent surveys have not recorded the previously identified Green and Gold Frog (Litoria raniformus – a listed threatened species under state and commonwealth legislation). It is no longer considered to be present on the airport.

Ongoing management is required to conserve and protect listed species and minimise the impact of invasive species.



TABLE 11.13 COMPLETED WASTE MANAGEMENT ACTIONS FROM THE 2015 AES

ACHIEVEMENTS IN THE PREVIOUS FIVE YEARS SINCE 2015

Developed a Waste Management Plan to inform and drive future waste reduction initiatives.

Contractual obligations implemented for construction contractors to recycle construction waste.

TABLE 11.14 STRATEGY ACTION PLAN 2020

2020 ACTION NUMBER	PROPOSED ACTIVITY	TIME FRAME
19	Continue the implementation of the Launceston Airport Waste Management Plan to inform future waste reduction initiatives and manage all airport and construction wastes.	Quarterly
20	Implement behavioural awareness campaign for tenants and employees with regard to managing waste correctly.	Annual
21	Conduct regular tenant and APAL office inspections to ensure appropriate waste management systems are in place. In addition, check for bin contamination and provide feedback on how to improve segregation.	6-monthly

11.9.1 **OVERVIEW**

Maintaining biodiversity is as one of the key environmental issues for Australia. Accounting for ecological factors involves managing Indigenous species, introduced species and the pests that can threaten the ecosystems and can cause harm to people and property.

Launceston Airport is subject to a range of existing and potential biodiversity threats. These include:

- Development and changes to surrounding land-use
- Weeds, pest animal invasion and grazing (rabbits, macropods, hares)

- Stormwater and drainage run-off and water quality impacts
- Climate change
- Bushfire and wildfire.

The interconnected nature of the ecological values at Launceston Airport require an integrated management approach.

The key biodiversity and conservation management activities at Launceston Airport are:

- Management of sensitive flora and fauna
- Pest and weed management.

11.9.2 THREATENED SPECIES AND VEGETATION COMMUNITIES

In December 2013, APAL had flora and fauna surveys undertaken by external consultants. The report confirmed the presence of The Green and Gold Frog (Litoria raniformus), a listed species under state and commonwealth legislation and the Silky Bush Pea (Pultenaea prostrata), listed as vulnerable under the Tasmanian Threatened Species Protection Act 1995.

In February 2019 another flora and fauna survey was performed. No additional flora or fauna species listed as rare or threatened under either federal or state legislation were recorded in the study area, Green and Gold Frog was not recorded.

11.9.3 GREEN AND GOLD FROG (LITORIA RANIFORMUS)

The Green and Gold Frog (GGF) was sighted during an upgrade of the Airservices Australia fire drill ground in 1999 (Figure 11.1). There had been no additional sightings until March 2009 when up to 20 were found in grassed areas around a detention pond. All were juveniles ranging from fingernail size to almost fully grown (approximately 60-70mm).

Fire training at the training ground (FFTG) ceased in early 2014. Accordingly no training water has been replenishing the pond. Since then there have been few sightings of frogs in the annual surveys (four individuals in 2015; one in 2018; and none in 2016/2017 or 2019). The conclusion from the 2019 survey is that the FFTG pond is unlikely to represent suitable breeding habitat for GGF or other frog species due to the lack of water. However, it does provide transitory habitat for frogs. As the firefighting training no longer occurs at the site and run-off in the area has been diverted the limited pond recharge is through rainfall events only (GHD, March 2019).

11.9.4 SILKY BUSH PEA (PULTENAEA PROSTRATA)

The Silky Bush Pea (Pultenaea prostrata) was first located in 1995 adjacent to the main runway strip on airside (Figure 11.1). The plant has since grown to cover an area of approximately $12m^2$. In the last few years the centre has become sparse with the majority of growth at the tips or outer edge. The plant perimeter is marked by high visibility guide posts to protect against grass mowing activities and inadvertent disturbance. The presence of the Silky Bush Pea was re-verified during the 2019 flora and fauna survey.

11.9.5 VEGETATION MANAGEMENT

Launceston Airport has a weed management strategy to contain the State Declared Weeds and Weeds of National Significance (WONS) which occur on the airport. These weeds are gorse, blackberry, montpellier broom, slender thistle and fennel. None of these species are identified for eradication in the Northern Midlands.

The plants inhabit areas of airside around the flight strips. The majority are carried in as seeds by birds and other fauna from neighbouring properties.

There has been a program of gorse eradication underway for over 15 years, with great success, leading to very few sightings of gorse plants in recent years. If sighted on-airport, the plants are sprayed with herbicide to control their spread. Blackberries are routinely sprayed during the summer months, however, the introduction of the 'long grass policy' with regard to mowing of the grassed areas (for bird control) has meant that blackberry numbers have increased across the estate over the past four years. Weed locations have been mapped in the latest (2019) flora and fauna survey.

In early FY20, a DPIPWE officer identified flax leaf broom (a listed weed) in the LST gardens. This has since been removed. The grassed areas of airside are mown regularly to control grass height as required by CASA regulations. The length of grass in the flight strips is varied to help control bird species and reduce aircraft bird strike. The landside areas are generally turf and the landscaped gardens surrounding the terminal area consist of native and exotic species.

Native plants have been replaced as they die or are removed to improve public safely and maintain the garden. Launceston Airport utilises a specialist arborist to provide advice on the extent of tree maintenance required.

11.9.6 WILDLIFE MANAGEMENT

Launceston Airport actively discourages fauna from the flight strips to discourage bird strike and animals entering the aircraft movement areas. This is undertaken by the Operations Officers, utilising a combination of physical deterrence (approaching fauna in vehicles) and such measures as gas guns and, at times, poisoned baits.

The list of animals found in movement areas from time to time includes rufous wallabies, white-footed dunnarts, platypuses, snakes, rabbits, wombats, echidnas, feral cats, rats and mice. These example species are drawn from the APAL staff sightings; primarily Operations Officers. The species which pose a threat to aircraft safety are herded or caught and appropriately destroyed, as required by law.

Launceston Airport maintains a wildlife hazard management plan as part of CASA requirements to reduce the chance of aircraft wildlife strike. Launceston Airport's annual wildlife strike rate has reduced to (currently) 3.4 strikes per 10,000 aircraft movements. The masked lapwing presence on the airport has almost disappeared due to the adoption of a long grass policy. Other birds which have sightings recorded on the airport are:

- Richard's pipit
- Forest ravens
- European goldfinches
- Banded lapwings
- Common starlings

- Common skylarks
- Raptors
- Ducks
- Swallows
- Wrens
- Magpies
- Sparrows
- Black swans.

All of these birds have been recorded in the strike statistics in past years.

An external consultant ornithologist undertakes seasonal surveys of wildlife hazards and conducts an annual review of the Wildlife Hazard Management Plan providing recommendations on controlling risk species and the methods of deterrent. The decision to adopt a particular control strategy, whether habitat modification, attractant source removal or more direct eradication strategies, is made by Launceston Airport after consideration of the reports and advice provided by the ornithologist. Strategies adopted may be time-specific (seasonal) or in response to recent incidents or hazard identification through routine wildlife monitoring and surveys. Methods employed in the past have included:

- Harassment by vehicles
- Placement of orchard gas cannon
- Cracker shells
- Broadcasting equipment issuing bird distress calls
- Mowing grassed areas to varying lengths
- Removing water sources (ponds) from airport grounds
- Culling as an action of last resort.

Note: Launceston Airport has permits issued by the Department of Primary Industries, Parks, Water and Environment_to harass or destroy particular native species.

Biodiversity and conservation management actions completed during the previous Environment Strategy can be viewed in Table 11.15 with the 2020 Strategy Actions in Table 11.16.

11.10 LAND MANAGEMENT

Key Objective:

Undertake reasonable and practical measures to ensure land and any existing contamination is managed appropriately, ensure that new contamination does not occur.

6

OVERVIEW

Land management in this context refers to contaminated land management and protection of any significant geological sites within the airport site.

11.10.2 LOCAL GEOLOGY AND HYDROGEOLOGY

The geological landforms of Launceston Airport are described as a thin layer of clay loam top soil of varying thicknesses overlaying very stiff clay; grey to yellow brown and riddled with small stones. This overlies decomposed basalt that varies to rock at depth.

The soil is known to contain elevated levels of manganese, zinc, chromium and lead. In the north-east corner adjacent to the grass runways, a bank of residual soil containing quartzose and basalt pieces similar to river wash gravel is located. Similar banks are located on nearby properties either side of the airport.

The site and surrounding land is highly modified rural land and has been used for farming since the mid-1800s. There is no known significant geology on-site.

APAL has a responsibility to ensure geological and hydrogeological features within the grounds of Launceston Airport are not polluted.

All construction and demolition projects are assessed for their impact on soil and surrounding surface water.

Airport activities that may impact land include:

- Airservices Australia fire training activities
- Car parking and potential run-off from hardstand areas
- Storage, handling, use and disposal of fuels, oils, chemicals and hazardous substances
- Inappropriate disposal of waste generated from activities and construction projects
- Demolition and construction works
- Importation of fill
- Disturbance of contaminated land from excavation activities
- Aircraft maintenance and washing aircraft and maintenance refuelling
- Landscaping and vegetation removal that may cause erosion
- Underground storage tanks and above-ground storage tanks
- Vehicle maintenance and washing.

Based on legacy and current site uses, contaminants of potential concern include PFAS from the legacy use of AFFF, petroleum hydrocarbons and diesel associated with fuel storage and spills, and metals associated with onsite maintenance and operations.

TABLE 11.15 COMPLETED BIODIVERSITY AND CONSERVATION ACTIONS FROM THE 2015 AES

ACHIEVEMENTS IN THE PREVIOUS FIVE YEARS SINCE 2015

Completed fauna and flora survey by independent consultants.

Airservices Australia has conducted annual Green and Gold Frog surveys.

Continued to engage an ornithologist to conduct seasonal surveys and an annual review of wildlife hazards.

Management practices have significantly reduced the presence of the masked lapwing on the airport.

Established a Wildlife Hazard Committee which meets bi-annually.

Sown insect and bird repellent entophytic grass around key areas of the precinct, including runway flanks.

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	ting and the second second Second second second Second second	TABLE 11.16 STRATEGY ACTION PLAN 2020	
	2020 ACTION NUMBER	PROPOSED ACTIVITY	TIME FRAME
	22	Continue to monitor and responsibly manage/control pest species and weeds on-site using a risk-based approach.	Ongoing
	23	Complete wildlife hazard assessments undertaken by a recognised ornithologist to inform the Wildlife Hazard Management Plan.	Ongoing
	24	Maintain a committee to address wildlife management.	6-monthl
		LAUNCES	TON AIRPORT N

STER PLAN 2020

11.10.3 **DEVELOPMENTS AND THEIR** IMPACTS

Construction activities have the potential to impact on soil quality at Launceston Airport. The AEPR require expert examination of contaminated sites if there is a possibility of adverse impacts. With this in mind APAL has several control measures in place to ensure soil and groundwater pollution and erosion is managed and minimised. These measures include:

- Construction site controls (e.g. erosion and sediment control)
- Fuel storage and handling procedures
- Surface water quality controls (e.g. litter traps, drainage, spill response)
- Spillage management and management of contaminated sites (e.g. stockpiling contaminated soils, spill response plans/equipment).

11.10.4 **AIRSERVICES AUSTRALIA FIRE** DRILL GROUND

The Airservices ARFFS unit formerly used a training ground on the north-east boundary of the airport. The site had been active as a training ground since the 1950s but ceased being used as a training ground in 2014.

The site was expanded in 1999/2000 to improve environmental performance and cater for larger vehicles. Some remediation was undertaken to remove high levels of hydrocarbon contaminated soil remaining from accelerants in training exercises.

During 2008 a consultant for Airservices Australia undertook a sampling program using competent personnel and NATA accredited laboratories for sample analysis which confirmed the presence of perfluorooctane sulfonate (PFOS) and perfluorooctane acid (PFOA) in the soil surrounding the training pad. PFOS and PFOA were ingredients historically used in the manufacture of aqueous film forming foam (AFFF). The chemical has been found to be persistent in the environment. The AFFF was changed in 2010 to a different product that does not contain PFOS or PFOA (Solberg RF6).

Airservices Australia is evaluating a range of management and/or remediation techniques for the site. A Preliminary Site Investigation was performed by Airservices in 2018 and a Detailed Site Investigation is planned to commence in 2020.

APAL continues to consult with Airservices on the management of their sites and the extent of contamination. In November 2018, a PFAS Round Table was formed with representatives from APAL, Airservices Australia, the Tasmanian EPA and DITRDC. The purpose of this forum is to prepare for and review works in response to PFAS at the airport.

Land management actions completed during the previous Environment Strategy can be viewed in Table 11.17 with the 2020 Strategy Actions in Table 11.18.

TABLE 11.17 COMPLETED LAND MANAGEMENT ACTIONS FROM THE 2015 AES

ACHIEVEMENTS IN THE PREVIOUS FIVE YEARS SINCE 2015

APAL completed a Detailed Site Investigation to identify areas of PFAS contamination on-airport.

Ensured that all fill material brought onto site was verified as free from contamination.

Required that tenants with sites of existing contamination monitored and managed their sites appropriately.

Regular inspections of construction sites and material stockpiles were undertaken to ensure that erosion and sediment control measures were being employed.

2020 ACTION NUMBER	PROPOSED ACTIVITY	TIME FRAME
25	Ensure all contaminated sites at the airport are monitored and managed by the relevant tenant in line with their OEMPs.	Annual
26	Maintain a contaminated land register that identifies contaminants of concern and priority sites.	Annual
27	Implement the PFAS National Environmental Management Plan, or any other such documents that may supersede this in time.	Ongoing



TABLE 11.18 STRATEGY ACTION PLAN 2020

<u>1</u>02



11.11 **AIR QUALITY**

Key Objective:

To meet both Commonwealth and state air quality standards.

11.11.1 OVERVIEW

Good ambient air quality is critical for maintaining community and ecological health. Launceston Airport is situated in the Tamar Valley in a largely rural aspect with a small light industrial subdivision adjacent to the airport. Ambient air quality in the Tamar Valley is impacted by particle emissions from domestic heating. The townships of Perth and Evandale are situated within five kilometres of the airport.

Emission sources on-airport include:

- LPG (boiler and cooking)
- Power generation facility emissions related to operations and maintenance, other than those specifically for flying aircraft (e.g. from boilers, emergency generators and air conditioners)
- Ground support equipment using diesel fuel on the apron
- On-airport road vehicle traffic
- Landside vehicles
- Emissions of hydrocarbons and odours from aircraft and road vehicle refuelling/de-fuelling and emissions from fuel storage tanks.

In line with the EMS, air quality management procedures are outlined in CEMPs and OEMPs to minimise emissions of dust, odour and other pollutants.

Air quality actions completed during the previous Environment Strategy can be viewed in Table 11.19 with the 2020 Strategy Actions in Table 11.20.

11.12 CULTURAL AND HISTORIC HERITAGE

Key Objective:

To ensure sites of cultural and historic heritage value are managed in accordance with legislative requirements.

11.12.1 HISTORIC HERITAGE

Godden Mackay Logan Pty Ltd (GML) was commissioned by APAL to prepare a Heritage Management Plan (HMP) for Launceston Airport. The HMP was completed in March 2013 and a comprehensive review and update was performed by Southern Archaeology in 2019.

The 2019 review found that the values of Launceston are embodied in nine elements of moderate and above heritage value within the airport land: hangars 10, 14 and 17, buildings 26 (air traffic control tower), 105 and the terminal gardens, as well as three areas of historical archaeological sensitivity related to the former properties 'The Springs', 'Kirkdale' and 'Cowley'. Two 'potential historic sites' were also identified along the northeastern perimeter road of the estate.

The 2019 built heritage review also resulted in a number of additional sites being added with buildings 47, 108, 109 and 16 (attached to 17) being included in the defined heritage group.

Further, in 2016 building 26 (the Launceston Air Traffic Control tower) was listed as a Commonwealth Historic Heritage Place (place ID: 106121). The tower 'is of historical significance in a national context as a rare and representative surviving example of a post-World War II era control tower equipped to an international standard following guidelines devised by the International Civil Aviation Organization.'

The tower was designed in 1955, built about 1956-58 and is believed to have been commissioned in 1958, making it one of the oldest surviving operational towers in Australia. It has been used for its intended purpose since completion, and is a component of a large and significant air traffic control and operations centre established at Launceston Airport following World War II.

The HMP has been developed with the ongoing operational requirements of a busy regional airport in mind. The main pressure on the significant hangars on the site is their location and the restrictions this may place on possible future uses. The cultural and historic heritage actions completed during the previous Environment Strategy can be viewed in Table 11.21 with the 2020 Strategy Actions in Table 11.22.

11.12.2 CULTURAL HERITAGE

The Launceston Airport site is relatively small (180 Ha) with very little undeveloped land available for expansion. The majority of landside is developed or has had some form of significant ground disturbance.

An Aboriginal Heritage Assessment Report (AHAR) had not previously been prepared for APAL. As such, there were no previously recorded Aboriginal sites located at Launceston Airport. The HMP concluded that while there may be cultural heritage values attached to the airport, this could only be determined by the Aboriginal community and recommended a site survey be conducted once the community ban has been lifted.

In 2018 (after the community ban was lifted) Launceston Airport commissioned a survey using external consultants and an Aboriginal Heritage Officer to undertake a survey of the airport to determine if aboriginal sites may be present. Three (3) artefact scatters (AH13662, AH13663 and

TABLE 11.19 COMPLETED AIR QUALITY ACTIONS FROM THE 2015 AES

ACHIEVEMENTS IN THE PREVIOUS FIVE YEARS SINCE 2015

Dust suppression was used where necessary on all sites where it could impact on the local environment (e.g. construction projects).

Ground handling agencies introduced electric vehicles (tugs) in the baggage hall.

TABLE 11.20 STRATEGY ACTION PLAN 2020

2020 ACTION NUMBER	PROPOSED ACTIVITY	TIME FRAME
28	Monitor, record and investigate air quality complaints made to the airport.	Complaint based
29	Ensure CEMPs outline strategies to manage dust.	Ongoing

TABLE 11.21 COMPLETED CULTURAL AND HISTORIC HERITAGE ACTIONS FROM THE 2015 AES

ACHIEVEMENTS IN THE PREVIOUS FIVE YEARS SINCE 2015

Completed a Heritage Management Plan review of the airp Archaeology (December 2018).

TABLE 11.22 STRATEGY ACTION PLAN 2020

2020 ACTION NUMBER	PROPOSED ACTIVITY	TIME FRAME
30	Actively preserve sites of cultural and historic heritage significance in accordance with Commonwealth and state legislative requirements.	Annual
31	Continue to implement the policies of the Heritage Management Plan (including Aboriginal heritage).	Ongoing
32	Train relevant employees in interpretation of the Launceston Airport Heritage Management Plan and its implementation.	Annual
33	Identify opportunities for enhanced visitor information based on Launceston Airport's cultural heritage assets.	2022

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AH13664) and one (1) isolated artefact (AH13665) were identified and recorded within or near the Launceston Airport study area. Two Potential Areas of Sensitivity (PAS) were also identified in the survey (Fig 11.1). The survey report also noted that a number of locations could not be surveyed due to no access or long grass covering the ground surface.

Based upon the survey findings, an Aboriginal Heritage Management Plan (AHMP) was prepared which includes recommendations to mitigate potential damage to known Aboriginal heritage sites and PAS. Aboriginal Heritage Tasmania (AHT) was consulted through development of the AHMP and has endorsed a final version of the plan. APAL is committed to implementing the recommendations of the AHMP and will continue to engage with AHT prior to any works in areas of known potential Aboriginal heritage values.

11.13 **GROUND-BASED NOISE**

Key Objective:

To manage and minimise ground-based noise emissions associated with the operation of the airport.

11.13.1 **OVFRVIFW**

The management of airport noise is separated into air and ground-based noise sources. The noise generated by aircraft during flight, taxiing, landing and take-off is regulated by Airservices. While air noise tends to be a more significant source of noise impacts on surrounding areas than ground-based noise sources, this action plan focuses on Launceston Airport's ground-based noise sources that have the potential to adversely affect the local community.

11.13.2 **GROUND-BASED NOISE**

Ground-based aviation noise activities are regulated by DITRDC under the AEPR.

The potential sources of ground-based noise on Launceston Airport are aircraft manoeuvring and their landing and take-off cycle. There is no permanent aircraft maintenance facility onairport and engine running for testing purposes is infrequent and confined to apron areas. Sources of non-aviation noise include:

- Road traffic
- Construction and demolition activities
- Tenant activities
- Noise from plant and equipment
- Ground service equipment
- Freight operations.

All major construction projects require CEMPs which require the noise to be managed according to the AEPR.

No ground-based noise complaints have been historically received by Launceston Airport, undoubtedly attributable to the rural location of the site and relatively low residential density around the airport.

Ground-based noise actions completed during the previous Environment Strategy can be viewed in Table 11.23 with the 2020 Strategy Actions in Table 11.24.



TABLE 11.23 COMPLETED GROUND-BASED NOISE ACTIONS FROM THE 2015 AES

ACHIEVEMENTS IN THE PREVIOUS FIVE YEARS SINCE 2015

No recorded ground-based noise complaints during the five-year period.

Retained a register of complaints related to aircraft activity.

TABLE 11.24 STRATEGY ACTION PLAN 2020

2020 ACTION NUMBER	PROPOSED ACTIVITY	TIME FRAME
34	Continue to ensure that all contractor CEMPs incorporate measures to minimise ground-based noise.	As required
35	Monitor all noise complaints to determine whether there are any particular emerging trends or issues.	2-monthly

11.14 HAZARDOUS MATERIALS

Key Objective:

To ensure all hazardous materials are stored, handled, used and disposed of in accordance with Australian Standards and applicable regulations.

11.14.1 **OVFRVIFW**

AEPR declares that state legislation applies to hazardous materials, as this is primarily an occupational health and safety matter. Inappropriate management of hazardous materials can have adverse impacts on the environment.

11.14.2 CHEMICAL USE AT LAUNCESTON AIRPORT

A number of hazardous materials are stored and used at Launceston Airport, including fuel, oils, solvent-based chemicals and hazardous building materials. Without appropriate management and procedures, hazardous materials have the potential to affect the environment, including soil, groundwater, surface water, air quality, and human health and safety.

Sources and uses of hazardous materials at Launceston Airport include:

- Bulk aviation and automotive fuel storage and handling
- The storage and usage of firefighting foam
- Tenant operated maintenance facilities for vehicles and aircraft

- General airport operation, construction, maintenance and landscaping, including the use and disposal of pesticides and herbicides; solvents and paints; batteries and asbestoscontaining materials within existing buildings; fuels and cleaning chemicals
- Other hazardous materials present in buildings and structures including:
 - Lead-based paints
 - Polychlorinated biphenyls (which may be present in lighting capacitators and transformers)
 - Ozone depleting substances (potentially used as refrigerants in cooling systems).

11.14.3 MEASURES TO REDUCE IMPACT

Current policies operated at Launceston Airport include UST monitoring procedures which require annual tank tightness testing to be undertaken, leak detection equipment on commercial facilities and correct storage of chemicals.

APAL maintains a hazardous materials risk register, an asbestos register and a manifest of hazardous materials on-site. Known sites of asbestos are monitored and, where possible, removed. Launceston Airport has several control measures in place to ensure all activities involving hazardous materials are appropriately managed:

- The Launceston Airport Emergency Plan details the standard operating procedures to minimise volatile organic and odorous emissions in the event of chemical spills and to reduce any potential environmental impacts
- Tenants are required as part of their OEMPs to maintain registers dealing with all hazardous materials (including asbestos) stored, handled or used as part of their operations. The individual OEMPs must include provisions for phasing out hazardous materials in favour of safer alternatives and reviews are conducted annually
 - Tenants are responsible for ensuring that for operations under their control, these procedures and control measures are adhered to and that appropriate records and registers are maintained.
 - Smaller or lower risk tenancies are still required to practice appropriate hazardous materials management.

Hazardous materials actions completed during the previous Environment Strategy can be viewed in Table 11.25 with the 2020 Strategy Actions in Table 11.26.

TABLE 11.25 COMPLETED HAZARD MATERIALS ACTIONS FROM THE 2015 AES

ACHIEVEMENTS IN THE PREVIOUS FIVE YEARS SINCE 2015

Conducted a hazardous materials risk assessment and maintained a hazardous materials risk register and a manifest of hazardous materials on-site.

Staff, tenants and contractors reported any major chemical or hydrocarbon spills and reported minor spills greater than 2 litres within 24 hours.

Launceston Airport and its tenants continued to monitor known sites of asbestos for signs of deterioration, record their condition and reporting where possible.

Monitored and ensured that all hazardous materials were stored in accordance with Australian Standards and applicable regulations.

Ensured that SDS were available for hazardous materials stored in all workplaces. A review of tenants formed part of an annual inspection program.

Significant asbestos remediation activities were undertaken in the terminal undercroft and boiler room.

TABLE 11.26 STRATEGY ACTION PLAN 2020

2020 ACTION NUMBER	PROPOSED ACTIVITY	TIME FRAME
36	Map type, volumes and locations of hazardous materials held on-airport and ensure that they are stored in accordance with Australian standards with SDS provided. Undertake regular inspections accordingly.	6-monthly
37	Require tenants to inspect and monitor USTs and ASTs to ensure that contamination of surrounding areas is not occurring.	Annual
38	Ensure the storage and handling of contaminating substances are addressed appropriately in contractor CEMPs.	As required



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AIRPORT SAFEGUARDING STRATEGY

12.1 OVERVIEW AND OBJECTIVES

The capacity of an airport to operate unencumbered as an airport is fundamentally dependent on what occurs on the land surrounding it. The erection of structures that physically intrude into the flight paths of arriving and departing aircraft can clearly limit or prevent use of the airport. So too can other developments that are perhaps less obvious. For example:

- Residential developments adjacent to airports and under flight paths may lead to complaints about aircraft noise and eventually lead to the introduction of curfews or even the closure of an airport
- Industrial activities that generate smoke or similar hazards may constrain use of an airport
- Other activities such as agriculture, animal husbandry or wetland developments may attract birds and/or wildlife species and pose a hazard to aviation.

As the main gateway to Northern Tasmania, the long-term and effective safeguarding of Launceston Airport is critical to maintain the social and economic benefits it contributes to the region, and to protect surrounding communities. The objectives of the airport safeguarding strategy are to:

- Strengthen Launceston Airport's role within the state's economic and transport infrastructure and protect its ongoing 24-hour operation
- Enable the airport to effectively and competitively operate at national levels
- Ensure any new land-use or development around the airport does not prejudice the airport's safe and long-term operations, and avoids or minimises incompatible land uses
- Manage and, where possible, minimise the impact of airport and aircraft operations on surrounding areas and communities
- Ensure that strategic planning for the region recognises and protects Launceston Airport, and that land-use decisions are integrated, appropriate land-use buffers are in place and provision is made for future growth and development.

The National Airports Safeguarding Framework provides a set of principles and guidelines to assist in addressing these and other important airport safeguarding issues to better protect the ongoing operation of airports in Australia.



12.2 NATIONAL AIRPORTS SAFEGUARDING FRAMEWORK

As outlined in Section 4.2.1 of this Master Plan, the National Airports Safeguarding Framework (NASF) represents a collective commitment from governments to ensure that an appropriate balance is maintained between the social, economic and environmental needs of the community and the effective use of airport sites. The framework applies at all airports in Australia and affects planning and development around airports, including development activity that might penetrate operational airspace and/or affect navigational procedures for aircraft. Pursuant to the NASF agreement, it is the responsibility of each jurisdiction to implement the framework into their respective planning systems.

NASF is comprised of a set of seven principles and nine guidelines. The NASF principles are:

- Principle 1: The safety, efficiency and operational integrity of airports should be protected by all governments, recognising their economic, defence and social significance
- **Principle 2:** Airports, governments and local communities should share responsibility to ensure that airport planning is integrated with local and regional planning
- **Principle 3:** Governments at all levels should align land-use planning and building requirements in the vicinity of airports
- **Principle 4:** Land-use planning processes should balance and protect both airport/aviation operations and community safety and amenity expectations
- **Principle 5:** Governments will protect operational airspace around airports in the interests of both aviation and community safety
- **Principle 6:** Strategic and statutory planning frameworks should address aircraft noise by applying a comprehensive suite of noise measures

• **Principle 7**: Airports should work with governments to provide comprehensive and understandable information to local communities on their operations concerning noise impacts and airspace requirements.

The nine guidelines are:

- **Guideline A**: Measures for Managing Impacts of Aircraft Noise
- **Guideline B**: Managing the Risk of Building Generated Windshear and Turbulence at Airports
- **Guideline C**: Managing the Risk of Wildlife Strikes in the Vicinity of Airports
- **Guideline D**: Managing the Risk of Wind Turbine Farms as Physical Obstacles to Air Navigation
- **Guideline E**: Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports
- **Guideline F**: Managing the Risk of Intrusions into the Protected Airspace of Airports
- Guideline G: Protecting Aviation Facilities Communications, Navigation and Surveillance (CNS)
- **Guideline H**: Protecting Strategically Important Helicopter Landing Sites
- **Guideline I**: Managing the Risk in Public Safety Areas at the Ends of Runways.

The Department of Infrastructure, Transport, Cities and Regional Development (DITRDC) has produced a factsheet on the NASF (DITRDC's factsheet) which provides useful background and explanatory information relating to the framework. The Australian Airports Association has produced an airport practice note titled *Planning Around Airports – Safeguarding for the Future*, which provides guidance to planning authorities on how to implement the NASF.

The following sections describe how the NASF guidelines are addressed relative to Launceston Airport, and identifies areas for improvement where appropriate.

12.3 LAUNCESTON AIRPORT POLICIES AND PROCESSES

Launceston Airport has a number of policies and processes in place for ensuring that on-airport developments achieve airport safeguarding requirements. These include the following:

- The development approval process outlined in Section 5.10 of this Master Plan, which incorporates the Major Development Plan and building control requirements of the Airports Act
- The Aerodrome Manual prepared in accordance with APAL's obligations under Civil Aviation Safety Regulations Part 139.

All on-airport developments must comply with the above policies and processes which ensure that airport safeguarding principles and requirements are met.

When APAL is notified of off-airport development applications it assesses them having regard to the NASF guidelines and provides an appropriate response to the responsible authority setting out any issues or concerns in terms of airport safeguarding. To assist in the implementation of NASF off-airport, and the safeguarding of Launceston Airport, there should be appropriate planning controls in place in local planning schemes in accordance with the NASF principles outlined above.

12.4 STATE AND LOCAL PLANNING

As stated in Section 4.2.2 of this Master Plan, the Northern Midlands Interim Planning Scheme recognises the importance of Launceston Airport, and contains the following objective:

Protect Launceston Airport from encroachment by incompatible uses or developments that compromise its operations in recognition of its *importance and contribution to the Launceston Region and State economy.*

This objective is supported and is considered to be consistent with the principles of NASF.

The Northern Midlands Interim Planning Scheme also includes an 'Airports Impact Management Code' and some other controls relating to airport safeguarding.

As stated in Section 4.2.3 of this Master Plan, under the Tasmanian Government's planning reform program, the Northern Midlands Interim Planning Scheme will soon be replaced with a new planning scheme, the Tasmanian Planning Scheme (TPS). The TPS includes a 'Safeguarding of Airports Code' (C16.0) which will apply when the TPS comes into effect in Northern Midlands.

Whilst state and local planning systems provide some protection for Launceston Airport, there is no reference to NASF in either the current 'Airports Impact Management Code' or the future 'Safeguarding of Airports Code', and neither code addresses the full range of airport safeguarding matters set out in the NASF guidelines. As previously stated, pursuant to the NASF agreement, it is the responsibility of each jurisdiction to implement the framework into their respective planning systems.

The State acknowledges its role in the implementation of the NASF guidelines through the planning system. In doing so the State has identified that the planning system is broader than the relevant planning scheme, and some of the NASF Guidelines may best be implemented through appropriate strategic planning to avoid land use conflicts as opposed to implementing specific use and development standards in the planning scheme.

The State have also stated that there are opportunities to address many of the NASF guidelines through the future Tasmanian Planning Policies (TPPs), which will provide the overarching policy guidance for use and development in Tasmania. The TPPs will guide the allocation of planning zones ensuring the Launceston Airport is protected through any future rezoning proposals. There may also be opportunities to further refine the SPPs Safeguarding of Airports Code to address certain aspects of the remaining NASF Guidelines.

APAL will continue to work with the Tasmanian Government and local planning authorities to further implement the NASF guidelines through the future Tasmanian Planning Policies and refinements to the Safeguarding of Airports Code in the State Planning Provisions.

12.5 MANAGING THE IMPACTS OF AIRCRAFT NOISE

DITRDC's factsheet relating to NASF states:

Over the long-term, inappropriate development around airports can result in unnecessary constraints on airport operations and negative impacts on community amenity due to the effects of aircraft noise. These impacts need to be managed in a balanced and transparent way.

Guideline A provides advice on the use of a complementary suite of noise metrics, including the Australian Noise Exposure Forecast system and frequency-based noise metrics, to inform strategic planning and provide communities with comprehensive and understandable information about aircraft noise.

As noted in NASF Guideline A, aircraft noise is one of the most important issues for all airports in terms of land-use protection. Aircraft noise is an unavoidable by-product of an airport's operation, and whilst modern commercial jet aircraft are quieter now than when first introduced, this is still an issue that requires considerable planning focus. Having said that, the Launceston Airport site context is largely rural in nature with nearby development confined to the townships of Perth and Evandale, and suburbs of Youngtown some five kilometres and eight kilometres away respectively.

12.5.1 USE OF ANEF SYSTEM

Commonwealth Government policy requires the adoption of the Australian Noise Exposure Forecast system for determining likely noise exposure around Australian airports. A description of the ANEF system and associated land-use compatibility advice for areas in the vicinity of airports is contained in Australian Standard AS2021:2015 Acoustics – Aircraft Noise Intrusion – Building Siting and Construction (AS2021). The building site acceptability table from AS2021, which shows 'acceptable', 'conditionally acceptable' and 'unacceptable' building types within the different ANEF zones, is shown on the ANEF chart (Figure 12.5).

The ANEF chart includes the cumulative noise effect of a full year's operations so that the seasonal changes in weather patterns and airline schedules are included.

The resulting contours are therefore a measure of the total noise exposure over a full 12-month period divided by 365 to give a daily average. They do not represent the maximum exposure caused by a single noise event (an aircraft overflight).

The ANEF is required to be endorsed for technical accuracy by Airservices Australia in the manner approved by the Minister.

12.5.2 LAUNCESTON AIRPORT ANEF

The earliest Launceston Airport noise exposure forecast was produced in 1975. The first ANEF published publicly was in 1990 by the Federal Airports Corporation. Subsequent updated ANEFs were produced in 1999, 2004, 2009 and 2014.

A new ANEF was produced in conjunction with the preparation of this Master Plan and a copy is included at Figure 12.5.

As with the previous ANEFs, the 2019 ANEF contours represent the long-term forecast for noise impact, after taking into account the longrange practical airfield capacity operations level of 67,890 movements. This section sets out the base parameters and assumptions used to prepare the ANEF contours. The ANEF has been derived by computer simulation using the Integrated Noise Model (INM) Software Version 7.0d. The INM calculates aircraft noise impacts by applying standard or user-defined aircraft flight profiles, performance data and noise-power-distance (NPD) curves to the runway configuration and flight tracks specific to Launceston Airport. It is noted that INM will soon be replaced by a new software program for the preparation of ANEFs, the Aviation Environmental Design Tool (AEDT), which will be used for the airport's next Master Plan/ANEF.

All aircraft tracks and operating procedures have been derived from a combination of published information from the Aeronautical Information Publications (AIP), ADS-B images provided by Airservices as well as consultation with Airservices staff. The modelled data has been confirmed as being a realistic representation of aircraft track usage and is considered operationally feasible for the airport by Airservices local air traffic control. Figures 12.1 and 12.2 indicate arrival and departure tracks for runways 14R and 32L. In addition, helicopter and touch and go training tracks have been included in Figures 12.3 and 12.4. These tracks have been adopted for the 14R/32L runway. In practice, aircraft tracks can vary either side of the theoretical flight paths due to effects such as weather, aircraft type and payload. The computer modelling process has included an allowance for track dispersal to accommodate these variations.

Airport traffic movements for the ANEF have been based on a capacity study that was performed during the development of the 2008 ANEF, which is considered to remain valid. The resultant annual forecast is 67,890 movements which could be expected to occur between 2070 and 2075. The aircraft fleet mix is based on the current aircraft utilisation together with an allowance for next generation aircraft which are expected to be in service at Launceston during the course of the forecast. A breakdown of the fleet mix used in the ANEF is shown on the Long Range ANEF Chart (Figure 12.5). Runway utilisation was determined after analysing meteorological data and consultation with local air traffic control as 30 per cent for Runway 14R and 70 per cent for Runway 32L. Night movements (between 7pm and 7am) were modelled at 24 per cent of total movements.

The traffic pattern over the course of a 24-hour period is based on the current situation modified to reflect a generally more balanced pattern during the day as peaking is reduced due to capacity constraints as aircraft movements increase.

The area affected by the 2019 ANEF contours has changed when compared with the previous ANEF in the 2015 Master Plan:

- The contours are slightly shorter on both the northern and southern ends. This results in the contour being further away from the town of Launceston (to the north-west of the airport)
- The contours are slightly narrower on both the eastern and western sides.

These changes can be attributed to minor adjustments to the input assumptions including:

- The change in aircraft traffic proportions: a decrease in B737/A320 traffic and an increase in Metroliners/Saab 340 traffic
- Previous Dash 8-300s have been upgraded to Dash 8-400s, which have a lower noise profile
- The grass runways are now closed.

Figure 12.5 illustrates the ANEF and provides a table for recommended land-uses derived from AS2021. The changed contour shape of the 20 and 25 ANEF zones does not cause any additional urban dwellings to be affected and the critical ANEF Zone 30 and greater has likewise not expanded to encompass any dwelling beyond that already affected. The dwellings within the ANEF Zone 30 are located south of the Runway 32L approach and have been in place for over 40 years.

The plans of the tracks used in the development of the ANEF have been provided in Figures 12.1 to 12.4 to indicate to the public where they may expect aircraft to transit during regular operations. The frequency of use of the tracks is subject to prevailing weather conditions.

Referral of planning applications to Launceston Airport, from the Northern Midlands Council, within the ANEF footprint is critical to the management of aircraft noise into the future. Processes in place through the Northern Midlands Interim Planning Scheme ensure that Launceston Airport has an opportunity to assess proposed developments and advise the Council of applicable standards and impact on airport operations. The council planning scheme through the provisions of the Airport Impact Management Code (and the future Safeguarding of Airports Code) ensures relevant Australian Standards are applied to all land-use development proposals, but only within the ANEF contours.

12.5.3 LIMITATIONS OF THE ANEF SYSTEM

The ANEF system forms the basis for the airport's current published noise contours. However, experience has shown that aircraft noise is not confined to areas inside the ANEF noise contours, nor does the noise stop at a line on a map. In fact, most complaints relating to aircraft noise at Australian airports come from people who live outside the published ANEF noise contours (that is, outside the 20 ANEF contour).

As outlined in NASF Guideline A, it is now generally recognised that basing land-use planning decisions solely on ANEF noise contours, without reference to other information, is likely to lead to a less-thanoptimal outcome for airports and the community. At best, the ANEF and AS2021 system sets minimums and, in the end, the system is only intended to mitigate noise effects within buildings. Additional or supplementary noise planning tools are required to better support the airport's ongoing operation and protect surrounding communities.

12.5.4 N CONTOURS

Having regard to the recognised limitations of the ANEF system, NASF Guideline A recommends using the 'Number Above' noise metric to supplement the ANEF contours.

The Number Above metric is a complementary aircraft noise contour system which produces contours showing the potential number of aircraft noise events above a certain decibel level, usually 60dB(A), 65dB(A) and 70dB(A). These contours, called 'N contours', have several advantages over the ANEF system, particularly because they report noise by the number of single events, which is how individuals generally experience and perceive aircraft noise.

The N contour system reports aircraft noise in the way that a person perceives it – as a number of noise events per day above a certain decibel level.

As recommended in NASF Guideline A, N contours have been produced in parallel with this Master Plan to provide an additional level of noise information. The N contours are shown in Figure 12.6 and comprise the following:

- N60: 100 or more daily events above 60dB(A)
- N65: 50 or more daily events above 65dB(A)
- N70: 20 or more daily events above 70dB(A).

Like the ANEF, the N contours reflect modelling of long-range runway capacity and are not intended to represent actual runway utilisation at a specific point in time.

Strategic planning around the airport should take these N contours into account in accordance with the 'guidance to planning officials' set out in NASF Guideline A. It is noted in this regard that the Tasmanian Planning Commission's Guideline No. 1 – Local Provisions Schedule (LPS): zone and code application (at Guideline SAC 3) encourages the use of the N Contours in preparing the "airport noise exposure area" overlay which controls sensitive uses in proximity to airport.

FIGURE 12.1 **RUNWAY 14R DEPARTURE AND ARRIVAL TRACKS**

FIGURE 12.2 **RUNWAY 32L DEPARTURE AND ARRIVAL TRACKS**




FIGURE 12.5





LONG RANGE AUSTRALIAN NOISE EXPOSURE FORECAST (ANEF) CHART

It is noted that whilst Launceston Airport does have aircraft movements at night (particularly freight aircraft movements) the noise model did not generate a N60 Night contour (six or more events between 23:00 and 06:00 of greater than 60 dB(A)) which is referred to in the NASF guideline. The absence of this contour should not be taken to mean there will be no aircraft movements at Launceston Airport between 23:00 and 06:00.

12.5.5 NOISE MONITORING SYSTEMS

Aircraft noise complaint monitoring for Launceston Airport is undertaken by Airservices Australia's Noise Complaints and Information Service (NCIS). Noise complaints are received, logged and investigated by the NCIS. Any complaints that are received are responded to by the NCIS as appropriate.

Airservices provides aircraft noise complaints data to Launceston Airport each month. The noise complaints are monitored by APAL on a quarterly basis to determine whether there are any trends or issues evident. These are noted in the airport's annual environment reports and regularly reviewed for trends or changes to enable local action where possible.

In 2018 there were six individual complainants, slightly up from five complainants in 2017. The main issue of concern in 2018 was aerobatic activity at the airport, which affected three complainants.

Four suburbs recorded complainants in 2018. West Launceston and Western Junction recorded two complainants each while Kings Meadow and Evandale recorded a single complainant each. Evandale and Western Junction residents were affected by the aerobatic operation. Residents of West Launceston were affected by both standard flight path and night movements. The resident in Kings Meadows was affected by a military operation.

12.5.6 NOISE ABATEMENT PROCEDURES

Launceston Airport's noise abatement procedures (NAPs) are designed and implemented by Airservices to reduce the impact of aircraft noise on the community. They include procedures for runway use and flight paths to reduce flights over residential areas. Airservices air traffic control implements these procedures but they are not mandatory, and their use depends on weather conditions and aircraft requirements.

When possible, departures are directed away from the Launceston urban area to the north-west of the airport. The preferred runway for departures is Runway 14R. The least preferred runway for departures is Runway 32L (jet noise abatement climb procedures apply). When conducting circuit training flights, aircraft will avoid overflying the township of Evandale to the south-east of the airport.

Airservices conducts regular reviews to check the effectiveness of noise abatement procedures and to seek improvements. At major airports, it consults with community forums on the terms of reference for reviewing the procedures and publishes reports on its website.





12.6 MANAGING BUILDING GENERATED WINDSHEAR

DITRDC's factsheet relating to NASF states:

Building-induced windshear can be a problem for aviation operations in cases where structures are situated close to airport runways. When a significant obstacle is located in the path of a crosswind to an operational runway, the wind flow will be diverted around and over the building and can cause the crosswind speed to vary along the runway.

Guideline B presents a layered risk approach to the siting and design of buildings near airport runways to assist land-use planners and airport operators to reduce the risk of building generated windshear and turbulence.

The airport's windshear assessment envelopes, based on NASF Guideline B, are shown in Figure 12.7.

Launceston Airport's development planning and approval process includes consideration of NASF Guideline B and building generated windshear issues when considering on-airport development proposals. Through the assessment of on-airport development proposals, APAL first identifies whether the proposed development is located inside either of the windshear assessment envelopes shown in Figure 12.7, and if so, undertakes an assessment in accordance with the guideline, prior to development approval.

There are currently no specific off-airport planning controls relating to NASF Guideline B. Nevertheless, when APAL is notified of off-airport permit applications it assesses them for building generated windshear implications and responds accordingly. However, this may not capture all potentially important off-airport development proposals. This is a matter that requires state and local government attention in accordance with the NASF principles. APAL is working with the relevant state and local planning authorities to address this matter.

FIGURE 12.7 WINDSHEAR ASSESSMENT ENVELOPES



12.7 MANAGING THE RISK OF WILDLIFE STRIKES

DITRDC's factsheet relating to NASF states:

Wildlife strikes and/or avoidance can cause major damage to aircraft and/or compromise aircraft safety. Whilst the Civil Aviation Safety Authority has well-established safety requirements for wildlife management plans onairport, wildlife hazards also occur outside the airport fence.

Guideline C provides advice to help protect against wildlife hazards originating off-airport. Many existing airports are surrounded by areas that are attractive to wildlife, especially birds, but appropriate land-use planning decisions and the way in which existing land-use is managed in the vicinity of airports can significantly reduce the risk of wildlife hazards.

The airport's wildlife buffer zones, based on NASF Guideline C, are shown in Figure 12.8.



Launceston Airport's development approval process includes consideration of NASF Guideline C and potential wildlife hazard issues when considering on-airport development proposals. Through the assessment of on-airport development proposals, APAL identifies the wildlife attractant risk based on the guideline's land-use table and implements appropriate mitigation measures as required, prior to development approval. The Environment Strategy also includes a range of wildlife management measures undertaken by the airport, which includes a specific Wildlife Hazard Management Plan (refer to section 11.9.6).

There are currently no specific off-airport planning controls relating to NASF Guideline C or wildlife hazard risks. Nevertheless, when APAL is notified of off-airport permit applications it assesses them for wildlife strike implications and responds accordingly. However, this may not capture all potentially important land-use proposals, particularly given the fact that the wildlife hazard risk zones outlined in NASF Guideline C extend 13 kilometres from the airport. This is a matter that APAL has raised with the state and local planning authorities and is working to address.

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FIGURE 12.8 WILDLIFE BUFFER ZONES



12.8 MANAGING THE RISK OF WIND TURBINE FARMS

DITRDC's factsheet relating to NASF states:

Wind turbines can constitute a risk to low-flying aviation operations such as agricultural pilots. Additionally, temporary and permanent wind monitoring towers can be erected in anticipation of, or in association with, wind farms and can also be hazardous to aviation, particularly given their low visibility. These structures can also affect the performance of Communications, Navigation and Surveillance equipment operated by Airservices Australia and the Department of Defence. Guideline D provides advice on the location and safety management of these and other similar structures.

Launceston Airport's development approval process includes consideration of NASF Guideline D when considering on-airport development proposals.

There are currently no specific off-airport planning controls relating to NASF Guideline D or wind farms. However, wind farms within the Airport Obstacle Limitation Area overlay prescribed under the SPPs Safeguarding of Airports Code would be controlled to avoid impacts with aircraft operations.



12.9 MANAGING THE RISK OF LIGHTING DISTRACTIONS

DITRDC's factsheet relating to NASF states:

Pilots are reliant on the specific patterns of aeronautical ground lights during inclement weather and outside daylight hours. These aeronautical ground lights, such as runway lights and approach lights, play a vital role in enabling pilots to align their aircraft with the runway in use. They also enable the pilot to land the aircraft at the appropriate part of the runway.

It is therefore important that lighting in the vicinity of airports is not configured or is of such a pattern that pilots could either be distracted or mistake such lighting as being ground lighting from the airport. Guideline E provides advice on the risks of lighting distractions and how these can be minimised or avoided.

Lights within six kilometres of the airport fall into a category most likely to be subjected to the provisions of Regulation 94 of the Civil Aviation Regulations 1998 which addresses lighting that has the potential to endanger the safety of aircraft. This regulation forms the basis of NASF Guideline E.

Under Guideline E, within the six-kilometre radius there exists a primary area which is divided into four light control zones: A, B, C and D (see Figure 12.9). These zones reflect the degree of interference ground lights can cause as a pilot approaches to land. These areas also nominate the intensity of light emission above which interference is likely.

Lighting projects within these areas or in the neighbourhood of the airport that are brought to the attention of APAL are assessed and reviewed with regard to its likelihood to endanger the safety of aircraft. This assessment is undertaken to ensure they do not infringe the provisions of Regulation 94.

The airport's maximum lighting intensity zones, based on NASF Guideline E, are shown in Figure 12.9.

Launceston Airport's development approval process includes consideration of NASF Guideline E and potential lighting issues when considering onairport development proposals. APAL identifies which lighting intensity zone applies to the development and assesses whether any proposed lighting complies with the maximum lighting intensity requirements for that zone as stated in the guideline.

Whilst there are currently no specific off-airport planning controls relating to dangerous lighting around Launceston Airport, there is Regulation 94 of the Civil Aviation Regulations 1988 which applies off-airport.

When APAL is notified of off-airport permit applications it assesses them for lighting distraction implications, having regard to the guideline, and may request conditions where appropriate.

Whilst APAL would provide advice on lighting proposals if notified, this may not capture all potentially important proposals that may affect airport operations. This is a matter that APAL has raised with the relevant state and local planning authorities and is working to address.

12.10 MANAGING THE RISK OF **AIRSPACE INTRUSIONS**

DITRDC's factsheet relating to NASF states:

The operational airspace of airports is the volume of airspace above a set of imaginary surfaces, the design of which is determined by criteria established by the International Civil Aviation Organisation. These surfaces are established with the aim of protecting aircraft from obstacles or activities that could be a threat to safety—in particular, high-rise buildings.

Guideline F provides advice for planners and decision makers about working within and around protected airspace, including OLS and PANS-OPS intrusions, and how these can be better integrated into local planning processes.

After the issue of noise protection, the other most significant form of protection necessary for the immediate and long-term operation and future growth of the airport is the protection of its surrounding airspace from physical intrusions such as tall buildings or towers, and non-physical intrusions such as industrial chimney discharges. These matters are controlled by the *Airports* (Protection of Airspace) Regulations 1996 and are administered by Launceston Airport and the Commonwealth DITRDC. These matters are also addressed in NASF Guideline F.

12.10.1 PRESCRIBED AIRSPACE REGULATIONS

Under the provisions of the Airports Act and the Airports (Protection of Airspace) Regulations 1996 (Airspace Regulations), the airspace around specific airports is declared as Prescribed Airspace to protect the airspace for the safe arrival and departure of aircraft using the airport.





FIGURE 12.10A CURRENT OBSTACLE LIMITATION SURFACES

Prescribed Airspace is the airspace above any part of either an Obstacle Limitation Surface (OLS) or the surfaces set by Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS), which is defined as:

- OLS: this surface is usually the lower of the two surfaces that make up Prescribed Airspace, and is designed to provide protection for visual flying, or VFR (i.e. when the pilot is flying by sight)
- PANS-OPS: this surface is usually higher than the OLS and is designed to provide protection for instrument flying, or IFR (i.e. when the pilot is flying by instruments). The PANS-OPS may also protect airspace around the network of navigational aids that are critical for instrument flying.

Under Section 182 of the Airports Act, activities that result in intrusions into an airport's Prescribed Airspace are called 'controlled activities'. Controlled activities cannot be carried out without approval. The Airspace Regulations provide for the Commonwealth DITRDC or the airport operator to approve applications to carry out controlled activities and to impose conditions on approval.

12.10.2 LAUNCESTON AIRPORT PRESCRIBED AIRSPACE

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Airport operators are required to prepare plans of the Prescribed Airspace surfaces relating to their airport and have those surfaces declared under Airspace Regulations by the Commonwealth DITRDC.

Launceston Airport's Prescribed Airspace is shown on Figures 12.10A and 12.10B, and Figure 12.11. Figures 12.10A and 12.10B show the OLS based on the main runway 14R/32L as well as the grass runways 18/36 and 14L/32R. Figure 12.11 shows PANS-OPS surfaces for the main runway.

It is important to note the distances covered by the Prescribed Airspace. In some areas the Prescribed Airspace extends beyond 30 kilometres from the airport and four municipalities (Northern Midlands, Meander Valley, Launceston and West Tamar) are affected by Launceston Airport's Prescribed Airspace to varying degrees.

Referral of planning applications to Launceston Airport from the Northern Midlands Council, where a proposal may affect the Prescribed Airspace, is critical to the safeguarding of the airport into the future. Processes in place through the Northern Midlands Interim Planning Scheme ensure that Launceston Airport has an opportunity to assess proposed developments and advise the Council of applicable standards and impact on airport operations. The council planning scheme, through the provisions, the Airport Impact Management Code (and the future Safeguarding of Airports Code) ensures the Airspace Regulations are taken into account for all development proposals within the Prescribed Airspace.

During the design of any proposed on-airport developments detailed analysis of the prescribed airspace surfaces is undertaken to ensure compliance with relevant standards.

The relevant Commonwealth agencies, CASA and Airservices, are consulted about any building developments (and the use of associated construction equipment) that have the potential to impact aircraft operations, and approval is sought from DITRDC for any penetrations into the prescribed airspace surfaces as required under the Airspace Regulations.

12.10.3 POTENTIAL CHANGES TO AIRSPACE

Decommissioning of the grass runways 14L/32R and 18/36 will impact Launceston Airport's protected airspace. The change would be minor and limited to the approach/departure surfaces of these two runways. These changes are limited to the removal of the protection of approach/ departure surfaces below the inner horizontal surface of 211m AHD (the controlling surface of 14R/32L main runway). Figures 12.12A and 12.12B illustrate the changes.



FIGURE 12.10B



FIGURE 12.12A **FUTURE OBSTACLE LIMITATION SURFACES**

FIGURE 12.12B FUTURE OBSTACLE LIMITATION SURFACES





ARP

INNER HORIZONTAL SURFACE RL 211

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12.11 PROTECTING AVIATION FACILITIES

DITRDC's factsheet relating to NASF states:

Communications, Navigation and Surveillance (CNS) facilities are crucial to the safe and efficient operation of aircraft. While such facilities are generally associated with airports, some are offsite and at significant distances from airports. Inappropriate development in the vicinity of these facilities can compromise their effectiveness.

Guideline G is intended to assist land-use planners in their consideration of these facilities when assessing development proposals and rezoning requests and when developing strategic land-use plans. It will also guide their interactions with Airservices Australia and the Department of Defence on when to consult on development proposals and in gaining up to date geographical locations for these facilities.

Launceston Airport's development approval process includes consideration of NASF Guideline G when considering on-airport development proposals. Through the assessment of on-airport development proposals, APAL first identifies whether the proposed development is located in a CNS Building Restricted Area as defined in the guideline. If so, APAL undertakes an assessment in accordance with the guideline, including consultation with the relevant owner of the CNS facility, prior to approval of the development.

There are currently no specific off-airport planning controls relating to NASF Guideline G. Whilst APAL would provide relevant advice on proposals if notified, this may not capture all potentially important proposals that may affect CNS facilities. This is a matter that requires state and local government attention in accordance with NASF principles.

12.12 PROTECTING HELICOPTER LANDING SITES

DITRDC's factsheet relating to NASF states:

The protection of strategically important helicopter landing sites (HLS) (such as those associated with hospitals) from the adverse impacts of development has become a critical issue in recent years. There have been times where hospital emergency helipads have been closed due to safety concerns arising from the nearby operation of construction cranes. Guideline H seeks to provide a consistent national approach for land-use planning in the vicinity of these facilities. State and territory governments are responsible for identifying HLS that are considered to be of strategic importance, or those that are to be protected in the interest of public safety.

NASF Guideline H does not apply to helicopter landing sites on an aerodrome and therefore does not apply to Launceston Airport.









DITRDC's factsheet relating to NASF states:

Public Safety Areas (PSAs) are designated areas of land at the end of airport runways within which certain planning restrictions may apply. While air crashes are rare events, the majority occur in the vicinity of airports during take-off and landing. The PSA Guideline was developed to mitigate the risk of on-ground fatalities from an aircraft incident, by informing a consistent approach to land-use at the end of Australian airport runways.

The airport's public safety areas, based on NASF Guideline I, are shown in Figure 12.13.

Launceston Airport's development approval process includes consideration of NASF Guideline I and the public safety areas when considering onairport development proposals, to ensure that no incompatible uses/activities are sited within these areas. For the most part, the airport's public safety areas cover land outside the airport site, but within the ANEF contours. Most off-airport development proposals that fall within the ANEF contours are referred to APAL for review.

There are currently no specific off-airport planning controls relating to NASF Guideline I or the public safety areas at the runway ends. Nevertheless, when APAL is notified of off-airport permit applications it assesses them for public safety implications and responds accordingly. However, this may not capture all potentially important offairport development proposals. This is a matter that APAL has raised with the relevant state and local planning authorities and is working to address. It is noted, however, that the areas contained within the public safety areas are currently zoned Rural Resource, so there is limited potential for use or development to seriously impinge on these areas.







12.14 SUMMARY AND CONCLUSION

Given Launceston Airport's social and economic importance to the local region and the state, planners and the planning system should adopt a precautionary approach to protecting this significant asset. This is essential when looking back at the development of Australia's cities and their airports over the last 80 years, which has seen many airports' operations restricted by encroaching urban development. Such an approach would be consistent with the policy direction in the National Airports Safeguarding Framework, which recognises the need to supplement existing safeguarding measures with other tools.

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The Northern Midlands Interim Planning Scheme 2013 contains the following objective:

• Protect Launceston Airport from encroachment by incompatible uses or developments that compromise its operations in recognition of its importance and contribution to the Launceston region and state economy.

This objective is supported and is considered to be consistent with the principles of NASF.

The scheme also contains an Airports Impact Management Code (E12). The purpose of this provision is to:

- a) ensure that use or development within identified areas surrounding airports does not unduly restrict the ongoing security, development and use of airport infrastructure
- b) provide for management of the land-use implications of those areas relevant to use and development under the scheme.

The specific provisions of the Code ensure that land-use complies with the ANEF and AS2021 and that development complies with the Prescribed Airspace provisions of the Airports Act and the Airspace Regulations. The future Safeguarding of Airports Code under the Tasmanian Planning Scheme contains similar provisions.

Whilst the Airports Impact Management Code (and the future Safeguarding of Airports Code) within the planning scheme is supported, Launceston Airport believes that some additional state-wide planning provisions to enable improved protection of airports aligned with NASF would be beneficial. They are:

- A reference to the airport's N contours in addition to the ANEF contours in accordance with NASF Guideline A
- The standards relating to Prescribed Airspace need to clearly articulate that non-physical intrusions such as industrial chimney discharges are also potentially a controlled action
- Provisions to control hazards to aircraft operations through building generated windshear, wildlife strikes, wind turbine farms and lighting in accordance with NASF Guidelines B, C, D and E
- Provisions relating to the public safety areas at the runway ends in accordance with NASF Guideline I.

With the addition of these provisions, the objective of safeguarding Launceston Airport would be fully addressed in accordance with NASF.

Launceston Airport is working with the state government and relevant local councils to promote the implementation of the NASF in Tasmania and its eventual inclusion in the planning schemes. While Launceston Airport will play a key role in developing the improved planning regime, the process will need to be led by the state government.





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IMPLEMENTATION





13.1 OVERVIEW

This Master Plan represents the current view of airport development expected to be realised over the next 20 years, largely as a result of increased passenger and aircraft demand.

The implementation of the Master Plan and future projects will be in logical stages to match demand, with continuous monitoring using a range of processes and analyses to ensure the timely delivery of required infrastructure and facilities. The review of the Master Plan (which, through recently enacted legislation, will now occur every eight years) further enables Launceston Airport to reassess the project time frames, validate the accuracy of the forecasts and planning assumptions, incorporate progressive insights for the future and learnings from the past, and refine concept scenarios. The implementation of the Master Plan is also supported by a range of other systems and processes that ensure project implementation is undertaken in an efficient, safe, secure and sustainable manner, and the airport's development is properly managed.

13.2 CAPITAL PROGRAM

Largely underwritten by commercial agreements with airline customers, tenants and other business operators, the capital program underpins the capital works planned across the airport's five precincts. The capital program is aligned with Launceston Airport's precinct strategies (20 years) and capital plan (10 years).

13.3 PROJECT DELIVERY

The Launceston Airport project management process guides projects from inception through to operational handover. The process for projects focuses on the clarity of project scope, cost, time and risks. A Project Working Group (PWG) is established for all significant projects. The PWG monitors and directs all aspects of the project and comprises a range of senior management from across the business to enhance the breadth of expertise within the group. The primary aims of Launceston Airport's project delivery process are to:

- Manage the expectations of all project and business stakeholders
- Provide a transparent process to those affected by the project

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- Establish a governance process so that those delivering the project understand what is required, by whom and by when
- Increase clarity to ensure the project provides the best outcome for the business
- Increase consistency and quality of information for efficient and effective communication
- Increase stakeholder buy-in and align project objectives to strategic goals
- Ensure projects progress seamlessly through the funding and design approval stages
- Increase the business's ability to plan and evaluate workload
- Increase the business's ability to prioritise projects
- Identify, assess and manage associated risk.

Following completion, a post-implementation review of projects is conducted by the senior management team.

13.4 DEVELOPMENT APPROVAL **PROCESS**

Development approval requirements for the Launceston Airport site are administered under the Airports Act. The details of the approval process for on-airport developments are discussed in Section 5.10. Before they reach the delivery stage, all such projects progress through this consent process. This includes Major Development Plan (MDP) approval (if required) and approval by the Airport Building Controller.

13.5 SAFETY MANAGEMENT SYSTEM

Launceston Airport maintains a Safety Management System (SMS) which aims to ensure compliance with current state and federal legislation and is intended to outline how safety is managed on the airport site. The SMS is a reference point for employees to assist in clarifying the safety processes / systems used at the airport and best practice safety standards.

The safety systems and processes outlined in the SMS are designed to achieve business safety objectives and support Launceston Airport's Work Health & Safety Policy. The SMS comprises safety elements that divide the system into points of reference to make navigation and reference easier and simpler for the end-user. No one element is more important than another and all safety elements align to support 'big picture' safety requirements and obligations.

Contractors, tenants, property occupiers, temporary workers, concessionaires and other airport business operators are required to cooperate with and, where applicable, demonstrate an approach to safety management equivalent to the SMS.

13.6 ENVIRONMENTAL MANAGEMENT SYSTEM

Launceston Airport's Environmental Management System (EMS) is discussed in Section 11: **Environment Strategy.**

This system provides a structured approach to planning and implementing environmental protection measures. The EMS monitors environmental performance and integrates environmental management into the airport's operations, planning and other quality management systems. It records the findings of various environmental reviews and assessments to ensure action items arising from reviews are followed up.



We support a variety of community sponsorship and development programs to enhance economic and social prosperity.



13.7 ASSET MANAGEMENT SYSTEM

Launceston Airport has an integrated Asset Management System that provides detail and processes for managing airport assets. This system includes identification of specific actions required to manage the assets and includes demand forecasts, condition and risk information as well as long-term financial forecasts.

13.8 COMMUNITY AND STAKEHOLDER ENGAGEMENT

Launceston Airport has a strong commitment to community and stakeholder consultation and will continue to take a proactive approach to communicating with the community, governments at all levels, businesses, industry, employees and other key stakeholders. This ongoing approach is fundamental during implementation of the Master Plan. The airport's communications and engagement activities involve four main streams, outlined below. To monitor the progress of these activities, Launceston Airport monitors its stakeholder and communications performance through stakeholder surveys which provide a measure of stakeholder satisfaction levels.

13.8.1 COMMUNICATIONS AND INFORMATION

Launceston Airport will continue to use a range of communication channels – including its website, media releases, community meetings and social media – to provide timely and accurate information about airport operations, projects and future plans.

13.8.2 STAKEHOLDER ENGAGEMENT

Launceston Airport holds regular briefings, meetings and updates to keep stakeholders informed and engaged on airport-related issues, including an annual stakeholder event. These stakeholders include local, state and Commonwealth governments and relevant government departments; agencies and statutory authorities; the local community; airlines; industry; business and tourism bodies; and employees.

13.8.3 FORUMS

Launceston Airport has established a Community Aviation Consultation Group which focuses on community-related airport matters. The group provides an opportunity for the community to discuss and express opinions regarding Launceston Airport, particularly with regard to planning, development and operations, and disseminates information regarding the airport. Members include community, government and industry. The group is independent of the airport and has an independent chair.

13.8.4 COMMUNITY INVESTMENT

Launceston Airport supports a variety of community sponsorship and development programs to enhance the Launceston community's economic prosperity and social and cultural life.



13.9 PERIODIC REVIEWS

For an airport of Launceston Airport's scale, the Airports Act now provides for a final Master Plan to remain in force for eight years. In addition, there is provision for the Minister, by written notice, to direct the airport-lessee company to replace the original plan.

In addition to the statutory review requirements, Launceston Airport management processes provide for annual review of the development proposals that are included in this Master Plan based on updated annual forecasts.

Airspace protection surfaces are reviewed periodically following significant flight track changes, and declaration of the new surfaces is then sought from the Commonwealth under the *Airports (Protection of Airspace) Regulations 1996.*



CONCLUSION

This Master Plan provides the community, business operators, government and other key stakeholders with an understanding of Launceston Airport, what it does, and the values and aspirations by which it defines itself. It provides an assessment of the context in which the airport stands today and articulates the growth requirements APAL must meet to achieve its aspirations for the airport, in addition to meeting its lease requirements.

This document expresses the airport's continued commitment to develop as a leading regional airport and become Tasmania's port of choice, implementing the highest industry standards and reflecting best practice in airport management, both now and in the future.

The Master Plan will not be successful unless Launceston Airport continues to widely communicate these strategic goals and incorporate them into its day-to-day business and planning activities, with direct links to its capital works program and stakeholder engagement plans. The airport will also continue to monitor its performance over time and make adjustments as needed to achieve the desired results. This Master Plan will guide Launceston Airport as t works on promoting sustainable and compliant ong-term growth, safe operations and an optimal sustomer experience. The airport commits to updating the Master Plan every eight years to cover each new planning period, in accordance with egislative requirements.

Despite its comprehensive nature, this Master Plan does not intend to outline a fixed set of directives. In Launceston Airport's view, the planning process should be dynamic and adaptable in order to adequately respond to evolving stakeholder requirements and external circumstances beyond the airport's reasonable control. It will, however, serve as Launceston Airport's strategic planning framework, against which the airport will make infrastructure-related decisions and focus its resources, thus accommodating future growth and consolidating its position as the gateway to the heart of Tasmania.



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