

Gold Coast Airport

Master Plan 2006



#### FORWARD

On behalf of Gold Coast Airport Pty Limited (GCAPL), I am pleased to present our 2006 Master Plan which establishes a framework for the future development of Gold Coast Airport.

This Master Plan updates and incorporates amendments to the 2001 Master Plan. The amendments proposed were incorporated to either provide an outcomes based approach to the development of the airport or in response to submissions received during the exhibition period.

As Gold Coast Airport is the principal domestic and international aviation gateway to the Gold Coast/ Tweed Region, it is important that the prudent planning measures established and maintained by the relevant planning authorities over the last 20 years are continued to ensure the airport is capable of fulfilling its function on behalf of the Gold Coast and Northern Rivers communities. The recommended planning strategies contained in this document will ensure that the airport can facilitate safe, efficient and regular air transport services over the next 20 years.

During the lifetime of the approved Master Plan, GCAPL will work closely with all airlines and tour operators to develop the network of routes and services to and from Gold Coast Airport to service the Gold Coast/Tweed market.

Gold Coast Airport is a significant contributor to the region's economic welfare, not only in its own right but also through the flow-on effects of airport and tourism activity from which the whole community derives benefit. These economic benefits will continue to increase with the growth in aviation and other developments at the airport in the future. GCAPL is a locally based, Australian owned company dedicated to facilitating the air transport needs of the Gold Coast and Tweed communities. Our team is made up of individuals with the expertise necessary to ensure a balance between commercial success and social and environmental responsibility. The Master Plan is a guide to the development of airport facilities, infrastructure and land uses including land use controls to meet the future requirements of the aviation industry and the community which it serves for the ensuing 20 years. It also identifies potential commercial opportunities to enhance the viability of the airport as a business while protecting its core aviation function.

The Master Plan also proposes land use controls in adjacent areas to ensure safe and efficient aircraft operations into the future, and includes an assessment of aircraft noise and other potential impacts of the proposed developments on the community. In this respect, it compliments current local authority planning provisions and protection provided under the Prescribed Airspace Regulations.

The Master Plan is intended to be the primary guide to further developments of the airport and its environs and the principal planning instrument that addresses the obligations of GCAPL pursuant to the requirements of the *Airports Act 1996*.

I invite you to share our vision for Gold Coast Airport as a major economic generator for the Gold Coast/ Tweed region.

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Dennis Chant Managing Director Gold Coast Airport Pty Ltd

December 2006

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### GLOSSARY

Ab initio	All training up to completion of commercial pilot's license and multi- engined commercial instrument rating.
Aerodrome/Airport	A defined area on land or water (including any buildings installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.
Airport Control Service/ Air Traffic Control	Air traffic control service provided by Airservices Australia.
Airport Emergency Plan	A plan developed by the Airport Operator to co-ordinate all agencies and their individual Airport Emergency Procedures, state or supporting area plans for dealing with an airport emergency.
Airport Emergency Procedures (Standard Operating Procedures)	Individual agency procedures for meeting the Airport Emergency Plan.
Aircraft / Aeroplane	Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.
Aircraft Operator	A person, organisation or enterprise engaged in, or offering to engage in, aircraft operation.
Airline Operator	The operator of a Regular Public Transport air service.
Airport Operator	The airport operator is the person(s) or organisation whose name appears on the license document and/or in aeronautical aviation publication Enroute Supplement Australia.
Airport Security Program	A written plan prepared by an Airport Operator that details security measures and procedures for the airport as approved by the Secretary, Department of Transport and Regional Services.
Air Side	The movement area of an airport, adjacent terrain and buildings or portions thereof, access to which is controlled.
Apron	<ul> <li>The part of an airport used:</li> <li>a) for the purpose of enabling passengers to board, or disembark from aircraft;</li> <li>b) for loading cargo onto, or unloading cargo from, aircraft; and/or</li> <li>c) for refuelling, parking or carrying out maintenance on aircraft.</li> </ul>
Aviation Security	A combination of measures and human and material resources intended to safeguard civil aviation against acts of unlawful interference.
Categorised Airport	An airport that has been identified by the Department of Transport and Regional Services through an instrument signed by the Secretary and pursuant to ANA 22 ZK. (1) as being an airport requiring the implementation of specific aviation security measures through an Airport Security Program.
Control Tower	A unit established to provide air traffic control service to airport traffic.

Department	The Commonwealth Department of Transport and Regional Services.
Gold Coast Airport Pty Ltd (GCAPL)	A subsidiary of Queensland Airports Limited (QAL)
Handling Agent	An organisation which provides an airline with services such as, but not necessarily confined to, engineering support, passenger handling, operational services and the supply of consumable items.
In Flight	'In flight' commences when the last external door of the aircraft is closed in preparation for the first movement of the aircraft for the purpose of taking off; or if the aircraft moves before all doors are closed for the purpose of taking off, when it first so moves, until the first external door of the aircraft is opened after the aircraft comes to rest.
Joint User Airport	An airport under control of a part of the Defence Force in respect of which an arrangement under Section 20 of the Civil Aviation Act is in force.
Land Side	That area of an airport and buildings to which the public normally has free access.
Manouvering Area	Those parts of an airport used for the take-off, landing and taxiing of aircraft, excluding aprons.
Movement Area	That part of an airport used for the surface movement of aircraft, including manouvering areas and aprons.
Prohibited Area	In relation to an airport, means any part of the airport upon or in relation to which is posted a notice to the effect that access to that part of the airport is prohibited, and purporting to have been posted with the authority of the Chief Executive of the Airport Operator.
Regualr Public Transport Service	A service consisting of Regular Public Transport aircraft operations, as prescribed in the Civil Aviation Regulations.
Regulatory Signs	A sign, which advises of any law, regulation or restriction which it, would be an offence to disregard.
Secretary	The Secretary to the Department of Transport and Regional Services.
Sterile Area	In relation to an aerodrome, means an area in the aerodrome to which persons, vehicles and goods are not permitted access until given clearence, in relation to aviation security, under Section 21 of the Act.
Uniformed Security Force	<ul> <li>Means a body or person each of whom:</li> <li>a) is identically dressed in a uniform of the kind generally worn by security or police personnel; and</li> <li>b) is equiped with: <ul> <li>an appropriate firearm, and</li> <li>a portable radio transceiver that enables the person to communicate with other members of the uniformed security force and with a central controller of that force, and</li> <li>iii provides a rapid response capability when the screening point is operational and staffed by screening operatives.</li> </ul> </li> <li>At GCAPL, the Australian Protective Service under contract to AAL as required by ANRs carries out the functions.</li> </ul>

### **ABBREVIATIONS**

ABC	Airport Building Controller
ACCC	Australian Competition and Consumer Comission
AEO	Airport Environment Officer
ANEC	Australian Noise Exposure Concept
ANEF	Australian Noise Exposure Forecast
ANEI	Australian Noise Exposure Index
BASI	Bureau of Air Safety Investigations
CASA	Civil Aviation Safety Authority
DME	Distance Measuring Equipment
DMR	Department of Main Roads (QLD)
DoTARS	Department of Transport & Regional Services
EMP	Environmental Management Program
EMS	Environmental Management System
FAC	Federal Airports Corporation
GA	General Aviation
GCAPL	Gold Coast Airport Pty Ltd
GHD	Gutteridge Haskins and Davey Pty Ltd
GPS	Global Positioning System
HIAL	High Intensity Approach Lighting
ICAO	International Civil Aviation Organisation
ILS	Instrument Landing System
JOSF	Jointly Owned Storage Facility
JUHI	Joint User Hydrant Installation
MLS	Microwave Landing System
MUIT	Multi User Intergrated Terminal
NDB	Non Directional Beacon
OLS	Obstacle Limitation Surface
PANS-OPS	Procedures for Air Navigation Services – Aircraft Operations
RPAs	Rules and Practices for Aerodromes
RFFS	Rescue and Fire Fighting Service
RPT	Regular Public Transport
RTA	Roads and Traffic Authority (NSW)
SEPP	State Environment Planning Policy
TAR	Terminal Area RADAR
T-VASIS	T-Visual Approach Slope Indicator
VHF	Very High Frequency
VOR	VHF Omni – Directional Range

### **EXECUTIVE SUMMARY**

#### Introduction

As custodian of Gold Coast Airport, Gold Coast Airport Pty Limited (GCAPL) has a clear responsibility under the *Airports Act 1996*,to ensure that the airport is developed to accommodate the air transport demands of the Gold Coast and Northern New South Wales communities.

GCAPL's vision for the airport involves a partnership with the communities we serve, to develop a facility which continues to meet the growing needs of family, business and tourist travellers while making a major contribution to the economic and social well being of those communities.

Achievement of this vision requires long term planning. The purpose of the Master Plan is to summarise the planning framework for the development of Gold Coast Airport over a planning period of 20 years, within the context of the airport's ultimate development potential.

GCAPL gives its assurance that it will work closely with all stakeholders in government, business and the wider community to realise its vision while balancing economic development with environmental and social responsibilities.

#### **Economic Significance**

Gold Coast Airport is a key driver for the economy of the Gold Coast/Tweed region. The value of tourism visitor arrivals/departures through Gold Coast Airport is of major economic significance to this region.

The airport is an important part of the Australian aviation transport network connecting the tourism capital with the major southern population centres.

The airport contributes the following benefits to the regional economy:

- direct employment of over 1000 people at the airport;
- commercial enterprises at the airport provide training opportunities and apprenticeships;
- Tourism Australia figures indicate that approximately 6.0 million tourists visited the Gold Coast/Northern Rivers region in 2005. 33% of the visitors flew via Gold Coast Airport;
- the Gold Coast and Tweed business communities benefit by being able to fly directly to the major business centres of Sydney, Adelaide, Newcastle and Melbourne; and,
- the airport provides direct international flights to New Zealand.

#### **Development Objectives**

In order to realise the vision for Gold Coast Airport and to accommodate the commercial and aviation marketing objectives, GCAPL has identified specific development objectives which it will pursue in the course of this planning period. These objectives include:

- to ensure the capacity and provision of Gold Coast Airport's infrastructure is commensurate with the forecast growth in passenger and aircraft movements;
- to capitalise on the compatible development potential of the airport site, thereby generating employment and economic growth for the region and an equitable return for shareholders;
- to ensure the safe, secure and efficient movement of passengers and aircraft;
- to achieve an acceptable balance between the development of the airport and mitigation of environmental impacts including aircraft noise;
- to ensure an efficient, diverse and responsive ground transportation network to cater for the land transport needs of the travelling public, visitors and airport staff;
- to deliver high levels of service quality and facilities;
- to grow the aviation market and network of domestic and international services servicing Gold Coast Airport;
- to provide services and infrastructure that demonstrate a multi use, flexible and integrated planning approach; and,
- facilitate the determination of a road/rail corridor west of the airport that is acceptable to all major stakeholders.

#### **Forecast Growth**

Total passenger movements at Gold Coast Airport have more than doubled over the past 5 years increasing from 1.7 million in 2000/2001 to 3.58 million in 2005/2006.

#### Land Use Planning

In concert with the requirements of the *Airports Act 1996* and associated Regulations, GCAPL, Gold Coast City and Tweed Shire Councils consulted on a regular basis to form a land use development plan that is viewed as complementing Commonwealth, State and Local Government planning regimes.

The current zoning of the part of Gold Coast Airport located in Gold Coast City (Queensland) is "Community Purposes" Domain. Areas of the City in which development could potentially affect airport operations, such as through the erection of tall buildings, are controlled by Constraints Codes in the Planning Scheme.

The part of the airport located in Tweed Shire (NSW) is zoned "Special Uses 5(a) - Airport" under the Tweed Local Environmental Plan 2000 (LEP). The LEP contains provisions which protect airport operations from potentially adverse forms of development, and also prescribes areas of the Shire in the vicinity of the airport in which development should be curtailed or specially constructed so as to avoid adverse effects of aircraft noise.

The proposed Land Use Plan identifies five primary precincts. The plan details GCAPL's key development objectives, development opportunities, development control principles, design principles and acceptable and unacceptable uses for each precinct.

#### **Airspace Protection**

The safe movement of aircraft will always remain a fundamental requirement for the successful development of Gold Coast Airport. In that regard, necessary protection for the airspace around and over the airport has been provided in the form of Regulations to the Airports Act 1996. Current planning instruments protect the two runway system incorporating an ultimate length for runway 14/32 of 2858m.

GCAL will continue to take a pro-active role with State and Local Government authorities to ensure that the airspace protection requirements are provided for in development assessment and approval procedures.

Apart from continuing control of development through use of local authority statutory planning provisions, measures to protect the airport's. "prescribed airspace" will also be effected through enforcement of the Airports (Protection of Airspace) Regulation under the Airports Act."

#### **Development Proposals**

The development concept for Gold Coast Airport is to adopt an integrated planning approach to facility development. It is recognised that in order to meet the development objectives the balance between development of airside facilities, ground transportation access and commercial development will need to be carefully managed. The Revised Fresh Master Plan shows the overall infrastructure layout projected for 2020 and beyond. A plan depicting this layout is shown at Figure 6.10.

The key features of this Master Plan include the following:

- a phased flexible approach for terminal development;
- future provision for a possible rail terminus either adjacent to the main domestic terminal which may be incorporated into a Multi Modal Transit Centre or adjacent to the future airport entrance;
- provision of precincts for non aviation commercial/ industrial development; and,
- development of improved vehicular access from the Gold Coast Highway by provision of upgraded entry and exits.

#### **Environment Considerations**

The Master Plan has considered environmental issues associated with the development proposals. To ensure that the current operations at Gold Coast Airport and development proposed in the Master Plan are managed by GCAPL to prevent or minimise potential environmental impacts, Environmental Management Programs (EMPs) have been developed. These are included in the AES. Field investigations and surveys have identified areas of important remnant vegetation and cultural heritage adjacent to the Cobaki Broadwater and to the west and south west of the existing runway system. Development proposals have consciously avoided encroachment into these areas by restricting development west of the Tugun Bypass route.

The aircraft noise contours based on the Australian Noise Exposure Forecast (ANEF) system for the forecast aircraft traffic have remained unchanged in this Master Plan. Essentially the noise footprint for the Airport is adequate to cater for future aircraft. The rational for this assessment is that due to improvements in technology aircraft are becoming quieter hence the existing ANEF contours are able to be retained.

Not with standing this fact noise generated by aircraft has a major impact on the surrounding region and therefore requires an ongoing program for noise management. Managing aircraft noise is a responsibility of Airservices Australia. They are assisted in this task by GCAPL, the airlines and land use planning authorities (Gold Coast City Council and Tweed Shire Council).

#### Implementation

Implementation of the Master Plan will be in stages to meet demand. Each stage will be subject to separate planning, commercial, operational and environmental assessment.

A Major Development Plan (MDP) will be prepared for major projects in accordance with the requirements of the Airports Act 1996. MDPs are subject to Commonwealth approval processes including environmental impact assessment, industry and community liaison and a 90 day public review period. Other airport developments, of a smaller nature, are also subject to Commonwealth approval through the Department of Transport and Regional Services appointed Airport Building Controller and Airport Environment Officer.

Section 7.0 Implementation of this Master Plan details those projects which GCAPL believes will be undertaken over the next 20 year horizon.

#### Review

A review of the Master Plan is required every five years in accordance with the requirements of the Airports Act 1996.



# **1.0** INTRODUCTION

#### **1.1 BACKGROUND**

On 29 May 1998, the Commonwealth Department of Transport and Regional Services (DoTARS) awarded to Gold Coast Airport Pty Limited (GCAPL) formerly Queensland Airports Limited (QAL) a 50 year lease with a further 49 year option to operate Gold Coast Airport.

Under the *Airports Act 1996*, GCAPL is required to prepare an Airport Master Plan and an Environment Strategy.

This Master Plan presents a concept for the ultimate development of the airport site and provides some more detailed concepts for the period covering the next twenty years. It is a key document that is used as a guide for:

- development of airport facilities for both aviation and non-aviation uses;
- assessment of the environmental effects of airport construction and operation;
- development of land use control for areas surrounding the airport; and
- establishment of airport access requirements.

The Master Plan was prepared in consultation with various on-airport and off-airport stakeholders, government departments and local councils and the general community.

#### **1.2 VISION FOR GOLD COAST AIRPORT**

GCAPL has a vision for Gold Coast Airport that ensures the commercial and operational requirements of this airport are developed in harmony with its physical and social environmental requirements.

GCAPL intends to be a leading corporate citizen. The vision that GCAPL holds for Gold Coast Airport is one that positions this airport as a major economic generator for tourism in Queensland, and in particular the Gold Coast/ Tweed Region.

The vision is one that sees Gold Coast Airport:

- continuing to provide safe, secure and efficient operations;
- positioned as the natural choice for visitors and locals wishing to travel directly to and from the Gold Coast/ Tweed Region;
- continuing as a major generator of employment and other economic benefits for the Tweed and Gold Coast communities through the timely provision of quality air transport facilities;
- enhancing the range of products, facilities and services offered to a level that meets customer expectations;
- working in partnership with stakeholders who have a vested interest in the successful development of the airport; and
- fulfilling our environmental and social responsibilities.

These key principles will be fulfilled whilst providing an appropriate return on investment to shareholders through sound business management.

# 1.3 DEVELOPMENT OBJECTIVES OF THE MASTER PLAN

The Master Plan is a strategic plan for future airport facilities that will satisfy the forecast aviation demands in a way that is compatible with the environment and local community needs. It provides a rational development program for aviation infrastructure that maintains flexibility to accommodate future changes in the dynamic aviation industry.

The Master Plan must also reflect the reality of the changing revenue-generating sectors of the airport's business and identify new non-aviation commercial revenue streams that will maintain the airport's profitability by supporting infrastructure development and economic growth.

GCAPL's development objectives are to:

- ensure the capacity and provision of Gold Coast Airport's infrastructure is commensurate with the forecast growth in passenger and aircraft movements;
- ensure the safe, secure and efficient movement of passengers and aircraft;
- achieve an acceptable balance between the development of the airport and mitigation of environmental impacts including aircraft noise;
- capitalise on the compatible development potential of the airport site, thereby generating employment and economic growth for the region and an equitable return for shareholders;
- ensure an efficient, diverse and responsive ground transportation network to cater for the land transport needs of the traveling public, visitors and airport staff;
- deliver high levels of service, quality and facilities;
- grow the aviation market and network of domestic and international services to and from Gold Coast Airport;
- provide services and infrastructure that demonstrate a multi-use, flexible and integrated planning approach; and,
- facilitate the implementation of a road/rail corridor west of the airport that is acceptable to all major stakeholders.

#### **1.4 HISTORY OF GOLD COAST AIRPORT**

An emergency landing strip for aircraft was developed on the site of what is now Gold Coast Airport in 1936. In 1939, three gravelled runways in a triangular arrangement were further developed to accommodate services by Regular Public Transport (RPT) aircraft. The upgrading continued with the main runway being extended to 1,676m in 1952 and the bitumen sealing of aircraft movement areas during the years from 1954 to 1956. Extension of the runway to its present length of 2,042m was carried out in 1968 to permit the operations of DC9 and L-188 Electra aircraft. In 1981 airline operations were transferred to a new terminal building and apron area. Further upgrading of movement areas to accommodate wide-body aircraft, such as the Airbus A300 and the Boeing B767, and increased traffic was carried out in 1982, 1986, 1990 and 1996.

The current terminal building has been built in a linear configuration and was intended for extension to the north and south to cater for future traffic growth.

Prior to 1988 the airport was owned and operated by the Commonwealth Government. On 1 January 1988, the then Department of Transport and Communications transferred control of the airport to the FAC, a Government business enterprise. Government policy changes saw the airport privatised on 29 May 1998 with Queensland Airports Limited (QAL) being the successful tenderer and taking the role of Airport Leasing Company. In 1999, QAL changed the company name to Gold Coast Airport Limited (GCAL). In 2006 the company name was changed to Gold Coast Airport Pty Limited (GCAPL).

In 2001, pursuant to the *Airports Act 1996* the Airport Master Plan was approved by the Federal Minister of Department of Transport and Regional Services (DoTARS). This master plan is the over arching strategic document which guides the future development of the airport and its environs. Since 2001, the extension of the 14/32 Runway has been approved and the route for the Tugun Bypass has been finalised. Works are expected to commence immediately on both these projects. The delineation of the bypass has paved the way for the delineation and subsequent approval of the Robina-Coolangatta rail corridor which will be constructed adjacent to the Bypass Route.

#### **1.5 AIRPORT SITE**

Gold Coast Airport lies at the southern end of the Gold Coast and is about 20 km south of Surfers Paradise and 3 km north of Coolangatta. It serves the Gold Coast/Tweed region from Coomera in the north to Byron Bay in the south. A plan showing the location of the airport within the region is at Figure 1.1.

Gold Coast Airport occupies a site of 385 hectares and straddles the border between New South Wales and Queensland on the Pacific Coast. It is located on a coastal plain with Currumbin Hill to the north and the Cobaki Broadwater to the south and west. The Pacific Ocean lies to the east.

#### **1.6 AIRLINE SERVICES**

Virgin Blue, Jetstar and Qantas Airways provide domestic services from Gold Coast Airport and Freedom Air, Jetstar and Pacific Blue provide the bulk of the international services. Virgin Blue flies directly to Melbourne, Sydney, Adelaide and Newcastle. Jetstar flies directly to Melbourne, Sydney, Adelaide, Newcastle and Christchurch. Qantas flies directly to Sydney twice a day. Freedom Air flies directly to Auckland, Christchurch, Hamilton and Wellington. Pacific Blue flies to Auckland twice weekly.

#### **1.7 AIRPORT FACILITIES**

Gold Coast Airport has a two runway system comprising of the main 14/32 runway (2042m) and a general aviation 17/35 runway (582m), together with associated taxiway and apron areas. Related aviation facilities and infrastructure include a domestic and international terminal complex, public car parks, ground transportation area, air freight facilities, in-flight catering facilities, general aviation and helicopter facilities, aviation fuel facilities and an air traffic control and fire service complex.

The layout of the major facilities at Gold Coast Airport is shown in Figure 1.2.

#### 1.7.1 Runways/Taxiways/Aprons

The primary runway (14/32) handles the majority of the aircraft movements. This runway is 2042m long and 45m wide and has a grooved bituminous concrete surface. Runway 14/32 has a partial parallel taxiway with stub taxiway connections to the runway at various locations. Taxiways A, B, C and D service the main runway. Approvals are in place to extend the runway to 2500m incorporating a parallel taxiway system. The secondary (cross) runway, (17/35) is used for General Aviation (GA) movements. This runway is 582m long and 18m wide and is constructed of bituminous concrete.

A Regular Public Transport (RPT) apron adjoins the domestic and international terminals, T1 and T2. It is made of bituminous concrete and covers an area of approximately 9.1 hectares. Additional apron areas are located between T2 and the now decommissioned T3, which was the international terminal. It is made of bituminous concrete and covers an area of approximately 1.3 hectares. The airport also has 3.7 hectares of sealed aprons which service the GA facilities located north of T3.





#### 1.7.2 Terminal

The existing domestic and international terminal building was originally opened as a domestic terminal in 1981. Since that time it has undergone significant remodeling and expansion to the north and south to its current configuration.

The terminal is separated into two distinct operational areas, with Qantas operating the southern end as a domestic terminal (T1), and GCAPL managing a joint-user domestic and international facility at the northern end (T2). Both ends of the terminal maintain a range of visitor service operators, including food and drink vendors, car hire operators, a newsagent and souvenir shop. International travellers also have access to a duty free store.

#### 1.7.3 Freight

Freight from all aircraft is unloaded on the applicable apron area and transported by trolleys to the freight handling buildings which are located next to T3, in the newly developed air freight precinct.

#### 1.7.4 General Aviation

The general aviation facilities and aprons are located north west of the terminal area and comprise maintenance facilities, flying schools, hangars and charter operators.

#### 1.7.5 Helicopters

Helicopter operations are conducted from a separate area within the general aviation area to minimise conflict with fixed wing operations.



# **2.0** THE MASTER PLAN

#### 2.1 PURPOSE OF THE MASTER PLAN

The purpose of the Master Plan is to provide the planning framework for the development of Gold Coast Airport over a planning period of 20 years. The Master Plan provides the airport operator, the Commonwealth, State and Local Government, the local community, airlines, aviation-related industries and interest groups, commercial users and investors with confidence to plan for the future development of the airport and surrounding environments. It provides the basis for planning aviation activities, land and commercial development, environmental management and infrastructure delivery in an integrated and timely manner.

The implementation of the planned activities and the triggers for the implementation are detailed in Section 7, covering the first five years in some detail and the following fifteen years in summary.

The Master Plan remains in force for a period of five years after approval unless directed by the Minister to replace the plan. This five year review process forms a comprehensive regime for the ongoing regulation of activities on the airport.

The Gold Coast Airport Master Plan is a strategic document that provides a concept for future planning. It does not represent any actual development proposal, nor commitments to proceed with development, but is intended to inform all levels of government, the aviation industry and the community about the future planning framework against which future development proposals will be developed and assessed.

All subsequent development applications for prescribed major works will be checked for conformity with the Master Plan and will be subject to further, separate approval processes as outlined in the Airports Act 1996 and the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (where appropriate).

#### **2.2 THE MASTER PLANNING PROCESS**

The privatisation of most of Australia's major airports initiated the establishment of the *Airports Act 1996* and Airport Regulations which now provide a regulatory framework for airport operators to develop their Master Plans.

Upon leasing Gold Coast Airport, GCAPL (formerly GCAL) was required under Section 75 of the *Airports Act 1996* (the Act) to submit a draft Master Plan to the Federal Minister for approval. In 2001 the Master Plan for Gold Coast Airport was approved. The land use plan in the approved 2001 Master Plan is shown in Figure 2.1.

Section 77 of the Act advises that an approved Master Plan will be in force for a period of five years from the date of approval or until it is replaced by a new plan. This Master Plan is an update of the 2001 Master Plan and is prepared pursuant to this requirement. This Master Plan proposes to simplify and update the text of the current master plan. No land use amendments are proposed.

In developing the Master Plan in accordance with Section 71 of the Act, GCAPL:

- outlined development objectives of the Master Plan (Section 1.3);
- outlined the extent of consistency with planning schemes in Queensland and New South Wales (Section 4.4);
- assessed the future needs of the airport users for services and facilities relating to the airport (Chapter 3);
- outlined proposals for land use and related development of airport land (Chapter 4);
- produced forecasts relating to noise exposure levels over a 20 year planning period (Chapter 5); and,
- assessed the environmental issues that might reasonably expect to be associated with the implementation of the plan and plans for dealing with those expected issues (Chapter 6).



In addition, GCAPL has also included those requirements of Section 71 of the Act and Airports Regulation 5.02 including:

- any likely change to the Obstacle Limitation Surface (OLS) or the Procedures for Air Navigation Services - Aircraft Operations (PANS-OPS) if developments contemplated in the Master Plan proceed (Section 4.12); and,
- the contents of any report carried out under Regulation 6.09 of the Airports (Environment Protection) Regulations and the plans for dealing with issues referred to in the report (Section 4.3.1).

As required by the Airports Act, the Master Plan is developed in consultation with stakeholders, including airport users, government departments and authorities and surrounding communities. The Master Plan was put on public display for 90 days to allow for the interested public to review and make written comment on its content.

GCAPL's responses to these comments were forwarded to DoTARS as an appendix to the draft Master Plan to be taken into consideration in the Minister's approval of this final Master Plan.

#### **2.3 CONSULTATION**

Sections 79 and 80 of the Airports Act specify that a full consultation program is required prior to the preparation and submission of a draft Master Plan to the Minister for Transport and Regional Services for approval. This consultation program included the following:

- newspaper advertisements;
- circulation of draft plans for inspection;
- presentation of the Draft Plan to various industry, government representatices and community groups;
- 90 day exhibition period; and
- a summary of how comments have been addressed.

The results of the exhibition of the plan are included as Appendix 1 of this Master Plan.



# **3.0** FORECAST GROWTH

Gold Coast Airport Pty Ltd (GCAPL) prepares and updates passenger forecasts annually, based on market knowledge, business planning and tourism forecasts.

Based on discussions with airlines of future fleet acquisitions, the Tourism Forecasting Committee report for domestic and inbound international tourism and development of tourism infrastructure in the Gold Coast and Northern New South Wales, it is Gold Coast Airport's opinion that average annual growth moving forward will represent approximately 5% domestically. Gold Coast Airport is located in Australia's premier tourism centre, with strong growth planned locally of accommodation stock and tourist attractions. The strong growth in domestic airline seat capacity since the demise of Ansett is expected to abate with modest growth in the next 5 years.

Internationally there is greater potential for growth, off what is currently a relatively low base. The Gold Coast Airport runway extension to 2500m will facilitate direct flights to Asia and therefore an average annual growth rate of 20% has been prepared, with the majority of that growth being delivered from 2009-10 onwards. By 2011-12, international traffic will make up 1 in 9 passengers at Gold Coast Airport, or 11%. Overall forecasting 6 years from now, Gold Coast Airport predicts a total average annual growth rate of 6.12% for both domestic and international passengers. Domestic and New Zealand services will always represent the core business of Gold Coast Airport and represent the majority of passengers.

#### 3.1 FUTURE NEEDS OF THE AIRPORT USERS FOR SERVICES AND FACILITIES RELATING TO THE AIRPORT

In the short term, the growth in passenger numbers coupled with the need to attact international flights to the Gold Coast will result in the extension of the main 14/32 runway to 2500m and construction of associated Taxiways and the expansion of the existing terminal. The public carpark has also been extended to create an additional 550 spaces.

The construction of the Tugun Bypass will relieve congestion at the entry to the Airport however it is likely that a secondry entry to the airport will be required in the next 5 years. Additional office space will be required to cater for the increased number of government authorities and agencies required to meet the expanding security and operational requirements.

Beyond the next 5 years it is likely that the terminal may require further expansion either north or south and the carpark will need to be multileveled. This multilevel carpark will need to consider the future rail terminus.

## 4.0 LAND USE

#### **4.1 INTRODUCTION**

The Master Plan identifies various precincts of the airport according to the predominant existing and intended land uses. The plan identifies the nature of development envisaged for the particular precincts using terminology consistent to the greatest extent possible with language used in the local authority planning schemes, or with commonly understood generic meanings.

The Land Use Plan for Gold Coast Airport is shown in Figure 4.1.

The precincts identified with the airport are:

- Runway Precinct;
- Terminal Precinct;
- General Aviation Precinct;
- Western Enterprise Precinct; and
- Cobaki Environmental Precinct .

These five precincts cover an area of 385 hectares.

This section of the Master Plan sets out the overall planning intent for the area, land use strategies and related objectives and development control principles associated with the various precincts.

This Master Plan simply updates the 2001 Master Plan. No policy or land use changes are proposed.

#### **4.2 PLANNING INTENT**

Gold Coast Airport satisfies the primary air transport needs of the Tweed and Gold Coast regions. It is intended to continue to fulfill this role in the long term as there are obvious economic and social benefits in having such a facility located in close proximity to the Gold Coast/Tweed regions' major centres. The airport and its surrounding lands are valuable assets serving one of Australia's fastest growing and most attractive regions. The airport serves local residents, business and tourism interests.

Development in the area surrounding the airport is affected by, and can affect, the airport's operations. The Master Plan intends to protect the airport's existing and future operational requirements, and to promote appropriate and compatible development and use of lands affected by the airport's operations.

The development of commercial opportunities which benefit from location on airport land are critical to the long-term viability of the airport, including its ability to be upgraded to take advantage of new market opportunities and to function as an attractive tourist and business gateway to the Gold Coast/Tweed region.

The South East Queensland Regional Plan advocates Transport Oriented Development (TOD). The development of the airport as provided by this Master plan will provide mixed use accommodation and commercial areas designed to maximize the efficient use of land through high levels of access to public transport. The airport is an ideal TOD due to the development potential and the co-location of air, rail and public transport services at the airport. In addition, pedestrian and cycle links will also be provided linking the airport with the neighbouring community and beachfront.

The further development of the airport will require negotiation of off-site service infrastructure impacts with the two Councils and relevant State Government departments.

The Land Use Plan represents the ultimate land use of the airport as determined at the time of preparation of this Master Plan and will be reviewed at each 5-year master planning cycle.



# 4.3 COMMONWEALTH LEGISLATION AND REQUIREMENTS

The Commonwealth has retained responsibility for controls over land use planning and development on the airport pursuant to the *Airports Act 1996*. The formal process for achieving this control is for the Minister for Transport and Regional Services to approve a Master Plan.

This Master Plan will be used as the basis for determining development applications made under the Airports Act 1996 and under the local authority planning provisions to the extent that they apply.

The Commonwealth under the *Airports Act 1996* and Regulations 1997 also requires GCAPL to prepare an AES which follows a similar five (5) cyclic process as the Master Plan. The AES outlines how GCAPL will manage environmental issues on the airport over a five (5) year period. DoTARS has appointed an Airport Environment Officer (AEO) on site ensuring the airport is in compliance with the Airport Environmental Protection Regulations, the AES and operates in accordance with good environmental practices.

#### 4.3.1 Airports Regulations 1997

The *Airports Act 1996* sets out the issues that must be addressed in the Master Plan. Section 71(5) refers to matters specified in Regulation 5.02 Airports Regulations 1997. In response to these requirements, development proposed in the Master Plan will not alter OLS or PANS OPS surfaces for the airport and no change to land use zones are proposed therefore a report pursuant to Regulation 6.09 is not required.

# 4.3.2 Building and Environmental Approval Processes

With the introduction of the *Airports Act 1996*, building activity approval must be obtained from the Airport Building Controller (ABC) who is appointed by DoTARS. The ABC is a party independent of GCAPL.

The consent of GCAPL and approval from the AEO is required before the ABC can give any approval. In considering its consent, which may be granted with conditions, GCAPL must ensure that the proposal is consistent with the Master Plan. GCAPL will also assess the impact of any proposal on infrastructure, operations and environmental aspects of the airport when reviewing an application for consent.

#### 4.4 STATE AND LOCAL GOVERNMENT

Before approving a Master Plan, the Minister must consider the extent to which carrying out the Master Plan would meet future aviation requirements, and the effect the implementation of the plan would have on the use of the land within and around the airport, the outcome of consultations undertaken and the views of the Civil Aviation Safety Authority (CASA) and Airservices Australia.

# 4.4.1 Consistency with Surrounding Planning Legislation

The Master Plan must detail the extent of consistency with State and Local Government planning schemes in force where the airport is located. State and Local legislation has been reviewed as part of the preparation of the Master Plan.

The airport's vital role in the regional economy is acknowledged by the respective regional and state planning documents. The preservation of the air space and the development of aviation and non aviation assets are essential for the future growth of the region. The South East Queensland Regional Plan 2005-2026 and the New South Wales Department of Planning's guidelines reinforce the importance of and seek to protect the future of Gold Coast Airport.

In view of the need to preserve operational safety and efficiency, the State planning regimes of Queensland and NSW oblige the local authorities in which the property is situated to include protection of the airport's airspace in their local planning schemes, by virtue of the Queensland State Planning Policy 1/02 – Development in the Vicinity of Certain Airports and Aviation Facilities and the NSW North Coast Regional Environmental Plan respectively. The airport's importance in the regional economy and the regional transport network is acknowledged in the respective strategic planning documents of both local authorities, and in each case the respective parts of the airport property are classified as special use zones in recognition of the presence of the airport.

The current zoning of the part of Gold Coast Airport located in Gold Coast City (Queensland) is "Community Purposes" Domain. This domain reflects essential community infrastructure which is provided by government or is government regulated. The operations of the airport itself are classified as "public utility", "transit centre" and "transport terminal", these being activities which are facilitated by the special purpose zoning (being classified as "self assessable"), notwithstanding that the Airports Act is in fact an exclusive code for regulation of the airport's land use. The Planning Scheme includes a Constraints Code titled Gold Coast Airport and Aviation Facilities Code (referred to herein as the "Airport Code" and further discussed below), which directly recognises the Airport Master Plan as being the definitive guide to development of land within the airport environs.

The part of the airport located in Tweed Shire (NSW) is appropriately zoned "Special Uses 5(a) - Airport" under the Tweed Local Environmental Plan 2000 (LEP). The important role of the airport and the need for its protection have long been features of strategic planning and policy statements of Tweed Shire Council, including in the Tweed Shire 2000+ Strategic Plan which refers to support for the airport's long-term operation in view of its economic, transport, employment and tourism benefits to the Tweed. In the more recent Tweed 4/24 Strategic Plan, the preparation of a Land Use Structure Plan is foreshadowed, which among other things would provide for "coordinated planning for expansion of Coolangatta (Gold Coast) airport", although this could not of course impose land use planning controls on the airport property.

A small area of the southern most part of the airport property adjacent to the Cobaki Broadwater is identified in NSW State Environmental Planning Policy (SEPP) 14 as being ecologically significant wetland. The provisions of the SEPP are not applicable to airport property by virtue of the Airports Act. The environmental significance of this area however is reflected in the AES and applications for development are assessed for compliance with the AES.

#### 4.4.2 Surrounding Land Use Policies

The local authorities representing the localities in which the airport is situated have incorporated mechanisms into their statutory planning instruments and procedures to identify and control activities which may have the potential to adversely affect safety or operational efficiency within the airport's airspace. In particular, the provisions of the Airports (Protection of Airspace) Regulations, which among other things require local authorities to formally notify proposals which may constitute "controlled activities" (potential hazards to operation of aircraft) under the Airports Act, are implemented through established protocols which ensure that such proposals are brought to GCAPL's notice.

There are detailed planning controls in relation to development in the locality of the airport in the Gold Coast Planning Scheme, through its Gold Coast Airport and Aviation Facilities Constraint Code. This imposes height limits pursuant to the airport's OLS and PANS-OPS surfaces and lighting zone controls, as well as regulating types of development which should or should not take place in surrounding areas in relation to potential for attraction of birds and bats or because of potentially hazardous emissions, etc. The same code contains provisions bringing into effect the standards imposed by AS2021 in relation to aircraft noise, although this is not among controlled activities under the Airports Act.

Controls presently imposed under the Tweed LEP are not yet as detailed or comprehensive as those in effect in Gold Coast City, however similar new provisions drafted with input from GCAPL have been provided to Tweed Shire Council, and in whatever form is ultimately agreed after further consultation will be implemented through the new planning instruments being prepared under the NSW State Government's mandated and standardised new Statewide planning system. Nevertheless, height controls in particular are currently enforced through existing LEP provisions and the consultation protocol referred to above.

#### 4.5 RUNWAY PRECINCT

This precinct is partly within the Gold Coast City Council area and partly within the Tweed Shire Council area.

#### 4.5.1 Key Development Objectives

This precinct is intended to be developed and operated as an area accommodating:

- safe aircraft landing, take off and taxiing operations;
- aircraft navigation aids, radar and communications equipment; accommodating air traffic control, aviation rescue and fire fighting and meteorological services;
- other facilities to ensure safe operation of aircraft; and,
- any future road/rail corridor option which is compatible with movement area clearance requirements.

#### 4.5.2 Development Control Principles

Development will comply with all relevant national and international aviation standards and in particular shall be in accordance with the International Standards and Recommended Practices for Aerodromes Annex 1 (ICAO 1987), and governing Australian national regulations issued under the Air Navigation Act 1920 and Civil Aviation Act 1988 and associated Regulations.

The runway strips and aircraft movement areas shall be constructed to maximise the capacity of the existing infrastructure to allow for future aircraft to service the area.

The runways, taxiways and aprons will be developed in a cost-effective manner and constructed to ensure safe and efficient aircraft operations.

The runways, taxiways, aprons and aircraft parking areas shall be configured to minimise aircraft noise impacts and environmental impacts generally.

Development shall be in accordance with the OLS and PANS-OPS surfaces identified for the airport.

Development shall be in accordance with the Airport Environmental Strategy prepared pursuant to the Airports Act and Regulations. Any facilities development within the precinct shall incorporate measures to ensure that the operational integrity of other/adjacent navigation and communication systems is always maintained.

Access to the area shall be strictly controlled and the area secured from adjacent precincts, where applicable, with appropriate security perimeter fencing incorporating access control measures, including surveillance monitoring as necessary.

#### 4.5.3 Design Principles

Development will be guided by existing and forecast future operation of the airport. Development should provide maximum flexibility for future operations within Gold Coast Airport's planning horizon.

#### 4.5.4 Unacceptable Development

All other development not related to achieving the key development objectives and not consistent with the development control and design principles is unacceptable in the Runway Precinct.

#### 4.5.5 Runway Extension Project

In 2005, the Major Development Plan for the GCA Runway Extension (GCARE) was approved. Briefly the project includes the following features:

- runway 14/32 would be extended from its current length of 2042 metre to a length of 2350 metres for runway 14 and 2500 metres for runway 32, involving a distance of 458 metres in the overall pavement extension;
- construction of a new Code E taxiway to connect the runway extension to the terminal areas;
- changes to the perimeter access road to ensure safe access is maintained around the airport site for operational and emergency situations;
- temporary storage areas, site office facilities, access tracks, fencing and security control during construction of the GCARE Project;
- extension of existing lighting on the runway and taxiway;
- trimming and removal of selected vegetation to meet OLS requirements;

- maintenance of existing drainage paths where possible and the installation of appropriate drainage design changes where required to maintain drainage integrity; and
- a jet blast wall at the southern end of the extended runway with an effective height of 2 metres to mitigate jet blast effects to the adjacent property; and
- upgrade of the existing taxiway, apron and main runway facilities to the same standard as the new taxiway.

This runway is scheduled for completion in March and the Taxi way is scheduled for completion in April 2007.

#### 4.5.6 Runway Capacity

The current runway has a capacity of approximately 30 RPT aircraft movements per hour. The proposed runway extension (without the southern parallel taxiway extension) will decrease this capacity to approximately 20 RPT aircraft movements per hour (with full length operations). The construction of the new southern taxiway Charlie extension, and the new taxiway kilo, will further increase the runway capacity to approximately 40 RPT aircraft movements per hour.

#### **4.6 TERMINAL PRECINCT**

This precinct is partly within the area covered by Gold Coast City Council and partly within the area covered by Tweed Shire Council.

#### 4.6.1 Key Development Objectives

This precinct is intended to be developed and operated as an area:

- primarily accommodating facilities for the safe, efficient and economic handling of aircraft, passengers and freight, and related services and support activities;
- of sufficient capacity to accommodate an international/ domestic terminal and related infrastructure development;
- which caters for the airport's role as a key tourist and business gateway to the region;
- containing development which recognises existing infrastructure and operating conditions and is sufficiently

flexible to accommodate future changes associated with the dynamic and evolving nature of the business;

- where the development of future facilities will have a strong commercial focus and contribute to the viability of the airport as an enterprise and to the wider community;
- where environmentally sustainable development principles are adopted where feasible; and,
- providing efficient, diverse and responsive ground transportation facilities.

#### 4.6.2 Development Opportunities

The precinct is identified to accommodate: terminals and related infrastructure and freight handling facilities; aviation facilities and services; aircraft maintenance buildings including hangars and workshops; a Multi-Modal Transit Centre (including bus and rail connections); ground transportation facilities; hotel/convention centre/tourist accommodation; and commercial and associated land uses which would benefit from the precinct's principal terminal function, location within the airport and close proximity to the Multi-Modal Transit Centre.

#### 4.6.3 Development Control Principles

Development shall be of a quality and standard required at all times for the convenience of the aviation industry, other transport providers and airport users including visitors and staff.

Development will incorporate concepts that will accommodate future expansion, new technologies and changes in operations with the least amount of disruption to ongoing airport operations.

Development shall be user oriented and sensitive to the needs of the airline industry, passengers, employees and the community in general. The level of service, efficiency of operation, convenience, safety, security and impact on the environment will be primary considerations.

The overall gross floor area of development in this precinct is not to exceed an amount equal to the area of the precinct. No development in the precinct is to penetrate the defined OLS for the airport. Any Hotel/tourist accommodation development in the precinct should not exceed a height of ten storeys.

The area of any shops provided in any building except the passenger terminal, is not to exceed 20% of the area of the building.

Development shall be in accordance with the AES prepared pursuant to the Airports Act and Regulations.

Any development within the precinct should also have regard for the potential aircraft noise impacts and the requirements of Australian Standard AS 2021 Acoustics - Aircraft Noise Intrusion - Building Siting and Construction in relation to proposed activities within the area.

New buildings are to provide variation in set backs from the arterial road and rail network to provide visual relief and ambience. As a guide, an average setback of at least 6 metres from the transport corridor is appropriate.

Landscaping and open space areas will be provided in prominent locations in this precinct to complement the Precinct's important gateway function. Car parks will also be well landscaped to avoid undue prominence and to reinforce the attractiveness of this Precinct as a gateway to the Gold Coast/Tweed region.

#### 4.6.4 Design Principles

Except for the passenger terminals, hotel/s, commercial buildings and Multi Modal Transit Centre and structures intended for a specific purpose such as aircraft maintenance and hangarage, development will preferably be of a low profile with a horizontal emphasis incorporating design elements which achieve visual articulation and relief.

Terminal buildings shall provide a worthy statement as the gateway to the Gold Coast/Tweed Region and a catalyst for the revitalisation of the airport. The Multi Modal Transit Centre and any hotels and commercial buildings should also be landmark buildings and worthy statements as part of the gateway area to the Gold Coast/ Tweed Region. All other buildings in the precinct should exhibit a level of architectural design, which is consistent with creating a favourable visual impression of this gateway to the Gold Coast/Tweed Region.

The development will accommodate a range of allotment sizes to provide maximum flexibility including multiple occupation if required and incorporate shared car parking, landscaping treatments and appropriate storm water management.

Development should not create a hazard or nuisance to airport operations or to neighbouring occupation.

Buildings should be clustered where possible to retain some views across the Airport from the Gold Coast Highway and to provide opportunities for landscaped open space areas.

#### 4.6.5 Access and Parking

The main entrance to the airport is via the signal controlled intersection of Terminal Drive and the Gold Coast Highway. North of the intersection, the Gold Coast Highway consists of two lanes each way divided by a median strip. At the airport entrance the highway widens to provide four through lanes and two dedicated right turn lanes. The highway's southern approach to the intersection consists of three through lanes and dedicated lanes for both right and left turning vehicles.

A further exit for northbound vehicles leaving the airport was opened in December 2000 with the completion of the commercial area adjacent to the Gold Coast Highway.

Access to the Airport will need to be improved commensurate with the development of non aviation assets at the airport.

Internal access roads are to be provided to an appropriate engineering standard. Car parking is to be provided in appropriately designed and landscaped locations to cater for vehicles visiting the airport.

#### 4.6.6 Unacceptable Development

All other development not related to achieving the key development objectives and not consistent with the development control and design principles is unacceptable in the Terminal Precinct.

#### **4.7 GENERAL AVIATION PRECINCT**

This land is within the Gold Coast City Council area.

#### 4.7.1 Key Development Objectives

This precinct is intended to be developed and operated as an area:

- accommodating primarily general aviation and corporate related service and support activities;
- which maintains and promotes general aviation uses at the airport;
- which provides for tourist related aviation;
- which provides for aviation related administrative and commercial facilities;
- which provides facilities for the safe, efficient and economic handling of aircraft, passengers; freight and related services and support facilities; and,
- which contributes to the commercial viability of the airport as an enterprise.

#### 4.7.2 Development Opportunities

The precinct is identified as accommodating aircraft hangarage and maintenance facilities, ancillary aviation support activities including avionics, equipment maintenance, aviation related service and light industries and commercial/light industrial and associated land uses.

#### 4.7.3 Development Control Principles

The gross floor area of this precinct is not to exceed an amount equal to the area of the precinct. Development is not to penetrate the airport's OLS. Unless necessitated by a particular site activity, development should not exceed 10m in height. Development should be preferably of a low profile with a horizontal emphasis incorporating design elements, which achieve visual articulation and relief.

Development shall be in accordance with the AES prepared pursuant to the *Airports Act 1996* and Regulations.

#### 4.7.4 Access and Parking

The main ingress/egress point to an internal road system to service this precinct is from the Gold Coast Highway via Kirribin Street.

Vehicular access through this precinct and to the Terminal Precinct is achieved via an internal roadway, Eastern Avenue. Lores Bonney Circuit also provides access within the General Aviation Precinct.

#### 4.7.5 Development Staging

Development within the precinct is nearly at full capacity. However, opportunities to redevelop older sites will exist over time as demand for larger, more modern multi-use facilities increases.

#### 4.7.6 Development Constraints

The development potential of the General Aviation precinct is limited due to its proximity to aircraft movement areas which may exert clearance requirements and limit the height of development within parts of the precinct.

Any development within the precinct will also have regard for potential aircraft noise impacts and the requirements of Australian Standard AS 2021 Acoustics - Aircraft Noise Intrusion - Building Siting and Construction in relation to the proposed activities within the area.

Development must ensure that it does not result in the attraction of birds to the airport. This has particular implications in terms of landscaping and any storm water management strategy associated with the development.

Development involving external lighting within defined areas near runway approaches must ensure that it does not constitute a hazard to aircraft operations. This includes the control of street lighting.

There is a need to control public access to aircraft operations areas. Accordingly, any areas developed for aviation related purposes must incorporate appropriate security fencing and access control measures from any adjoining operational areas.

#### 4.7.7 Unacceptable Development

All other development not related to achieving the key development objectives and not consistent with the development control and design principles is unacceptable in the General Aviation Precinct.

#### **4.8 WESTERN ENTERPRISE PRECINCT**

This land is primarily within the Tweed Shire Council area with a small part within the Gold Coast City Council area.

#### 4.8.1 Key Development Objectives

The precinct is intended to be developed and operated so as:

- to provide building area and apron capacity to meet future demand from the aviation industry;
- to provide additional area for general aviation if required;
- to provide an area accommodating industrial development which takes advantage of the precinct's excellent accessibility to the major transport network;
- to ensure the commercial viability of the airport as an enterprise;
- to provide land for the Tugun Bypass and Robina-Coolangatta rail corridor; and
- to ensure the safety and efficiency of aircraft operations.

#### 4.8.2 Development Opportunities

The land within this precinct will have exposure to but no access from the Tugun Bypass.

The precinct is identified as being suitable for:

- airport-related activities such as aircraft maintenance facilities, airfreight terminals and ancillary aviation support activities such as flight catering, avionics/equipment maintenance; and
- non-aviation activities such as light industry, general industry, bulky goods retailing, warehousing, factory outlets, ground transportation related activities, commerce and trade and associated land uses.

#### 4.8.3 Development Control Principles

The gross floor area of development in the precinct is not to exceed half the area of the precinct.

Development is not to penetrate the airport's OLS.

Development should preferably be a maximum of 10m in height except in areas internal to the site where structures intended for aircraft maintenance and hangarage may be of a sufficient height to accommodate the subject aircraft.

Development, and in particular buildings, that will be visible from arterial roads, should be of a high architectural standard and visual appearance, to present an attractive facade to adjacent public roads.

A range of allotment sizes should be provided within the precinct to provide maximum flexibility for accommodation options including multiple occupation if required.

Landscaping treatment throughout the precinct should be significant and in accordance with GCAPL landscaping guidelines.

New buildings are to provide variation in setbacks from the Tugun Bypass/rail Transportation Corridor to provide visual relief and ambience. As a guide, an average setback of at least 6 metres from the corridor boundary is appropriate. Development shall be in accordance with the approved AES prepared pursuant to the Airports Act and Regulations.

#### 4.8.4 Access and Parking

On-site parking should, where appropriate and possible, be shared between buildings and provided in small clusters. On-site car parking should be appropriately designed and landscaped.

Vehicular access to the Western Enterprise Precinct would be achieved via an internal road system serviced directly from Boyd Street or from a possible future Boyd Street /Tugun Bypass interchange. Access to and from the Tugun Bypass will be from either the interchange at Boyd Street or from the Gold Coast Highway via Boyd Street. The suitability of Boyd Street for development generating significant volumes of traffic and/or industrial traffic will need to be demonstrated.

#### 4.8.5 Development Strategy

Development within the precinct will be staged taking into account the orderly, efficient and economic release of land, provision of infrastructure, and access requirements.

#### 4.8.6 Development Constraints

The Western Enterprise Precinct is potentially constrained due to its proximity to aircraft movement areas and the location of various aircraft navigational and communication facilities which may exert clearance requirements and limit the height of development within parts of the precinct.

Any development within the precinct shall also have regard for potential aircraft noise impacts and the requirements of Australian Standard AS 2021 Acoustics - Aircraft Noise Intrusion - Building Siting and Construction in relation to the proposed activities within the area.

Development must ensure that it does not result in the attraction of birds to the airport. This has particular implications in terms of landscaping and any stormwater management strategy associated with the development.

Development involving external lighting near runway approaches must ensure that it does not constitute a hazard to aircraft operations. This includes the control of street lighting. There is a need to control public access to aircraft operational areas. Accordingly any areas developed for non-aviation purposes must incorporate prescribed separation distances and appropriate security fencing and access control measures from any adjoining aircraft operational areas.

#### 4.8.7 Tugun Bypass Road/ Rail Corridor

The preferred alignment for the Tugun Bypass Road/Rail corridor forms the western boundary of the Western Enterprise Precinct. The corridor extends some 2.2 kilometres across the airport site occupying approximately 12 hectares of airport land. The bypass alignment limits the extent of the precinct and will need to incorporate a thoroughfare for access to the Cobaki Environmental Precinct.

The alignment for the road/rail corridor has been determined and construction of the bypass has commenced. Upon completion of works the infrastructure corridors will be excised from Airport land, The land will become free hold title and transferred to State ownership. The airport will retain strata title on the land over the tunnels which will accommodate the runway extension.

Land use within this corridor is restricted to the construction of the Tugun bypass and the extension of the Robina Coolangatta rail link.

#### 4.8.8 Unacceptable Development

All other development not related to achieving the key development objectives and not consistent with the Sections 4.8.3 to 4.8.7 is unacceptable in the Western Enterprise Precinct.

#### 4.9 COBAKI ENVIRONMENTAL PRECINCT

This land is located within the Tweed Shire Council area, and consists of areas of remnant natural vegetation, areas of cultural significance and the site of a former sand dredging operation.

#### 4.9.1 Key Objectives

The precinct is intended to achieve the following objectives:

- to retain an area free from commercial development; and
- to protect the area's ecology and cultural hertitage.

#### 4.9.2 Development Control Principles

No development for purposes other than for the protection, enhancement and appreciation of the natural environment and of the cultural values of the site is appropriate.

#### 4.9.3 Acceptable Use

The following are acceptable uses;

- works to protect and enhance the area's significant ecological and cultural values;
- the establishment of public facilities to maintain and promote the environmental and cultural values of the Cobaki Environment Precinct, such as a nursery, walking tracks, an Interpretive Centre for the environment and cultural heritage and ecotourism; and,
- the siting of navigational facilities in existing cleared, grassed areas.

#### 4.9.4 Unacceptable Development

All other types of development are unacceptable in the Cobaki Environmental Precinct.

#### 4.10 INFRASTRUCTURE SERVICES

Water supply and sewerage services will continue to be obtained from the Gold Coast City Council systems. Upgrading of these services will be negotiated with Gold Coast City Council as the need arises. Internal systems are maintained and upgraded by GCAPL as required. Storm water drainage will continue to be directed into the Gold Coast and Tweed Shire drainage systems. Upgrading of these services will be negotiated with Gold Coast City Council and Tweed Shire Council as the need arises. Pollutant controls are currently provided and will be augmented as necessary consistent with the AES.

Electricity supply will continue to be obtained from the Queensland Energex system. Upgrading of this service will be negotiated with Energex or other authorised distributors as the need arises.

Solid waste disposal/trade waste is currently provided by Gold Coast City Council. Upgrading of this service will be negotiated with Gold Coast City Council as the need arises. The upgrading of external road accesses will be negotiated with Tweed Shire, Gold Coast City Council, Queensland Department of Main Roads, and/ or NSW Roads and Traffic Authority as appropriate.

#### 4.11 FUTURE ROAD ACCESS

The existing road access from the Gold Coast Highway to the airport will be maintained for some time into the future. The construction of the bypass road west of the airport will alleviate increasing congestion at the existing entrance, thus enabling this location to cater for the projected traffic volumes over the forecast period.

Notwithstanding this the Master Plan, includes the provision for a second entrance to the Airport at the intersection of the Gold Coast Highway and the Tweed Bypass. The entrance could either be via a grade-separated overpass or a signalised intersection depending on the capacity of Gold Coast Highway. This will address the situation where the current entrance could no longer cater for traffic volumes with an acceptable level of service.

If required the new grade-separated entrance to the airport would be sufficiently distant from the nearest residential areas as not to increase the level of noise nuisance, and being adjacent to an existing road structure would not have significant visual impact. The options for future airport access have been discussed with the Department of Main Roads, Queensland (DMR) and the NSW Roads and Traffic Authority (RTA). The DMR and RTA have endorsed the development as proposed in the Master Plan as the preferred option to satisfy the requirements for future landside access to the airport.

The internal road network required to connect to the grade separated intersection would be constructed to an appropriate engineering standard.

#### **4.12 BUILDING HEIGHTS**

Obstructions in the vicinity of an airport, whether they be natural or constructed, may seriously limit the scope of its operations.

The Airports (Protection of Airspace) Regulations establishes a system for the protection of airspace at and around airports in the interests of the safety, efficiency or regularity of existing or future air transport operations into or out of airports.

The regulations provide that the Secretary of DoTARS may declare specified airspace around an airport as `Prescribed Airspace'. In making that declaration under the regulations, the Secretary must have regard to:

- the OLS and PANS-OPS surfaces for the airport proposed in the approved Master Plan;
- any advice from CASA, Airservices Australia and GCAPL; and
- any other matters the Secretary considers relevant.

On 23 March 2001, "prescribed airspace" was declared by the Secretary in respect of Gold Coast Airport, the area affected being determined according to the current OLS.

#### 4.12.1 Obstacle Limitation Surfaces (OLS)

An Obstacle Limitation Surface (OLS) for an airport is a surface ascertained in accordance with the standards of ICAO International Standards and Recommended Practices for Aerodromes Annex 14 (ICAO 1987). The OLS defines protection requirements for the initial and final stages of a flight - take-off, preparation to land, and the landing itself. During these manoeuvers visibility must be good enough for the pilot to see and maintain visual reference to the airport, and take responsibility for obstacle avoidance and separation from other aircraft.

The OLS for Gold Coast Airport is depicted in Figure 4.2. It comprises a number of reference surfaces in airspace which determine when an object may become an obstacle to aircraft maneuvering in the vicinity of the airport or during landing or take-off.

The objective is to define a volume of airspace in proximity to the airport which should be kept free of obstacles that may endanger aircraft in visual operations, or during the visual stages of an instrument flight. Even so the intention is not to restrict or prohibit all obstacles, but to ensure that either existing or potential obstacles are examined for their impact on aircraft operations and that their presence is properly taken into account.

Since they are relevant only to visual operations, it may sometimes be sufficient to ensure that the obstacle is clearly visible to pilots, and this may require that it be marked and/or provided with night lighting. Of course each new obstacle may in some way inhibit the freedom of aircraft operations and inevitably contribute to air traffic congestion and delays. If an obstacle is located in the approach and take-off areas, pilots may need to make adjustments to their aircraft's optimum take-off and landing maneuver to ensure the necessary obstacle clearance.

This may require using less than the full runway length available and may result in significant operational penalties such as fewer passenger, or less freight and fuel uplift than optimum.

It is essential that off-airport land use planning take full account of OLS implications and avoid planning decisions which may adversely affect air safety or efficiency of operations.

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

In conditions of poor visibility pilots must rely on instrument procedures once they are airborne or when first approaching an airport. Although a landing will always be completed visually, pilots must initially be guaranteed they will have obstacle clearance until such time as the transition to the final phase of the flight. The instrument procedure is designed using a second set of assessment surfaces (commonly referred to the PANS-OPS surface) to provide the necessary clearance requirements.

In contrast to the OLS which defines when objects are to be considered as obstacles and assessed for their impact on aircraft operations, PANS-OPS surfaces cannot be infringed in any circumstances. Figure 4.3 depicts the current PANS-OPS surfaces for Gold Coast Airport. Figure 4.4 depicts the future PANS-OPS surfaces for Gold Coast Airport.

Due to the importance of the PANS-OPS surface, and the potentially severe limitations which could be imposed on aircraft operations if the surface is penetrated by new buildings or other structures, GCAPL will ensure that the respective local authorities are fully conversant with the nature of the limitations and the necessity for relevant proposed developments to be referred to GCAPL for approval. These PANS-OPS surfaces are also protected by the Prescribed Airspace Regulations.













# **5.0** NOISE EXPOSURE

#### 5.1 NOISE SENSITIVE DEVELOPMENTS

Noise generated by aircraft is an emotive issue, unpleasant for those experiencing it and probably the most significant and noticeable environmental impact of airport operations. Aircraft noise is experienced both within and beyond the airport's boundaries.

The management of aircraft noise and its effects is critical to the development of Gold Coast Airport, and it is therefore in the interests of all stakeholders, including the community, to work together in the management of this issue and minimisation of its effects. The airport's objective is to achieve a balance between economic growth and an environmental impact which is acceptable to the community.

The most effective way of managing aircraft noise impacts on properties within the vicinity of the airport is through the adoption and effective implementation of appropriate land use policies and acoustic standards for the areas adjacent to the airport. Accurate mapping of localities potentially affected by aircraft noise is important to achieve this purpose, and all proposals for development within the affected localities should be assessed in relation to potential for impacts from aircraft movements.

In Australia, the only current, authoritative regime for land use planning control of development in relation to aircraft noise is set out in Australian Standard AS2021 – Acoustics - Aircraft Noise Intrusion – Building Siting and Construction, referred to herein as AS2021. The current version of the standard is AS2021- 2000.

Aircraft noise planning policies in Gold Coast City and Tweed Shire should be consistent between the two local authorities, and the Councils should fully and stringently enforce the land use planning and acoustic controls contained in AS2021. The principal elements of AS2021 from a land use planning point of view are two-fold:

- a land use matrix, which establishes suitability, or otherwise, of particular activities depending on the degree of aircraft noise affectation, with or without incorporation in proposed buildings of noise reduction techniques; and
- tabulated noise reduction standards to be achieved to result in suitable reduction of effects of aircraft noise.

Geographical disposition of degrees of potential adverse affectation by aircraft noise are shown in ANEF contours published in this Master Plan, and revised from time to time as changes may occur in configuration of airport runways or in aircraft mix using the airport and associated flight paths, etc.

A review of forecast air traffic movements indicates that the ANEF contours incorporated in the current approved ANEF remain appropriate as a land use planning tool within the horizon for this Master Plan. The ANEF for Gold Coast Airport is shown in Figure 5.1.

While perhaps not completely precise, ANEF contours are currently the accepted land use planning measure, and plot estimated changes in noise exposure over time based on a forecast of aircraft movements, the aircraft fleet mix and flight path patterns for a defined future horizon. Possible alternative ways of expressing noise exposure for land use planning are presently under consideration by DoTRS and other agencies. Land use planning based on use of ANEF contours determines the suitability of particular types of activities according to the level of potential aircraft noise based on the respective ANEF zones. The acceptability of various types of development is summarised in Table 2.1 in AS2021, which is reproduced below (as Table 1) for reference.

Individual land uses are determined by the matrix to be:

- Acceptable there is usually no need for building construction to provide protection specifically against aircraft noise, although aircraft noise may nonetheless be noticeable, and some people may still find it undesirable;
- Conditional the maximum aircraft noise levels for the relevant aircraft and the required noise reduction should be determined from the procedures set out in AS2021, and the aircraft noise attenuation to be expected from the proposed construction should be determined in accordance with the outcomes set out in Table 3.3 of AS2021 (reproduced below as Table 2); and
- Unacceptable construction of the proposed building should not normally be considered. In the event that development for a particular purpose were to take place despite classification as "unacceptable", the AS2021 Table 3.3 indoor design sound levels should be achieved.

GCAPL is of the view that the schedule of land use acceptability based on AS2021 should be adopted by the respective local authorities having jurisdiction over the localities surrounding Gold Coast Airport and strictly enforced for new development, being, as previously noted, the single universal Australia-wide land use planning standard. Compliance with the requirements of AS2021 is currently required by the Gold Coast Planning Scheme's "Airport Code", but in GCAPL's opinion it should effectively be made virtually mandatory, with provision of very few opportunities for relaxation of those requirements only in the case of certain identified "hardship" situations.

In the immediate vicinity of the airport, the Gold Coast Planning Scheme imposes relatively low residential development intensities, which has the effect of not significantly increasing the population of areas most seriously affected by aircraft noise. However, as a result of the historical settlement pattern to the north of Boyd Street, it is unavoidable that people continue to reside in high noise areas (reportedly by choice and generally without complaint), so efforts should be made to ensure that new development is of limited new population numbers and appropriately acoustically treated to minimise adverse effects to the extent required by AS2021.

Tweed Shire's Local Environment Plan 2000 (LEP) was similarly formulated taking into account the adverse effects of aircraft noise just south of the southern end of the airport runway at Tweed Heads West, and permissible densities of residential accommodation that curtailed so as to limit as much as possible the number of people exposed to high levels of aircraft noise.

Building Type (Column 1)	Acceptable (Column 2)	Conditionally Acceptable (Column 3)	Unacceptable (Column 4)		
House, home unit, flat, caravan park	Less than 20 ANEF	20 to 25 ANEF	Greater than 25 ANEF		
Hotel, motel, hostel	Less than 25 ANEF	25 to 30 ANEF	Greater than 30 ANEF		
School, university	Less than 20 ANEF	20 to 25 ANEF	Greater than 25 ANEF		
Hospital, nursing home	Less than 20 ANEF	20 to 25 ANEF	Greater than 25 ANEF		
Public building	Less than 20 ANEF	20 to 30 ANEF	Greater than 30 ANEF		
Commercial building	Less than 25 ANEF	25 to 35 ANEF	Greater than 35 ANEF		
Light industrial	Less than 30 ANEF	30 to 40 ANEF	Greater than 40 ANEF		
Other industrial		Acceptable in all ANEF Zones			

#### TABLE 1 - BUILDING SITE ACCEPTABILITY BASED ON ANEF ZONES

# Gold Coast Airport

#### MASTER PLAN 2006 ANEF

Figure 5.1

### MP2006-02

#### LAND USE COMPATIBILITY ADVICE FOR AREAS IN THE VICINITY OF AUSTRALIAN AIRPORTS

Shall be read in conjunction with AS 2021 - 2000 Acoustics - Aircraft noise intrusion - Building siting and construction

Building Type	ANEF zone of site					
	Acceptable	Conditionally acceptable	Unacceptable			
Home, home unit, flat, caravan park	Less than 20 ANEF (note 1)	20 to 25 ANEF (note 2)	Greater than 25 ANEF			
Hotel, motel, hostel	Less than 25 ANEF	25 to 30 ANEF	Greater than 30 ANEF			
School, university	Less than 20 ANEF (note 1)	20 to 25 ANEF (note 2)	Greater than 25 ANEF			
Hospital, nursing	Less than 20 ANEF (note 1)	20 to 35 ANEF	Greater than 25 ANEF			
Public building	Less than 20 ANEF (note 1)	20 to 30 ANEF	Greater than 30 ANEF			
Commercial building	Less than 25 ANEF	25 to 35 ANEF	Greater than 35 ANEF			
Light industrial	Less than 30 ANEF	30 to 40 ANEF	Greater than 40 ANEF			
Other industrial	Acceptable in all ANEF Zones					

NOTES:

- The actual location of the 20 ANEF contour is difficult to define accurately, mainly because of variation in aircraft flight paths. Because of this, the procedure of Clause 2.3.2 of the Standard may be followed for building sites outside but near to the 20 ANEF contour.
- Within 20 ANEF to 25 ANEF som people may find that the land is not compatible with residential or educational uses. Land use authorities may consider that the incorporation of noise control features in the construction of residences or schools is appropriate. (See Exposure - Response graph below)
- 3. There will be cases where a building of a particular type will contain spaces used for activities which would generally be found in a different type of building (eg. an office in an industrial building). In these cases Table 2.1 of the Standard should be used to determine site acceptability, but internal design noise levels within the specific spaces should be determined by Table 3.3 of the Standard.
- 4. The Standard does not recommend development in unacceptable areas. However, where the relevant planning authority determines that any development may be necessary within existing built-up areas designated as unacceptable, it is recommended that such development should achieve the required ANR determined according to Clause 3.2 of the Standard. For residences, schools, etc., the effect of aircraft noise on outdoor areas associated with the buildings should be considered.

5. In no case should new development take place in greenfield sites deemed unacceptable because such development may impact airport operations.

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				AVERAGE DA	ILY AIRCRAFT	MOVEMENT	S			
Dumumu 14								-		
Runway 14		Arrival			Departure			Touch & Go		All Movements
Aircraft	Day	Night	Total	Day	Night	Total	Day	Night	Total	Total
737300	5.87	7.18	13.05	5.87	7.18	13.05				26.10
737400	13.00	0.32	13.32	13.32		13.32				26.64
767300	8.53	1.51	10.04	8.74	1.30	10.04				20.08
767200	4.35		4.35	4.35		4.35				8.70
777200	0.54	0.14	0.68	0.68		0.68				1.36
A320	5.22		5.22	5.22		5.22				10.44
BAE146	0.78	0.09	0.87	0.78	0.09	0.87				1.74
BEC190	6.10	0.83	6.93	6.10	0.83	6.93				13.86
SD360	1.46	0.20	1.66	1.46	0.20	1.66				3.32
DHC830	0.10	0.01	0.11	0.10	0.01	0.11				0.22
SF340	0.54		0.54	0.54		0.54				1.08
C130	0.33		0.33	0.25		0.25				0.58
BEC58P	18.88	2.82	21.70	18.88	2.82	21.70				43.40
LEAR35	2.05	0.30	2.35	2.05	0.30	2.35				4.70
COMSEP	13.46	2.01	15.47	13.46	2.01	15.47	62.82	9.38	72.20	103.14
Total	81.21	15.41	96.62	81.79	14.74	96.54	62.82	9.38	72.20	265.36

Runway 32										
		Arrival			Departure		Touch & Go		All Movements	
Aircraft	Day	Night	Total	Day	Night	Total	Day	Night	Total	Total
737300	3.52	4.31	7.83	3.52	4.31	7.83				15.66
737400	7.95	0.04	7.99	7.99		7.99				15.98
767300	5.12	0.90	6.02	4.35	1.67	6.02				12.04
767200	2.61		2.61	2.61		2.61				5.22
777200	0.32	0.08	0.40	0.41		0.41				0.81
A320	3.13		3.13	3.13		3.13				6.26
BAE146	0.47	0.05	0.52	0.47	0.05	0.52				1.04
BEC190	3.66	0.50	4.16	3.66	0.50	4.16				8.32
SD360	0.88	0.12	1.00	0.88	0.12	1.00				2.00
DHC830	0.06	0.01	0.07	0.07	0.00	0.07				0.14
SF340	0.32		0.32	0.32		0.32				0.64
C130	0.08		0.08	0.16		0.16				0.24
BEC58P	12.59	1.88	14.47	12.59	1.88	14.47				28.94
LEAR35	1.36	0.20	1.56	1.36	0.20	1.56				3.12
COMSEP	8.97	1.34	10.31	8.97	1.34	10.31	41.88	6.26	48.14	68.76
Total	51.04	9.43	62.47	50.48	10.07	60.56	41.88	6.26	48.14	169.17
Total	132.25	24.84	157.09	132.27	24.82	157.09	104.70	15.64	120.34	434.52

\*Touch & Go movements were composed of 83% touch-go landings and 17% circuit flights (5 to 1 ratio). The number of touch-go/circuit operations used in the Integrated Noise Model was half the number of movements shown in this table as each operation was counted as two movements: a take-off and a landing.

Where figures have been roundedm discrepancies may occur between totals and the sum of the component parts.

ANEF CONTOURS	-	SINGLE ANEF MODEL
HEADWIND	-	6 KNOTS
TERRAIN MODELLED	-	YES

PERCENTAGE OF PEOPLE SERIOUSLY & MODERATELY AFFECTED BY AIRCRAFT NOISE This graph shows that a proportion of the community will still be SERIOUSLY and MODERATELY affected by aircraft noise when the exposure is below 20 ANEF Over flight of aircraft will still occur in areas outside the 20 ANEF

AIRSERVICES AUSTRALIA ENDORSEMENT This plan was endorsed for technical accuracy by Leigh Kenna, Manager, Environment Monitoring, Environment Branch of Airservices Australia.

Original signed copies are held on file by Airservices Australia and Coolangatta Airport

Signed: \_ / Kenne

Date: 10/ 1/03 AIRSERVICES AUSTRALIA



THE AIRCRAFT NOISE CONTOURS ON THIS CHART HAVE BEEN CALCULATED USING THE BEST AVAILABLE MODELLING PROCESS. THE DATA INPUT TO THAT PROCESS ARE FORECASTS AND AIRSERVICES CANNOT WARRANT THEIR ULTIMATE CORRECTNESS. AIRSERVICES ACCEPTS NO LIABILITIES FOR ANY RELIANCE PLACED ON ANY DATA ON THIS CHART BY ANY THIRD PARTY. AIRSERVICES ACCEPTS NO RESPONSIBILITY FOR ANY INTERPRETATION OF THIS DATA BY THIRD PARTIES. The Tweed LEP also contains provisions with respect to land uses and acoustic treatment of development affected by aircraft noise, but among other things the LEP currently does not fully implement the requirements of AS2021, including by not requiring acoustic insulation of dwelling houses situated between the 20 and 25 ANEF contours.

Draft new provisions prepared for Tweed Shire with input from GCAPL will, if implemented, result in an aircraft noise control regime comparable to the one in force in Gold Coast City, which fully acknowledges and requires conformity with the land use restrictions and aircraft noise reduction requirements of AS2021. Adoption and implementation of the new Tweed Shire aircraft noise standards would come into effect as part of the process of re-writing of the Shire's planning instruments to conform with the NSW State Government's new standardised LEP and other documentation for the new planning system.

The issue of aircraft noise is the subject of regular, ongoing community consultation through the Gold Coast Airport Noise Abatement Consultative Committee, which brings together representatives of community organisations from localities to the north and south of the airport, as well as representatives of regular airport users, airlines, regulatory agencies, representatives of all levels of government and GCAPL.

#### TABLE 2 - INDOOR DESIGN SOUND LEVELS FOR DETERMINATION OF AIRCRAFT NOISE REDUCTION

Building Type and Activity	Indoor Design Sound Level (dB(A)
Houses, home units, flats, caravan parks: Sleeping areas, dedicated lounges Other habitable spaces Bathrooms, toilets, laundries	50 55 60
Hotels, motels, hostels: Relaxing, sleeping Social activities Service activities	55 70 75
Schools, universities: Libraries, study areas Teaching areas, assembly areas Workshop, gymnasia	50 55 75
Hospitals, nursing homes: Wards, theatres, treatment and consulting rooms Laboratories Service areas	50 65 75
Public buildings: Churches, religious activities Theatres, cinemas, recording studios Court houses, libraries, galleries	50 40 50
Commercial buildings, offices and shops: Private offices, conference rooms Drafting, open offices Typing, data processing Shops, supermarkets, showrooms	55 65 70 75
Industrial: Inspection, analysis, precision work Light machinery, assembly, bench work Heavy machinery, warehouse, maintenance	75 80 85

Progressive reductions in aircraft noise are being achieved through the introduction of new generation, quieter aircraft using advanced noise reduction technology, improved airframe design and the phasing out of older, noisier aircraft types. The ANEF will be updated when the noise foot print for new aircraft is available.

Aircraft noise abatement procedures are also in place and routine aircraft noise monitoring is undertaken to ensure the effectiveness of the adopted procedures.

Moreover, recreational and commercial developments within the boundaries of the airport provide a transitional land use buffer around the core aviation activities which help to protect the surrounding areas from the noise impacts of airport operations.

It should be noted that the noise impacts of aircraft in flight are the responsibility of the Air Services Australia and not of the airport operator. The management of aircraft noise is critical to the development of Gold Coast Airport and it is therefore in the interests of all stakeholders, including the community, to work together in the management of this issue. The airport's objective is to achieve a balance between economic growth and environmental impact which is acceptable to the community. The most effective way of managing aircraft noise impacts is through the adoption of appropriate land use policies for the areas adjacent to the airport and development should be assessed in relation to the potential of such impacts from airport activities. In particular, development should be assessed in terms of Australian Standard AS 2021 Aircraft Noise Intrusion - Building Siting and Construction.



# 6.0 ENVIRONMENT

#### 6.1 ENVIRONMENTAL ASSESSMENT

#### 6.1.1 Purpose of Environmental Assessment

This chapter addresses the potential effects associated with master planning for the future development of Gold Coast Airport to the year 2026. It focuses on long-term development options designed to meet expected aviation demand over the next twenty years.

The purpose of this section is to determine the potential environmental impacts associated with preferred airport planning options and to assess safeguards which might be introduced to minimise any adverse environmental effects. The assessments have not been undertaken in response to specific development proposals. Prior to the commencement of any major construction and development proposal, an environmental assessment in accordance with the *Airports Act 1996* and Regulations, which requires compliance with the provisions of the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 will be undertaken.

#### 6.1.2 Approvals Framework

The Commonwealth Government's Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act), to which GCAPL is subject under the Airports Act 1996 and Regulations, requires that environmental matters be examined and taken into account in the Commonwealth's decision-making processes. Currently, the AEO determines which development proposals are referred to the EPBC Act for assessment.

Planning proposals, while not being works having a direct physical impact on the environment, foreshadow intentions for future development, and therefore are assessed under the EPBC Act. The *Airports Act 1996* requires the establishment of an environmental management regime at Gold Coast Airport. The main elements of the Act include the requirement for an Environment Strategy to be produced that outlines proposals for environmental monitoring and remediation of pollution. The Minister for Transport and Regional Services has approved the Gold Coast AES. The Strategy has since commenced.

The regime focuses on a cooperative approach, supporting and ensuring compliance with environmental standards at the airport. The Airports (Environment Protection) Regulations 1997 are also enforced under this legislation. However, these regulations do not apply to pollution generated by an aircraft or noise generated by an aircraft in flight or when landing, taking off or taxiing at an airport.

#### 6.1.3 Scope of Assessment

The preferred planning options which are the subject of this assessment are described in Section 4.0.

Environmental aspects addressed include aircraft noise, potential effects on areas of remnant littoral rainforest and associated vegetation units, areas of cultural heritage, impacts on significant fauna, hydrology and water quality and air emissions associated with future operations and developments.

# 6.2 DESCRIPTION OF THE ENVIRONMENT

A description of the existing environment on Gold Coast Airport and environmentally significant areas is provided in the following sections.

#### 6.2.1 Native Flora

A large proportion of Gold Coast Airport has been historically cleared of vegetation for grazing, airport development and sand extraction purposes. The most significant vegetation communities remain in the south-east and south-west sectors of the airport. The remnant vegetation on the airport represents a subset of the Coastal Lowland vegetation that once extended from Coffs Harbour to Gladstone.

The AES identifies four significant vegetation associations which include; lowland and littoral rainforest; fringing tidal forest; open swamp sclerophyll forest and shrub heath.

The AES identifies the impacts of the Master Plan may include loss of vegetation through clearing, through modification of hydrology and drainage patterns and increased weeds as a result of construction activities.

The locations of significant flora species are identified on Figure 6.1.

#### 6.2.2 Native Fauna

The AES identifies that there are 2 species of amphibians, 14 species of birds and 7 species of mammals known to inhabit the airport which are considered significant. Of these the Wallum Sedge-Frog is the only nationally listed species. The AES has identified that the impacts of the Master Plan may include loss of habitat from clearing, changed drainage conditions and sedimentation of waterways, increased potential for pollution from construction and future uses and increased exotic species due to the altered environment.

The locations of significant fauna species are identified on Figure 6.2.

# 6.2.3 Water Catchments and Major Drainage Systems

Gold Coast Airport plays an important part in draining stormwater from surrounding areas. Stormwater flows from surrounding areas either into Coolangatta Creek or the Cobaki Broadwater. The airport constitutes approximately a quarter of the creek's total catchment area, storing stormwater along its length to enable it to flow gradually into the ocean without flooding residential or public areas. There is a current agreement between GCAPL and the Gold Coast City Council to maintain the storage volume of Coolangatta Creek within the airport precinct. GCAPL acknowledges the importance of the existing storage volume of the creek within the airport, and will maintain as much as possible to limit peak flows.

The Cobaki Broadwater is a component of the Tweed River tidal waterway system. The flood basin of the Tweed River valley receives high levels of runoff from the surrounding mountains. Floodwaters from Cobaki and Piggabeen Creeks are discharged via the Cobaki Broadwater into Tenanora Creek and the Tweed River. Thus the broadwater acts as both a flowpath for local stormwaters and as a backwater of the Tweed River.

#### 6.2.4 Ground Water

Gold Coast Airport is situated on a flat, coastal sand plain which previously contained many small lakes and swamps. The site is underlain by alluvial sands and gravelly deposits which form a shallow, unconfined aquifer (water table) beneath the airport.

The sand deposits are typically grey/white, clean sands that contain brown indurated layers at depth, and a less frequent occurrence of peat layers and marine muds. The sands are saturated from approximately 1-3m below ground level (the water table) over much of the airport. The water table is exposed in seepage faces and is contiguous with the standing water in Coolangatta Creek, the retention basins along the creek and in some remaining natural swamps and ponds on the western side of the airport.

Coolangatta Creek and the retention ponds, together with the Cobaki Broadwater to the west and the Pacific Ocean to the east, are natural groundwater discharge zones.

Generally airport groundwater is within AEPR standards, however at some sites there is evidence that groundwater quality has been affected by the Tugun Landfill Facility and possibly by other anthropogenic influences. Two known sites of groundwater contamination resulting from airport activities





are currently monitored to assess natural attenuation and ensure contamination does not migrate outside the airport boundaries. These sites include one area which has been contaminated from underground fuel lines associated with the JUHI operations and one area which has been identifed with minor ammonia contamination from nearby airport landfills. Parsons Brinkerhoff undertook an extensive groundwater contaminant assessment at Gold Coast Airport, including particle tracking and contaminant transport modelling. Results from this work indicate that any migration of contamination offsite at any stage in the future is highly unlikely.

The electrical conductivity shows that most groundwater around the airport is fresh (less than 1400 us/cm), although moderately saline groundwater (up to 14,300 us/cm) does occur.

The pH ranges between 5.42 and 8. In the airport environment, the pH is affected by the surrounding wallum country with associated acid sulphate soils, therefore a naturally low pH could be expected.

#### 6.2.5 Soils

The soils on the airport are generally siliceous sands typical of the beach system of dunes and estuaries. The southeastern area of the airport consists of a surface layer of dark brown, silty sand that becomes a light brown medium course sand after 1.5m. A layer of silty, clayey sand is interspersed in some areas below 2.8m.

Immediately west of the RPT apron, grey brown fine-grained sand predominates for the first metre. Below this level, bands of dark brown, fine-grained indurated sands are found. Some areas contain white, fine-grained sands while dark grey, organic clays or peat intersect the sand at depths varying from 1m to 7m.

The western area of the airport, at the Airservices Australia's fire training ground, has a surface layer of grey, fine-grained, slightly silty sand to a depth of 0.3 m. The sand below is white, fine-grained sand that starts changing to a darker brown colour at 1.6m.

To the immediate west of the general aviation area, the soil is generally silty sand containing 20-30% silt, Pleistocene sand

deposits with some areas of sandy silt containing 30% clay and silt interspersed for 0.5-2.5m in depth.

In the eastern area of the airport, the sand ranges from fine to medium grained, light grey in the first 0.5m, changing to fine to medium grained, grey until a depth of 2m. Light yellow fine to medium sand is found below 2m in depth with a layer of fine to medium dark brown sand (coffee rock) interspersed from 0.5 to 1.5m in depth.

The lithology of the soils in the area south of the RPT apron generally consist of tan-grey medium-fine sand overlying dark tan-grey indurated sand at approximately 2.5m depth.

Acid sulphate soils (ASS) is the common name given to soils containing pyrite (iron sulphides) that, after exposure to oxygen and water, generate sulphuric acid. Any disturbance or excavation of these soils results in oxidation of the pyritic material, leading to acidification.

Studies undertaken at the airport have indicated potential and actual acid sulphate soils (PASS and AASS), particularly in the southern end of the airport and among silt stockpiles resulting from the previous sand dredging operations.

Low pH values are regularly recorded in open drains passing through the southern end of the airport, which may reflect naturally acidic conditions – typical for the Wallum country in this area – or may be a direct result of runoff from ASS on the airport.

#### 6.2.6 Cultural Heritage

The airport lies in an area that was within the extreme southern boundary of the traditional lands of the Kombumerri People, and the northern boundary of the lands of the Minjungbal People whose traditional lands range from this boundary to the Clarence River.

Dr J. Hall (1990) carried out an archaeological assessment on several other sites including the previously identified camp/ midden complex located within the National Estate which was first identified in 1985 by Dr P. Lauer and Kombumerri Aboriginal community members. Not only does the midden/ camping site complex represent a significant fragment of an Aboriginal camping ground which may reveal knowledge of Aboriginal cultural practices, customs, lores/laws and traditions, but it is one of the very few such complexes remaining in the Gold Coast/Tweed River coastal region.

Additionally, it is the only such site complex yet recorded that still retains much of its former environmental content, in the form of the comparatively undisturbed coastal lowland vegetation associations. At other places in the region, while the occupation sites remain, the swamps have been drained and other vegetation cleared.

The camp/midden site complex was included on the Register of National Estate on 15 May 1991. The reason for its nomination was that it was one of the few remaining camp/midden sites in the region, and the only one known on the northern banks of the Cobaki Broadwater. The location of the camp/midden site complex within the Cobaki Environmental Precinct ensures its preservation and protection. Several archaeological assessments have been conducted since 1985 and all have identified various sites of cultural significance to the traditional people of this region.

#### 6.2.7 Air Quality

Firstly, the Airport (Environment Protection) Regulations do not apply to pollution generated by aircraft while flying, landing, taking off or taxiing. These matters are controlled under the Commonwealth Air Services Act 1995 and the Air Navigation (Aircraft Engine Emissions) Regulations. Therefore, it is not GCAPL's responsibility to carry out air quality studies relating to air emissions resulting from aircraft operations other than ground running and idling on aprons. The airport liaises with the relevant Environment Protection Authorities in their endeavours to address this matter.

In major cities, airports are typically significant contributors to the city "airshed" however the City of the Gold Coast is a linear urban area, stretching in a comparatively narrow strip along the coast. As a result of its linear structure and because prevailing winds disperse most air pollutant emissions out over the sea (or inland over less populated areas in the southern part of the City near the airport), air pollution from the airport is unlikely to be a major contributor to ambient pollution levels in the Gold Coast airshed. The air pollutants released from the Gold Coast Highway are probably significantly greater than those released from Gold Coast Airport's ground operations. When considered as a small part of the Gold Coast airshed, the airport's contributions to air pollution are considered to be insignificant.

#### 6.3 ENVIRONMENTAL MITIGATION

#### 6.3.1 Introduction

The land use options prescribed by this Master Plan were developed to minimise the impact on the environment. In particular, three major criteria were identified which limited the extent and location of future airport development. These were:

- the proximity of Currumbin Hill to the north which constrained any runway extension in this direction;
- the environmentally significant vegetation and Aboriginal sites to the west; and
- the importance of facilitating the preferred road/ rail corridor through the western sector of the airport.

Additional mitigation measures that will be implemented by GCAPL to preserve the existing environment at Gold Coast Airport are presented in the following sections.

#### 6.3.2 Flora and Fauna

The construction and operation of the proposed developments outlined within Section 4.0 of this Plan have the potential to impact areas of significant habitats and associated fauna. These negative impacts may occur as a result of clearing and construction works, an accidental fuel and chemical release, changed drainage conditions and habitat fragmentation. In order to protect the existing flora and fauna identified on Gold Coast Airport the following mitigation strategies will be implemented:

- undertake an environmental impact assessment for all major developments in accordance with legislative requirements;
- ensure compliance with the AES;
- implement an environmental management program for construction activities which specifies the management of

flora and fauna issues;

- implement the flora and fauna environmental management program to ensure the protection of areas with high conservation value;
- implement fuel and chemical storage and handling procedures;
- implement a landscaping policy which utilises local native flora species;
- provide environmental awareness training to staff; and
- implement flora and fauna monitoring and assessment programs.

#### 6.3.3 Water Quality

The proposed developments outlined within, Section 4.0 of this Master Plan have the potential to impact on the existing water quality at Gold Coast Airport. These negative impacts may occur as a result of an accidental fuel and chemical release, changed drainage conditions and increased sedimentation and erosion, acid drainage from disturbed acid sulphate soils and incorrect disposal of hazardous wastes.

To ensure the protection of surface water quality, the following mitigation strategies will be implemented:

- develop and implement soil management procedures for construction activities;
- require adherence to best practice guidelines for storage and use of chemicals; and,
- ensure compliance with the AES.

#### 6.3.4 Soils

The proposed developments outlined within, Section 4.0 of this Master Plan have the potential to impact on the existing geology at Gold Coast Airport. These negative impacts may occur as a result of mobilisation of existing contaminants, earthworks, increased risk of chemicals spills disruption of acid sulphate soils (ASS) and increased waste storage and management issues. To ensure the protection of soils GCAPL must ensure compliance with the AES.

#### 6.3.5 Cultural Heritage

The construction and operation of the proposed developments outlined within Section 4.0 of this Plan have the potential to uncover additional cultural heritage issues at Gold Coast Airport. To ensure that additional identified sites or artefacts are appropriately protected and that the existing cultural heritage sites are preserved the following mitigation strategies will be undertaken:

- ensure relevant Indigenous stakeholders and regulatory agencies are consulted during any planning and environmental assessment processes associated with the road/rail corridor through the western sector of the airport.
- implement environmental awareness and induction training programs outlining the significance of identified cultural heritage sites prior to construction;
- implement procedures relating to management of cultural and heritage issues during construction activities;
- ensure compliance with the AES and relevant legislations;
- conduct annual audits of the site to verify that areas are maintained in an appropriate condition; and,

#### 6.3.6 Air Quality

When considered as part of the Gold Coast airshed, the airport's contributions to air pollution are considered to be insignificant. Not withstanding this the following safeguards will be implemented:

- development and implementation of an environment management program for construction activities to minimise dust generation;
- ensure compliance with the AES;
- aircraft operators will be encouraged to upgrade aircraft to ensure optimal engine efficiency;
- promote the use of public transport for passengers and airport staff to and from the airport;
- promote the storage and use of chemicals which will not adversely impact on air quality;
- encourage regular maintenance of equipment to ensure efficient operation; and,
- ensure that ARFF conduct fire training activities under controlled conditions when appropriate meteorological conditions prevail.

#### 6.4 ENVIRONMENTAL MANAGEMENT

#### 6.4.1 Airport Environment Strategy (AES)

GCAPL proposes to manage environmental issues at Gold Coast Airport through the implementation of the AES. This Strategy includes the use of an Environmental Management System (EMS) prepared in accordance with the specifications outlined in the International Standard IS014001. The implementation of this system will enable GCAPL to meet appropriate Federal and State environmental standards relevant to Gold Coast Airport as a minimum level of performance. These standards include those specified by Commonwealth, State and local government legislation, guidelines and policies.

GCAPL's ISO 14001 certified EMS includes:

- policy and objectives;
- roles and responsibilities;
- action plans; and
- contingency plans.

GCAPL, in developing the EMS, assessed the significant environmental aspects of the airport and includes the following components:

- environmental policy and performance objectives;
- environmental planning;

- implementation and operation;
- checking and corrective action; and
- review of the EMS.

The EMS reflects the environmental philosophy and commitment of GCAPL, thus enabling the airport to maintain and improve its environmental performance. The EMS addresses the following issues:

- management of environmental impacts associated with GCAPL's operations;
- environmental objectives to be achieved by the airport;
- provision of environmental education and training to staff;
- the development of the airport business to maximise the social and economic benefits whilst keeping the environmental effects to an acceptable minimum;
- commitment by the GCAPL Board to environmental objectives;
- consultation with local residents and businesses to adequately address community concerns; and,
- commitment to the measurement and reporting of environmental performance.

GCAPL proposes to work pro-actively, in close consultation with regulatory authorities, stakeholders and other government and community organisations, to maximise the effectiveness of the EMS.

# 7.0 IMPLEMENTATION

The Commonwealth Government through the Minister for Transport and Regional Services is the approval authority for the Airport Master Plan. In accordance with the Airports Act, when a draft Master Plan is approved by the Minister, it becomes a final Master Plan and will be in force for a period of five years.

The developments prescribed in Table 3 below are based on the future requirements as forecast at the time of issue of this Master Plan. Changing economic conditions and uncertainties in the aviation and tourism industries makes planning of the timing of infrastructure difficult to predict accurately. The table flags future strategic proposals but this does not constitute a commitment by GCAPL to the provision of the projects identified, nor is it appropriate to evaluate and justify them fully at this stage.

The next stage of the planning process will be to conduct an internal environment assessment of each development and if required under the *Airports Act 1996*, produce a Major Development Plan for the proposed major developments. Any such Major Development Plan will require a 90 day public review, including environmental impact assessments and approval by DoTARS, prior to its implementation. Projects beyond 5 years are more difficult to assess in respect of accurate timing and will be demand driven. There is also further opportunity to revise development implementation schedules with the five-yearly Master Plan reviews. Table 3 gives the broad range of developments proposed for 5 to 20 years.

#### 7.1 PLANNING CYCLE

A Master Plan is a dynamic and evolving document and therefore will be subject to change. This may be brought about by such factors as market forces, operating conditions, changes in standards and new technologies. It is therefore prudent to refine strategic development intentions and review the Master Plan at logical intervals.

A flexible and dynamic approach to implementation is therefore required to respond to these changing conditions in a timely and cost effective manner.

Implementation will most likely be a continuous process and will proceed in accordance with the Commonwealth's legislative requirements.

Project	Timeframe			
Southern Runway Extension	0-5 Years			
Tugun Bypass	0-5 Years			
Creating the Cobaki Environmental Precinct	0-5 Years			
Construction of Tower Road Precinct	0-5 Years			
Terminal Expansion	0-5 Years			
Construction of Stage 1 Business Park	0-5 Years			
Construction of Hotel	0-5 Years			
Improve landscaping	0-5 Years			
Construct Cycleway and Viewing Platform	0-5 Years			
Multi Level Carparks	5-10 Years			
Rail Corridor	5-10 Years			
Construction of Stage 2 Business Park	5-10 Years			
Construction of Western Enterprise Precinct	5-10 Years			
Further Terminal Expansion	10-20 Years			
Construction of Stage 3 Business Park	10-20 Years			

#### **TABLE 3 - IMPLEMENTATION SCHEDULE**

### **1.0 INTRODUCTION**

Under the *Airports Act 1996* (the Act), Gold Coast Airport Pty Limited (GCAPL) is required to review and prepare a draft Master Plan for Gold Coast Airport every five years.

In accordance with the Act, the 2006 draft Master Plan (2006 dMP) was placed on public display for a period of 90 days from May 29 to August 28, 2006. During this time, the public were invited to provide written submissions on the content of the 2006 dMP

#### 2.0 CONSULTATION ON THE 2006 GOLD COAST AIRPORT DRAFT MASTER PLAN

Copies of the 2006 dMP were made available at the following locations:

- Palm Beach Library, 11th Ave, Palm Beach;
- Elanora Library, The Pines Shopping Centre, KP McGrath Dve, Elanora;
- Coolangatta Library, L3 Showcase on the Beach, Griffith St, Coolangatta;
- Tweed Library, Brett St, Tweed Heads;
- Kingscliff Library, Turnock St, Kingscliff;
- Gold Coast Airport Pty Ltd, Level 2, Airport Central, Gold Coast Airport, Bilinga QLD; and
- www.goldcoastairport.com.au.

Additional copies were available for purchase from Gold Coast Airport Pty Ltd.

To facilitate responses, a reply paid service and toll free phone line was established.

The above details and key dates were advertised in the early general news sections of The Gold Coast Bulletin, The Courier Mail and The Daily News on Saturday May 27, 2006. Media coverage also highlighted the above information in The Gold Coast Bulletin and on Channel 9 Gold Coast News. Copies of the 2006 dMP were distributed to 30 key stakeholders.

# 2.1 Brochure and Reply Paid Comment Card

A brochure summarizing the 2006 dMP and incorporating a reply paid comment card was produced and distributed through relevant government offices, the community information sessions outlined below, via direct mail and available to be downloaded from www.goldcoastairport.com.au.

#### 2.2 Community Information Sessions

To further extend opportunities for interested parties to ask questions and view the 2006 dMP, two community information days were held:

• Wednesday July 5, 4pm to 6pm at the Club Banora, Cocos Room, Leisure Drive, Banora Point.

#### AND

• Thursday July 6, 4pm to 6pm at Tugun Village Community Centre, Coolangatta Road, Tugun.

These details were advertised in the Gold Coast Sun, the Tweed Sun, The Gold Coast Bulletin and The Daily News. A media release was also distributed to all local Tweed and Gold Coast radio, print and TV media on 29 June 2006. At each session, display boards summarizing the 2006dMP were erected and GCAPL staff were on hand to answer questions. Copies of the document were also available at the sessions and a 2006dMP brochure was handed to every person attending the sessions. Additional comment sheets and a feedback box were also made available at each session.

A total of 13 people attended the Information Session at Banora Point and nine people attended the Tugun session. No written submissions or comment cards were received on either occasion and most verbal enquiries were regarding topics other than those covered by the 2006 dMP.

#### 2.3 Face to Face Briefings

A total of 17 face to face briefings were held with key government and community stakeholders throughout the consultation period. These were:

7/6/06	Gold Coast Regional Economic	Development
	Advisory Board	
7/6/06	John Witheriff, Chairman Regional Council	
	Commerce Queensland	
14/6/06	Gold Coast Airport Noise Abatement	
	Committee representing:	

- Banora Point Residents Association
- Tugun village Community Association Inc
- East Banora Residents Association
- Kingscliff ratepayers and Progress Association Incorporated
- Fingal Head Community Association
- Tweed District Residents and Ratepayers Association
- Bilinga Neighbourhood Watch
- Tugun Progress Association
- Friends of Currumbin
- Bilambil Heights Progress Association
- Cyclades Crescent Area Neighbourhood Watch
- Oxley Cove Community Group
- Cudgen Progress Association

28/6/06	Dr Tracey Gilmore, Director Queensland State
	Development
29/6/06	Margaret May MP, Federal Member
	for McPherson
29/6/06	Christine Smith MP, QLD Member for Burleigh
4/7/06	Steven Ciobo, Federal Member for Moncrieff
10/7/06	Tweed River Probus Club
11/7/06	Cr Chris Robbins, Gold Coast

	City Council Division 14
11/7/06	Tweed, Kingscliff and Murwillumbah Chambers
	of Commerce
11/7/06	Justine Elliott, Federal Member for Richmond
11/7/06	Christine Buschmann, Tweed Export Hub
25/7/06	Jann Stuckey MP, QLD Member for Currumbin
26/7/06	Tweed Shire Council Administrators and Chief
	Executive Officer (Max Boyd, Lucy Turnbull and
	Mark Rayner).
11/8/06	Tweed and Coolangatta Tourism Incorporated
	(TACTIC) Board meeting
15/8/06	Gold Coast Tourism member networking function
22/8/06	Gold Coast City Council Economics and
	Cultural Committee.

Briefings declined:

4/7/06 Mr Neville Newell, State Member for Tweed Heads.

#### 2.4 Additional briefings

Additional briefing notes were provided to

- Tweed Economic Development Corporation
- Queensland Transport
- Gold Coast Tourism
- Tourism Queensland
- Northern Rivers Regional Development Board
- Northern Rivers Tourism
- Air Services Australia
- Civil Aviation Safety Authority (CASA).

#### **3.0 RESPONSE TO CONSULTATION**

A total of 72 written submissions were received including 18 individual letters of support, six individual written objections, one petition of nine names, four copies of a standard objection letter and 43 copies of another standard objection letter.

### 3.1 Written Submissions

A total of 18 letters of support were received for the 2006 dMP from:

- Gold Coast Regional Economic Development Advisory Board
- Commerce Queensland
- Tourism Queensland
- Margaret May MP, Federal Member for McPherson
- Christine Smith MP, QLD Member for Burleigh
- Steven Ciobo, Federal Member for Moncrieff
- Gold Coast City Council
- Tweed Chamber of Commerce and Industry Inc.
- Justine Elliott, Federal Member for Richmond
- Jann Stuckey MP, QLD Member for Currumbin
- Tweed and Coolangatta Tourism Incorporated, (TACTIC)
- Tweed Economic Development
- Gold Coast Tourism
- Air Services Australia
- Civil Aviation Safety Authority
- Northern Rivers Tourism Incorporated
- AirServices Australia
- Gold Coast Desalination Alliance

Verbal support was also received from:

- Cr Chris Robbins, Gold Coast City Council
- Tweed River Probus Club

Positive comments on the plan focused on the following:

- Benefits for tourism, the economy and regional development
- Safety
- Recognition of Gold Coast Airport as a major tourism and business infrastructure node for the region
- Protection of the airport as a key economic driver
- Availability of commercial land
- Accommodation of the road and rail transport networks.

Written letters of concern received included six individual letters of concern; one petition of nine names regarding the proposed new entry to the airport; four standard letters regarding the proposed new entry to the airport; and 43 standard letters regarding concerns for the GA precinct from 16 different companies all associated with author of the standard letter. Only one of these companies was based at Gold Coast Airport.

Comments of concern focused on:

- · Proposed new entry to the airport, access and traffic
- Concern re the demise of general aviation
- Environmental concerns.

### 3.2 Community Support

The following comments and support for Gold Coast Airport have recently been offered in the media by community and tourism leaders.

Queensland Tourism Industry Council chief executive Daniel Gschwind applauded the Gold Coast Airport strategy. He said the global growth of low cost carriers, who generally fly into regional areas, had created a new expectation in travelers that they can fly directly to their destination of choice. "I think its critically important to have direct access to both domestic and international markets," he said (The Gold Coast Weekend Bulletin, Saturday 13 May 2006)

Gold Coast Tourism chief executive officer Pavan Bhatia said '[Gold Coast] airport's strategy was exciting.' He said 'the tourism industry here would benefit from the plans for Coolangatta as well as long-haul passengers flying into Brisbane airport.' (The Gold Coast Weekend Bulletin, Saturday 13 May 2006)

Queensland Tourism Minister, the Honourable Margaret Keech MP, says '*expanding Coolangatta Airport to provide direct flights to China and Korea Is vital if the Gold Coast is to continue its growth.*' (ABC Coast FM – Gold Coast, 06.30 News, Thursday 27 July 2006)

#### 4.0 CHANGES TO THE 2006 GOLD COAST AIRPORT DRAFT MASTER PLAN

Following the public consultation period and further review, the following changes have been made to the 2006 dMP:

Glossary, Abreviations, Forward and Executive Summary have been included.

- Chapter 1 'Objectives of Gold Coast Airport' has been amended to 'Development Objectives
  - of the Master Plan' to clearly adhere to the Airports Act 1996.
- Chapter 2 Minor grammatical changes have been made to correct tense. Minor changes have also been made to identify the legislative requirements in the document. The consultation section also was updated.
- Chapter 3 'Section 3.1 Future Needs of Airport Users' has been included to clearly satisfy the Airports Act 1996.
- Chapter 4 4.1 The areas of precincts have been deleted as they serve no purpose and were inconsistent with the Land Use Map.
  4.4.1 A Heading has been included to address consistency with surrounding planning requirements.

**4.5.1** Reference to the desalination plant tunnel has been deleted as the tunnel will not be located on the Airport.

**4.8.4** Access and Parking has been amended to reflect current status of the Boyd Street interchange.

4.8.5 Grammatical amendment.

**4.8.7** Transfer and title arrangements for the infrastructure corridors were included.

**4.11** Future Access has been amended to remove reference to a southbound overpass opposite Cahill Street and to include the possibility of a signalised second access to the airport. This change is in response to consultation with residents and the Queensland Department of Main Roads.

**Chapter 6 6.1.2** The AEO's role has been clarified. Sections on ground water and soils have been included to reflect the AES.

Chapter 7 Included further terminal expansion as long term.

#### Landuse Map 4.1

Amendments Include the option of a second rail terminal adjacent to second entry to airport.

#### ANEF Map 5.1

Date and endorsement of the plan from Airservices included.

