



Sunshine Coast Airport

Master Plan – September 2007



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Acknowledgement

This Master Plan has been prepared in close consultation with the airline industry, airport tenants, Federal, State and Local Government agencies as well as the local community. Sunshine Coast Airport gratefully acknowledges the cooperation and input from all organisations and individuals who participated in the preparation phase.

Disclaimer

Disclaimer

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1 Executive Summary

1.1 Introduction

A Master Plan is a strategic document intended to guide future development decisions to achieve the Sunshine Coast Airport (SCA) strategic intent. Its purpose is to reserve land for future airport activities based on the forecast growth of the airport business at the time of writing. The Master Plan is not intended to detail individual facilities or specific time frames for the implementation of the Plan; rather it sets the foundation upon which further analysis and planning is based.

This Master Plan is the product of changes made to the Master Plan Preliminary Draft Report February 2006 and has been written to address feedback received during the public consultation process and Councils review of that plan. This Master Plan - September 2007 sets the direction for the development of SCA from 2007 through to 2020.

The preferred long term development objective for the airport is to build a new runway to facilitate new international routes and support the growing regional economy of the Sunshine Coast. This new runway is likely to be constructed at some time towards the end of the planning horizon (2020) or shortly thereafter. Due to community concern with extending, and constraints on the ability to widen the existing Runway 18/36, no interim changes will be made to the existing runway. However, during the Master Plan time frame upgrades will be made to the taxiways, aprons, terminal and infrastructure to support the growth associated with the current runway.

It is envisaged that this plan will set the framework for a more detailed study of design, infrastructure planning, land use planning and environmental impacts required to achieve the long term planning objective.

1.2 Consultation

A comprehensive program of consultation was undertaken at the commencement of the study and at appropriate stages throughout the study period, with a wide range of stakeholders.

1.3 Aviation Forecasts

1.3.1 Passenger Movements

With the introduction by low cost carriers (Virgin Blue and Jetstar) of regular direct services between the Sunshine Coast and Sydney, Melbourne and Adelaide, traffic has grown rapidly to the current level of some 880,000 annual passenger movements.

Historic and forecast annual passenger movements are shown at Figure 1-1 below.

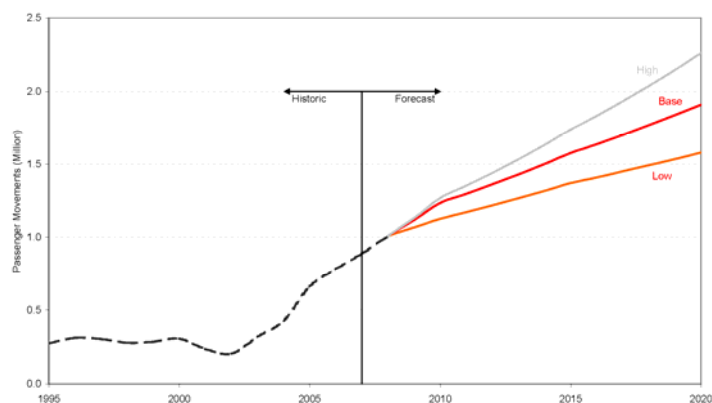


FIGURE 1-1 FORECAST ANNUAL PASSENGER MOVEMENTS

Figure 1-1 shows base case forecasts of some 1.9 million passenger movements by 2020, with high and low forecasts of some 2.3 and 1.6 million respectively.

1.4 Aircraft Movements

Historic and forecast total fixed wing (RPT plus GA) aircraft and helicopter movements are shown at Figure 1-2.

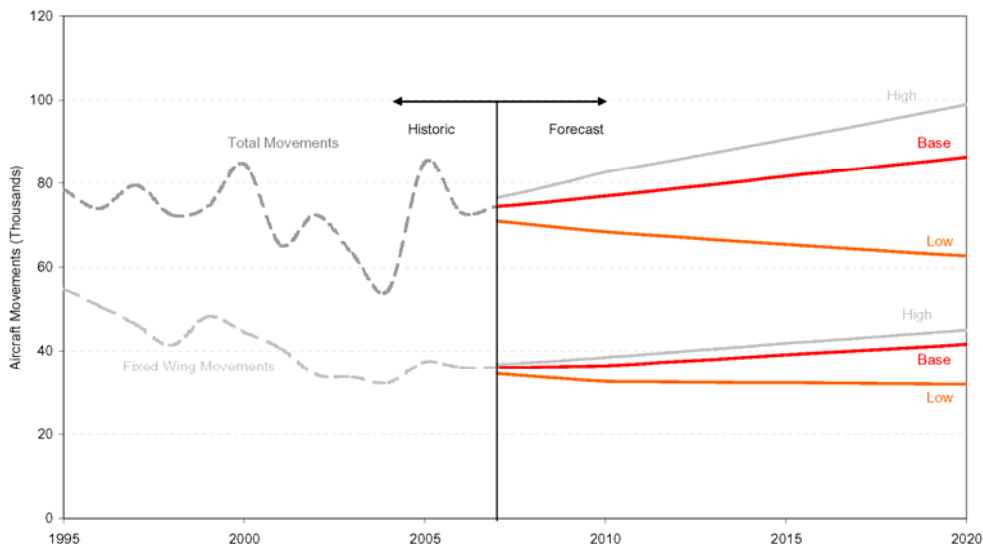


FIGURE 1-2 HISTORIC AND FORECAST ANNUAL AIRCRAFT MOVEMENTS

Fixed wing aircraft movements (including both RPT and GA) represent approximately 50 percent of total aircraft movements, additionally:

- ◆ Base case forecasts predict some 86,000 annual aircraft movements (41,000 fixed wing and 45,000 helicopter movements) by 2020; the high and low forecasts range between 99,000 (45,000 and 54,000) and 62,000 (32,000 and 30,000) annual aircraft movements respectively.
- ◆ RPT annual aircraft movement forecasts at 2020 are:
 - High 13,396
 - Base Case 10,891
 - Low 9,219

1.5 Busy Hour Passengers

Busy hour passenger forecasts were prepared to allow sizing of the future passenger terminal. The forecasts were based on a growth rate equal to the baseline annual passenger movement forecasts, as well as assuming a growth rate 1% per annum less than the baseline annual passenger movement growth rate. The forecasts are shown in Figure 1-3 below.

The busy hour passenger arrivals and departures are forecast to reach some 1,400 by 2020. In practice, it is likely SCA would negotiate with the airlines to encourage them to introduce new services outside the peak period, in order to minimise terminal and apron expansion facilities which would be underutilised much of the time.

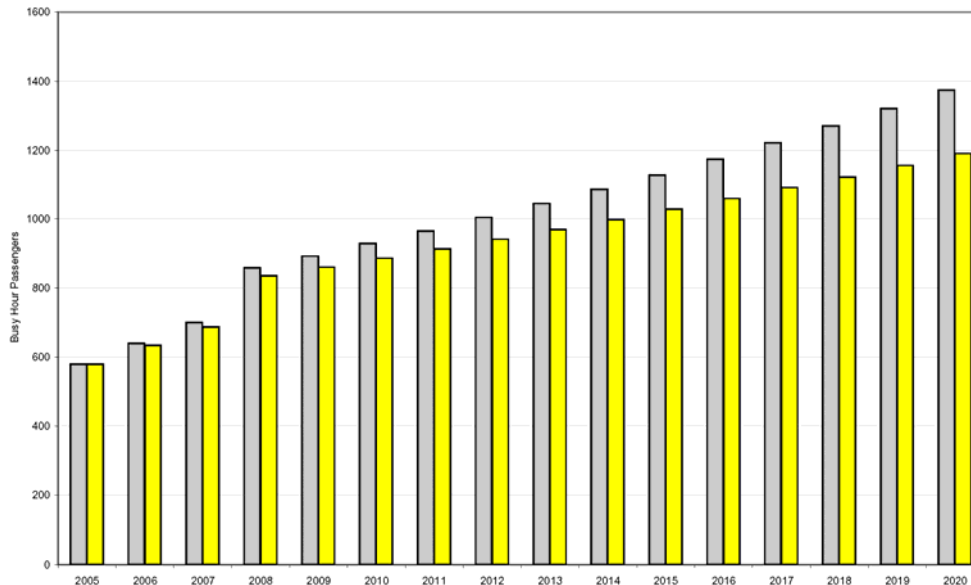


FIGURE 1-3 BUSY HOUR PASSENGER MOVEMENTS

1.6 Peak Stand Demand

Peak stand demand forecasts for RPT jet aircraft, using B737-900 as the design aircraft are provided below.

Year	Active Stand Demand	Buffer ⁽¹⁾	Total Stands
2007 (Current)	3	1 ⁽²⁾	3
2010	3	1	4
2015	4	1	5
2020	6	1	7

TABLE 1-1 PEAK STAND DEMAND

Notes:

1. Makes provision for off-schedule and itinerant aircraft
2. Boeing 737-300 Maximum on Bay 3

1.7 RPT Apron

The current RPT apron can accommodate four aircraft although aircraft cannot access all parking bays independently, nor is there sufficient space to accommodate future demands for aircraft stands.

An apron parking layout with seven bays to accommodate B737-800 (design aircraft) is shown at Figure 1-4 below. The layout includes angled bays to ensure clearance of the Runway 18/36 transitional surface; all bays can be accessed independently using aircraft power without the need for push back tugs.

1.8 Passenger Terminal

A terminal concept to accommodate the projected 2020 busy hour passenger numbers, including accommodating international (trans-Tasman) traffic, is shown at Figure 1-5 below.

TABLE 1-2 PARKING DEMAND FORECAST

Year	Short-term	Long-term	Rental	Staff	Coaches / Shuttles
2007 ⁽⁴⁾	321	166	140	80	8
2010	300	200	165	62	10
2015	400	270	190	75	12
2020	490	320	210	85	14

A concept for layout of the car park and terminal access road system to accommodate the 2020 demand, coupled by provision for terminal expansion and assuming that the control tower remains throughout the planning horizon, is shown at Figure 1-6 below.

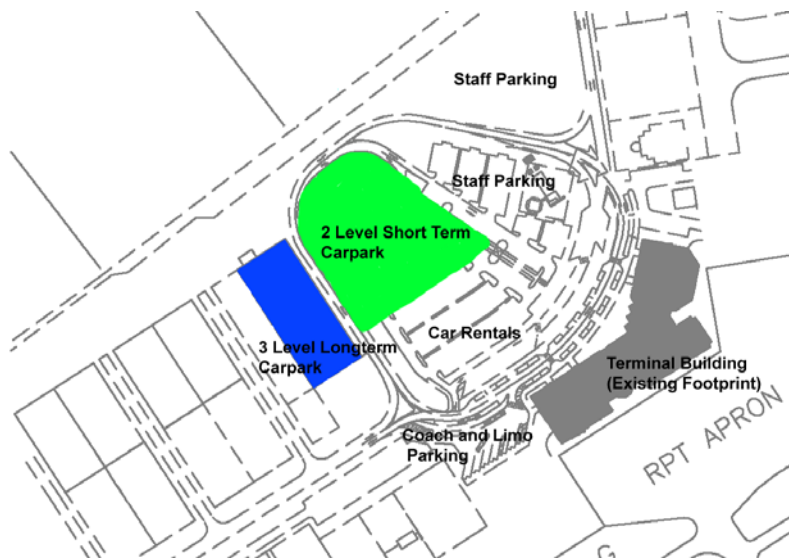


FIGURE 1-6 PROPOSED CARPARKING FACILITIES

1.10 Surface Access

The Department of Main Roads is proposing a new link road from the Sunshine Coast Motorway to David Low Way, linking into the latter at its intersection with Runway Drive. In addition, a new internal access road is proposed from David Low Way to the passenger terminal and other airport precincts. This arrangement is shown at Figure 1-7 below.

1.11 Runway Requirements

The existing main Runway 18/36 is 1,797m long x 30m wide; operations are restricted to narrow body aircraft types (B737-700/800 and A320) operating services to eastern Australian destinations, and possibly trans-Tasman, at reduced payload.

This plan recommends that no further work or extensions be made to the existing runway 18/36 and that the future Runway 13/31 be protected for the longer term development of the airport. Further, that detailed planning commences to confirm the construction triggers and impacts of the proposed runway. It is anticipated that this body of work may indicate the requirement for the runway construction towards the end of this Master Plan horizon (2020) or shortly there after. The proposed runway 13/31 will provide a take-off distance of 2,450m in each direction and with a runway width of 45m, wide bodied international

operations will be possible by a range of aircraft. Typical ranges from this runway are shown at Figure 1-8 below.



FIGURE 1-7 PROPOSED SURFACE ACCESS

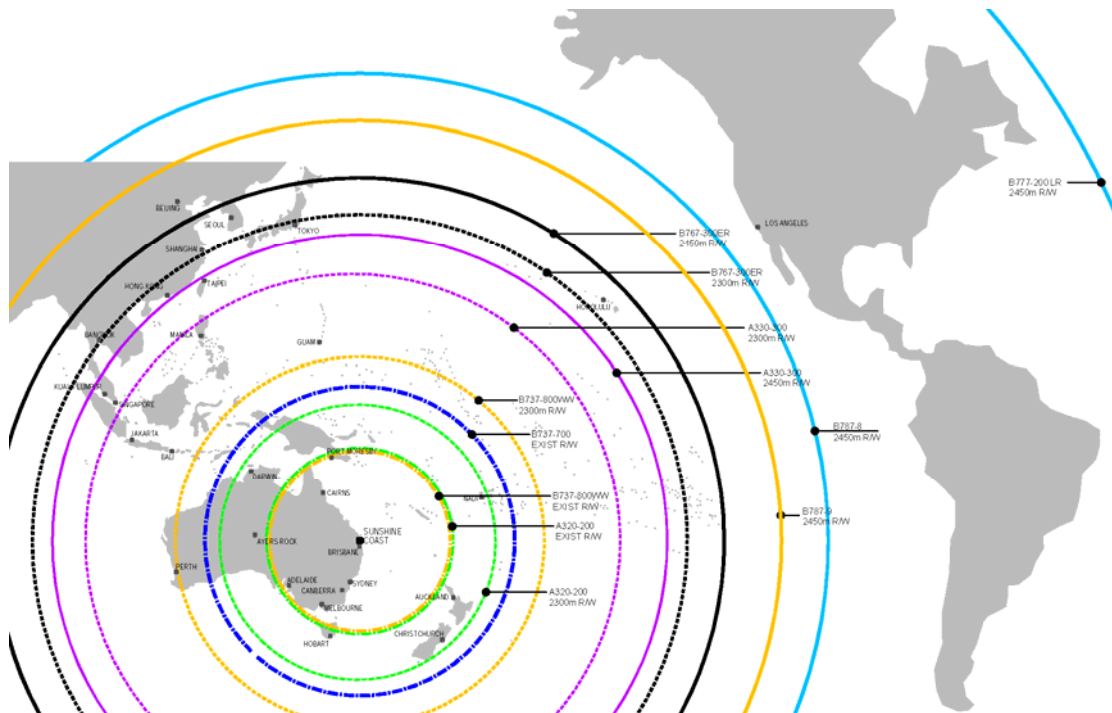


FIGURE 1-8 INDICATIVE RANGE CIRCLES

1.12 2020 Master Plan

A layout showing the 2020 Master Plan boundaries required to accommodate forecast traffic is shown at Figure 1-9 below.



FIGURE 1-9 SCA 2020 AIRPORT BOUNDARY

Key features of the Master Plan are Runway 13/31, a revised RPT apron and expanded passenger terminal facilities. The car park layout is revised, a new airport access road from David Low Way is constructed and the commercial precinct is expanded.

1.13 Aircraft Noise

Aircraft noise scenarios based on development of future Runway 13/31 were conducted and an ANEF was prepared to allow external land use planning to protect for the existing Runway 18/36 and the future Runway 13/31.

1.14 Obstacle Limitation Surfaces

An Obstacle limitation surface (OLS) drawing based on the existing Runway 18/36 and future Runway 13/31 was prepared to protect airspace associated with the airport in the long term. The OLS will be incorporated into the town planning scheme for areas surrounding the airport.

1.15 Staged Development

Operational requirements, funding limitations and other considerations usually dictate that provision of expanded or new facilities is undertaken in a staged manner. Development of facilities is driven by traffic conditions or other triggers that can be defined as part of the planning process ahead of the time the facilities are likely to be required.

Thus, the desired airport developments will be achieved in a series of stages that are tailored to match traffic growth and required service levels, with the basic philosophy being to ensure that maximum use is made of existing infrastructure in subsequent development stages.

Three development stages of ongoing development of the existing airport were prepared as follows:

- ◆ Stage 1 (short term) 0 – 5 years
- ◆ Stage 2 (medium term) 6 - 10 years
- ◆ Stage 3 (long term) 11 – 15 years.

The above time periods are indicative and do not represent a commitment to undertake the developments.

Major work items within each development stage are as follows:

- ◆ Stage 1
 - Secure and preserve the land required for the future east/west runway, associated infrastructure and its surrounding buffer zones.
 - Reconfigure RPT apron
 - Develop retail departure lounge in passenger terminal
 - Establish new airport access road
 - Expand landside road system
 - Expand car parking facilities
 - Provide serviced commercial sites
 - Commence detailed studies for the development of Runway 13/31
- ◆ Stage 2
 - Expand RPT apron
 - Construct partial parallel taxiway
 - Expand passenger terminal
 - Expand car parking facilities
 - Expand GA aprons
 - Review Runway 13/31 construction triggers
- ◆ Stage 3
 - Expand RPT apron
 - Expand car parking facilities
 - Expand GA aprons
 - Extend parallel taxiway
 - Commence construction on new runway (subject to economic, social, environmental study outcomes)