

APPENDIX A2:B

Long-term forecasts of aviation activity at Sunshine Coast Airport for 2013 – 2050

Sunshine Coast Airport

LONG-TERM FORECASTS OF AVIATION ACTIVITY AT SUNSHINE COAST AIRPORT FOR 2013~2050 FINAL REPORT

SUBMITTED BY

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NOVEMBER 2012



DOCUMENT CONTROL SHEET

Report Title	Long-Term Forecasts of Aviation Activity at Sunshine Coast Airport for 2013~2050
File Reference	12242scSunshineAirportEISForecastFinalReport-201112
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Reviewer	Philip Craig
QA Review	Shannen Chua
Issued Date	20th November 2012

**The purpose of this form is to ensure that documents are reviewed and approved prior to issue. The form is to be bound into the front of all documents released for the Project.*

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ABBREVIATIONS AND DEFINITION

ADL	Adelaide Airport
AKL	Auckland International Airport
ATR	Avions de Transport Régional or ATR International
CAAGR	Compound Average Annual Growth Rate
CASA	Civil Aviation Safety Authority
CNS	Cairns Airport
CMQ	Clermont Airport
CY	Calendar Year
DRW	Darwin Airport
EMD	Emerald Airport
FIFO	Fly-In, Fly-Out
FY	Fiscal Year
GDP	Gross Domestic Product
GFC	Global Financial Crisis of 2008~2009
GLT	Gladstone Airport
GRP	Gross Regional Product
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMF	International Monetary Fund
km	kilometre(s)
LCC	low-cost carrier
LEAPP	Leading Edge Aviation Planning Professionals
MEL	Melbourne Airport
MKY	Mackay Airport
MOV	Moranbah Airport
n.a.	not available or not applicable
PER	Perth International Airport
ROK	Rockhampton Airport
RPK	revenue passenger kilometre(s) (one revenue passenger flown one kilometre)
SCA	Sunshine Coast Airport
SCBC	Sunshine Coast Business Council
SYD	Sydney Airport
Southeast Asia	Brunei, Burma, Cambodia, Indonesia, Laos, Malaysia, Philippines, Singapore, Taiwan, Thailand, and Vietnam
TSV	Townsville International Airport
UNWTO	United Nations World Tourism Organization
VFR	Visiting Friends and Relatives

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1.0 INTRODUCTION

1.1 The Sunshine Coast Area

The Sunshine Coast is located in Queensland north of Brisbane and generally includes the area from the Glass House Mountains in the south to Rainbow Beach in the North and the hinterland to the west. The region is diverse with Caloundra, Mooloolaba, Maroochydore, Coolum, Noosa and Rainbow Beaches and the Blackall Range, Noosa Hinterland and Mary Valley hinterland areas¹.

The area is well-known for its beautiful beaches, hinterland national parks, and a series of towns along the beach, each with its own character and tourist offerings. The area is on the opposite side of Brisbane as the Gold Coast and has generally smaller hotels and more open spaces as compared to the high rises, theme parks, and gaming facilities of the Gold Coast.

The Sunshine Coast catchment area is home to approximately 350,000 residents², who are employed in a diversity of industries in addition to tourism including construction, health services and manufacturing. The area attracted 7.5 million visitors in 2011³.

1.2 Sunshine Coast Airport Master Plan and Updates

The Sunshine Coast Airport (SCA) served 852,828 passengers in Calendar Year 2011, a decrease of 0.8% compared to Calendar Year 2010.

- The compound average annual growth rate (CAAGR) of passenger traffic from 2002 to 2012 has been 14.5%. Growth has slowed in recent years but this high average growth rate is driven by some very high growth years as LCCs were introduced into the market.
- Three airlines currently serve the Airport with scheduled passenger flights. Jetstar and Virgin Australia currently fly to domestic destinations of Melbourne and Sydney while Air New Zealand is serving Auckland with international flights under a seasonal trial period.

The Sunshine Coast Airport 2007 Master Plan identified a need to expand the Airport to accommodate population growth, growth in regional tourism, and business and community needs for improved aviation services to and from the Sunshine Coast. The proposed project includes a new 2,430 meter runway, which will operate in an East/West direction. The runway direction is also described as 13/31.

¹ Sunshine Coast Destination Ltd, www.SCDL.com.au/aboutus
² Sunshine Coast Council, 18 November 2011
³ Sunshine Coast Destination, 22 February 2012

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The new runway will offer significant operational benefits over the existing 1,797-metre North/South runway. Due to the width of the current runway (30 metres), some aircraft currently operate with constraints on maximum cross wind capabilities. The project will also include expansion of the apron and a new terminal. During the assessment of the project, the airport is examining a number of runway development scenarios as follows and as further discussed in Section 10 of this report:

1. Develop a new runway
2. Upgrade the existing runway as per CASA requirements, or
3. Do no runway widening or extension.

1.3 Forecast Update Background and Summary

LEAPP has prepared this forecast update to support the EIS associated with the Airport expansion projects. The forecasts have been prepared after a review of previous forecasts, the compilation of airport and other data, the gathering of information on the area, and discussions with local and national stakeholders in the airline and tourism industry associated with the area.

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2.0 FORECASTING METHODOLOGY

2.1 Need for Unique Approach

Due to the dynamic nature of historical airline traffic at the Airport, a unique approach is required to determine potential future growth scenarios for traffic at the Airport. Airline traffic at the Airport has been subject to significant changes over time, primarily due to airline service changes. Therefore, traffic levels have not always followed a traditional correlation with economic activity in the region.

For this reason, LEAPP has undertaken both a top -down and a bottom-up approach to developing this forecast update. The intention has been to understand economic and other macro drivers of growth, micro strategic changes in the airline industry, and local industry and policy changes that could result in changes to future airline traffic at the Airport.

2.2 Historical Airport Activity and Previous Forecasts

We have evaluated historical airline service patterns, particularly since the previous forecast update was prepared in 2009.

- Since that time, the 2008~2009 Global Financial Crisis (GFC) has eased in many parts of the world.
- However, countries in Europe, as well as the United States continue to struggle with slow growth, unemployment, and significant debt resolution issues.
- In Australia, growth in some sectors of the economy has been slow, but sectors of the economy associated with mining and the export of mineral resources have been experiencing strong economic growth.
- Overall growth in tourism and the general economy have been mixed in recent years with trends indicating potential for future improvement.

Detailed analysis of the economy and its effects on air traffic are presented in this report.

2.3 Top-Down Macro Forecast Methodology

Air travel generally correlates closely with overall socio-economic and activity in a region, including income and population growth.

As part of this study, these factors have been analysed and used to determine general long term trends in air travel activity that could be expected to occur over time, understanding that these factors only partially

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explain historical traffic at the Airport, creating the need for evaluation of other factors as discussed below.

2.4 Bottom-Up Micro Forecast Methodology

In addition to socio-economic activity, several other bottom-up factors have been considered for inclusion in the development of forecast scenarios. Evaluation of these factors is based on research regarding local economic changes and opportunities, and discussions with economic stakeholders in the region.

- Bottom-up factors evaluated include potential local tourism infrastructure development as well as infrastructure investment in other industries in the region. Potential changes in airline capacity were considered that could capture new and developing markets, as well as traffic currently lost to service providers outside of the Sunshine Coast.
- Factors restricting potential future growth were also evaluated including continued constraints at the Airport, constraints on other tourism infrastructure, a potential slowdown in the resources sector of the economy and potentially slower growth in other sectors of the economy.

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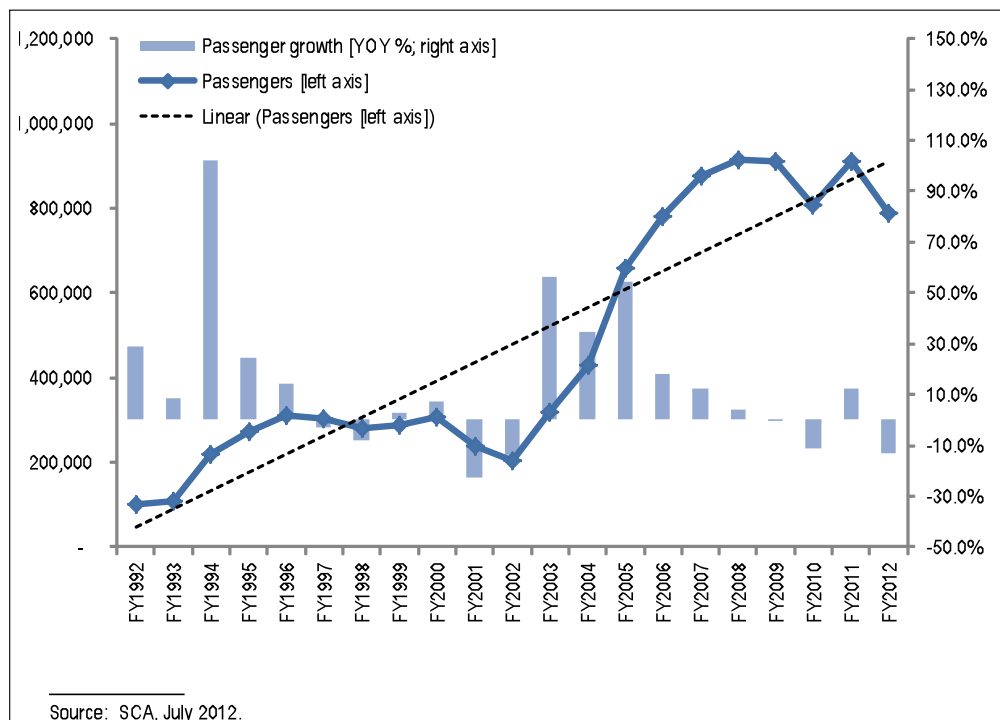
3.0 HISTORICAL AIRPORT ACTIVITY

3.1 Historical Passenger Trends

As shown in **Exhibit 3-1** below, traffic at the Airport has been volatile over the past two decades.

- According to data provided by SCA, passenger traffic has increased at a CAAGR of 10.9% from 100,150 total passengers in FY1992 to 790,002 in FY2012
- Growth rates have varied significantly over the past two decades, from negative growth of 22.6% from FY2000 to FY2001 to positive growth of 102.2% from FY1993 to FY1994.
- Passengers were at their highest level in FY2011, at 908,851.
- Passenger traffic decreased 14.4% in first half of CY2012 compared to the first half of CY2011 due to changes in airline service and other economic factors.

Exhibit 3-1: Historical Passenger Traffic (FY1992~FY2012)

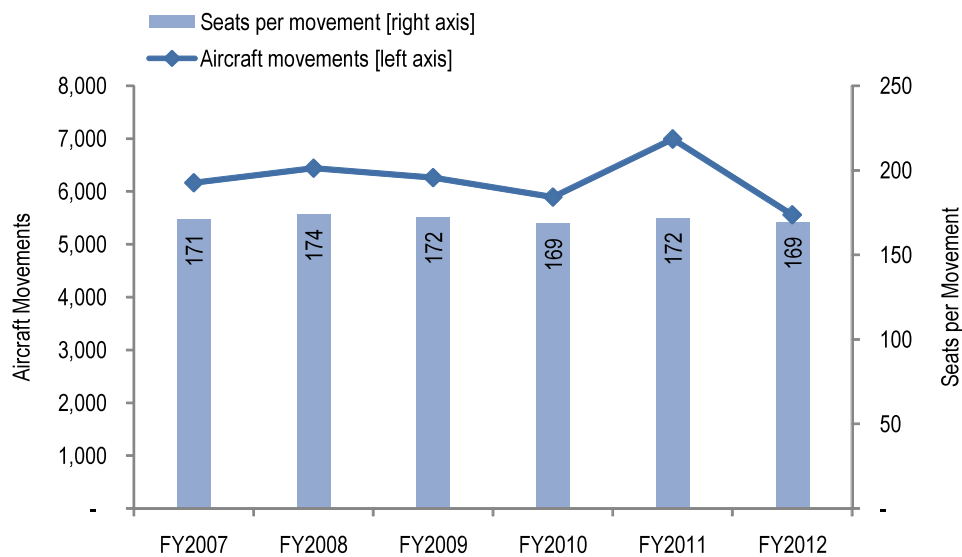


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3.2 Historical Aircraft Movements

As shown in **Exhibit 3-2** below, aircraft movements at SCA have also shown large changes in growth over the past several years with both passenger levels and aircraft size changes affecting the number of movements.

Exhibit 3-2: Aircraft Movements and Passengers per Movement (FY2007~FY2012)



Source: SCA, July 2012.

3.3 General Aviation and Helicopter Activity

As shown in **Exhibit 3-3** below, general aviation operations at SCA have decreased over the past five years while helicopter movements have increased substantially.

- The growth rates of these operations have been volatile similar to the commercial operations.
- Helicopter movements have grown as a result of increased helicopter training and testing operations at the Airport.

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Exhibit 3-3: General Aviation and Helicopter Movements (FY2007~FY2012)

Description	Movements						CAAGR
	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY2007~ FY 2012
General Aviation	29,782	33,202	25,568	20,902	26,814	25,168	-3.3%
Growth		11.5%	-23.0%	-18.2%	28.3%	-6.1%	
Helicopter	40,314	52,120	45,300	39,698	44,948	60,302	8.4%
Growth		29.3%	-13.1%	-12.4%	13.2%	34.2%	
Total	70,096	85,322	70,868	60,600	71,762	85,470	4.0%
Growth		21.7%	-16.9%	-14.5%	18.4%	19.1%	

Source: Airservices Australia, July 2012

3.4 Factors Affecting Airline Service

Several factors have affected historical aviation growth at SCA. These factors are examined in detail in the forecast analysis sections below. Factors that have affected aviation growth in the past and could continue to affect growth in the future at the Airport include:

- Economic growth including population, employment, income and exchange rates
- Airline service including changes in capacity, fares, and strategies for service at the Airport
- Passenger characteristics including purpose for travel and origins and destinations
- Tourism patterns including changes in tourism infrastructure and marketing
- Events including natural disasters, economic crises, and investments

3.5 Updates to the 2007 Master Plan Forecast Assumptions and Outputs

This forecast report represents an update to the 2007 Master Plan Forecast.

- This report takes into account historical data and information available since the previous forecasts were prepared.
- Subsequent to the publication of those forecasts, the global financial crises has peaked and is in the process of being resolved in most areas of the world, although weakness and new issues exist in many regions.

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- The previous forecasts could only speculate about the depth and length the financial crisis might take. We now see that Australia has weathered the economic storm better than many other nations and air traffic in general has recovered.

This report also takes into account the further evolution of changes in strategy at airlines serving the Airport, including the growth in LCCs in Australia and the region.

Recent local economic changes are taken into account including the recovery from the global financial crisis and efforts in government and business to improve economic growth on the Coast.

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4.0 TOP-DOWN ECONOMIC DEMAND ANALYSIS

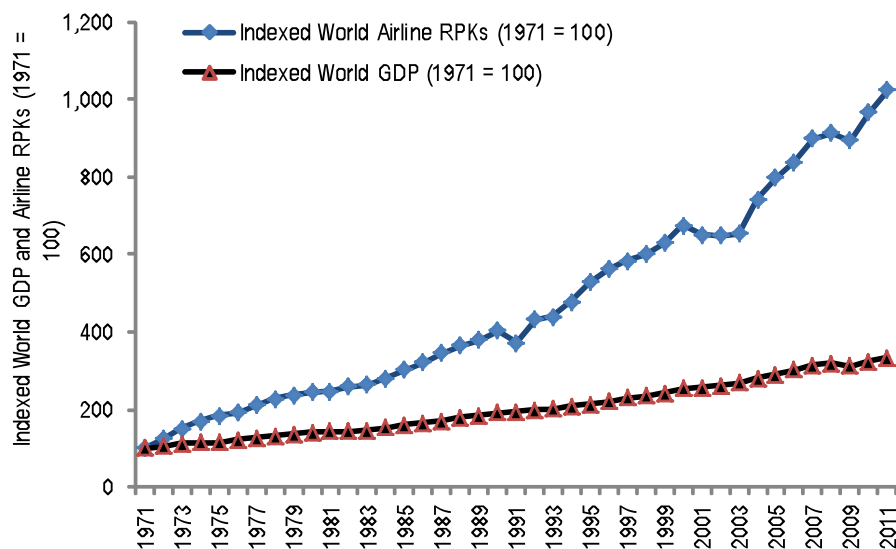
4.1 Introduction

4.1.1 Global Relationship between Economic Growth and Air Travel

Historically, air travel activity has shown a strong statistical relationship with overall economic activity, as measured by gross domestic product (GDP). Over the last four decades, world airline activity has grown at average rates per annum approximately double those of world GDP.

Exhibit 4-1, below, illustrates the historical relationship between GDP levels and airline activity. From 1971 to 2011, world GDP grew at a CAAGR of 3.1%, while world airline RPKs grew at a CAAGR of 6.0%.

Exhibit 4-1: Relationship Between World GDP and World Airline RPKs (1971 to 2011)



Sources:

RPKs: Airline Monitor and Boeing Current Market Outlook, multiple years including 2011
(RPKs = revenue passenger kilometers for all airlines)

GDP: World Bank, World Development Indicators, 2011 and WTO estimate for 2011
(GDP is World GDP in current US dollars indexed to 1971)

4.1.2 Per Capita GDP and Air Travel Activity

Per capita income growth results from growth in GDP levels and employment. Increased disposable income results from growth in the

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middle class in countries that are experiencing increased per capita and household income levels.

In most areas of the world, per capita levels of GDP correlate well with per capita air travel levels. Countries with high per capita levels of GDP tend to have high levels of air travel, while countries with low GDP per capita levels tend to have lower than average levels of air travel. Countries surrounded by water or with limited competing substitutes for transport tend to have higher-than-average travel levels than other countries do.

4.1.3 Other Factors Affecting Air Travel Activity

Other top-down factors that affect air travel activity include:

- Population growth and urbanization
- Global trade and tourism
- Exchange rate changes and relationships
- Geographical characteristics
- Fuel and oil prices
- Events
- Liberalisation of air travel

These factors are discussed in detail below as they relate to Australia, the Sunshine Coast, and SCA.

4.2 Global Aviation Demand Forecasts

Forecast passenger growth rates for select air markets are provided below.

- The forecasts are based on industry publications that rely on econometric analysis of socioeconomic growth factors, global surveys of origins and destinations and infrastructure development, and other factors and analysis.
- As with most aviation activity forecasts, significant levels of judgment are employed and actual results may be significantly different than the forecasts.

According to the “Long-Term Market Outlook” report produced by the Boeing Company, global passenger air travel, as measured in revenue passenger kilometres (RPKs), grew at a CAAGR of 4.7% from 2001 to 2011, and has been forecasted to grow at a CAAGR of 5.0% from 2012 to 2031⁴.

- According to the Boeing Company, passenger air travel in the Asia-Pacific region—as measured in RPKs—grew at a CAAGR of 9.5% from 2003 to 2010, one of the highest growth rates in the world during this period

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Boeing Current Market Outlook, 2012 (Airbus also produces a long term outlook but the latest release was not available at the time of this report).

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- Aviation activity is expected to experience continued strong growth, forecast at a rate of 6.4% from 2012 to 2031.
- Travel volumes in the Asia-Pacific region are already large, accounting for approximately 27% of global travel, according to Boeing⁵.

Exhibit 4-2 below, shows forecast growth rates between major regions of the world. As shown, growth rates to and from the Asia-Pacific region are some of the highest inter-regional growth rates.

Exhibit 4-2: Forecast Average Annual Passenger Growth Rates Activity (in RPKs) Between Regions of the World (2012~2031)

Region	Forecast CAAGR (%)					
	Africa	Latin America	Middle East	Europe	North America	Asia-Pacific
Asia Pacific	7.4	5.4	7.2	5.7	4.8	6.7
North America	6.0	5.1	6.4	3.8	2.2	
Europe	4.8	4.6	5.1	3.5		
Middle East	6.9	-	5.1			
Latin America	8.3	6.5				
Africa	6.2					
Global/ Total	5.6	6.6	6.4	4.1	2.8	6.4

Source: The Boeing Company, Current Market Outlook 2012

4.3 Resources Sector

Australia has experienced strong economic growth relative to other countries during the GFC, in part due to the strong performance of the resource sector of the economy. The resource sector has benefitted from strong demand in developing nations, particularly China, for the resources that are found in abundance in Australia.

- The resources sector growth results in significant growth in air travel due to the “fly-in, fly-out” (FIFO) nature of employment in the mines. Most workers choose to live in more established cities with the neighbourhoods, schools, and other amenities offered there.
- For work, they are on schedule to fly in and fly out of the mining area, working several days at a time, with breaks in between. While working in the mine, the employees live in housing supplied by the mining company. This structure has grown as the resource sector has boomed in Australia.

Mining employment has more than doubled over the past five years (as of 2012).

- The FIFO growth rate is even greater because many non-resident construction workers are not counted within the mining sector⁶.

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Boeing Current Market Outlook, 2012

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- The resource sector is expected to grow 10%~12% from 2012 to 2013, while non-mining economic activity is expected to grow at only 1%⁷.
- Mining sector growth also affects other ancillary industries such as consultants, service providers, equipment providers and other industries directly and indirectly related to mining operations. These industries also have experienced growth as the mining sector has grown and can be expected to continue experiencing growth that could lead to increased airline service demand.

This “resources boom” has been beneficial to the Australian economy as a whole, but has resulted in a division in economic performance between regions and sectors of the economy involved in the boom versus those that are not. Areas on the East Coast of Australia and the suburbs of the major cities have not benefitted as much from the resources boom and are experiencing slower growth.

- The continued industrialization of China and other countries contributing to the resources demand is expected by economists to continue, although growth may be slower in the near term compared to the previous decade as demand for Chinese goods from the US and Europe slows and other global economic challenges persist.
- Chinese economic growth is expected to slow, but to rates closer to 8% per year, still a healthy growth rate compared to large developed countries.

Cities such as Perth and Brisbane have seen significant increases in airline traffic due to growth in the number of FIFO resource sector employees living in those cities and flying to work and back.

- Perth Airport, for example, has more than doubled in size in terms of passenger activity levels over the last ten years.
- Perth Airport Pty Ltd, owner/operator of Perth Airport, announced that it will invest \$500 million over the next three years to build new and expanded airport facilities, including the development of Terminal WA, at which most FIFO services will operate⁸.

4.4 Top Down Factors Affecting Air Travel

4.4.1 Global Economic Growth

The 2009 SCA forecast report was completed in the midst of the Global Financial Crisis (GFC) that began in 2007 and caused a significant slowing of airline traffic in many parts of the world.

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MiningAustralia.com.au, July 2012
AICD, from Sunshine Coast Economic Forecast – CBA 22 May 2012
Perth Airport Pty Ltd, 2012.

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- As of mid-2012, when this report was prepared, several countries had recovered substantially from the crisis and are experiencing positive economic growth again, while others are still feeling the effects of the slowdown and even beginning to slow once again.
- In July 2012, the IMF warned that “failure to break free from the shackles of the financial crisis” has put the world economy in a worse state than the IMF was expecting⁹.
- The IMF stated that even the high growth “BRIC” countries (Brazil, Russia, India, and China) have shown weakness during 2012.

The European Union has been the area of greatest concern as the ongoing debt crisis continues to be pushed toward resolution and uncertainty continues to constrain growth in Europe. The US is also struggling to recover from the recession with job creation growing at a level that is too low to improve the high unemployment that has persisted throughout the recession.

- All of these factors affect aviation growth in Australia and the Sunshine Coast because Europe, the US, and other foreign countries play an important part of air travel to, from, and within Australia.
- And although global air travel activity historically has shown positive growth on average through economic slowdowns, the long-term nature of the current slowdown could have long-term consequences for future air travel.

As shown in **Exhibit 4-3** and **4-4**, below, which document key economic indicators for select countries in the region, several countries in the region—including Australia—had high rates of growth from 2000 to 2010 for Gross Domestic Product (GDP) and GDP per capita in current US Dollars.

- From 2000 to 2010, Australia’s GDP grew at a CAAGR of 12.0%, a rate higher than most developed nations.
- During the same period, GDP increased at a CAAGR of 17.3% for China, far exceeding that of most other countries in the world.
- According to the International Monetary Fund (IMF), GDP for many countries in Asia and the Pacific is projected to experience strong growth over the next five years, although at slower rates than during the past decade.
- Per capita income in Australia is projected to grow 2.9% per year from 2012 to 2017.

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Exhibit 4-3: Key Economic Indicators GDP: Selected Countries in the Asia-Pacific Region (2000–2017)

Country	GDP (Current US\$ million)						CAAGR Growth (%)	
	Historical Amounts			Estimated Amounts			Historical	Projected
	2000	2005	2010	2011E	2012E	2017E	CY 2000 ~ CY 2010	CY 2012 ~ CY 2017
China	1,198,477	2,256,919	5,930,393	7,298,147	7,991,738	11,598,974	17.3	7.7
Japan	4,731,199	4,571,867	5,488,424	5,869,471	5,980,997	6,531,077	1.5	1.8
India	476,350	808,668	1,597,945	1,676,143	1,779,279	2,628,926	12.9	8.1
Australia	399,540	732,095	1,245,305	1,488,221	1,585,964	1,833,075	12.0	2.9
South Korea	533,385	844,866	1,014,890	1,116,247	1,163,532	1,533,422	6.6	5.7
Indonesia	165,021	285,739	708,352	845,680	928,274	1,592,935	15.7	11.4
Thailand	122,725	176,352	318,908	345,649	377,158	494,255	10.0	5.6
Malaysia	93,789	137,960	237,803	278,680	305,826	417,194	9.8	6.4
Singapore	94,308	125,429	227,382	259,849	270,020	321,723	9.2	3.6
Philippines	81,023	103,072	199,591	213,129	227,584	299,619	9.4	5.7
New Zealand	53,100	111,678	140,787	161,851	180,548	204,216	10.2	2.5
Vietnam	31,176	52,931	103,575	122,722	135,411	190,126	12.8	7.0
Myanmar	8,905	11,987	45,380	51,925	54,416	72,382	17.7	5.9
Cambodia	3,653	6,293	11,255	12,861	14,204	20,986	11.9	8.1
Brunei	6,001	9,531	12,371	15,533	17,092	17,382	7.5	0.3
Laos	1,640	2,726	6,461	7,891	8,937	12,763	14.7	7.4
East Timor	335	815	3,199	4,315	4,073	5,009	25.3	4.2

Source: IMF World Economic Outlook Database, April 2012
Some amounts are estimated

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Exhibit 4-4: Key Economic Indicators GDP Per Capita: Selected Countries in the Asia-Pacific Region (2000-2017)

Country	GDP per Capita (Current US\$)					CAAGR Growth (%)	
	Historical Amounts		Estimated Amounts			Historical	Projected
	2000	2005	2010	2011E	2012E	2017E	CY 2000 ~ CY 2010 CY 2012 ~ CY 2017
Australia	20,731	35,635	55,475	65,477	68,916	74,856	10.3
Singapore	22,791	28,500	43,862	49,270	50,321	55,005	6.8
Japan	37,303	35,787	43,015	45,920	46,973	52,440	1.4
New Zealand	13,746	26,962	32,224	36,651	40,454	43,524	8.9
Brunei	18,465	25,759	29,882	36,548	39,382	35,913	4.9
South Korea	11,347	17,551	20,765	22,778	23,680	30,797	6.2
Malaysia	4,030	5,211	8,418	9,700	10,467	13,124	7.6
China	946	1,726	4,421	5,414	5,899	8,350	16.7
Thailand	1,983	2,825	4,992	5,394	5,851	7,442	9.7
Indonesia	800	1,291	2,981	3,509	3,797	6,071	14.1
East Timor	410	862	2,998	3,948	3,640	3,994	22.0
Philippines	1,055	1,209	2,123	2,223	2,329	2,778	7.2
India	465	729	1,342	1,389	1,455	2,013	11.2
Vietnam	402	637	1,174	1,374	1,498	1,982	11.3
Laos	304	464	1,004	1,204	1,338	1,744	12.7
Cambodia	288	455	753	852	931	1,309	10.1
Myanmar	178	216	742	832	855	1,028	15.4

Source: IMF World Economic Outlook Database, April 2012
Some amounts are estimated

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As shown in the table above, GDP per capita levels vary widely in the region, with Australia showing the highest amounts in the Asia-Pacific region.

- Rising wages and broadening distribution of wealth in large, rapidly developing countries near Australia such as China, India, and Indonesia is expected to result in an increasing share of the population with the ability to travel by air in the region.

Exhibit 4-5 which follows, highlights this relationship for sixteen countries in the Asia-Pacific region.

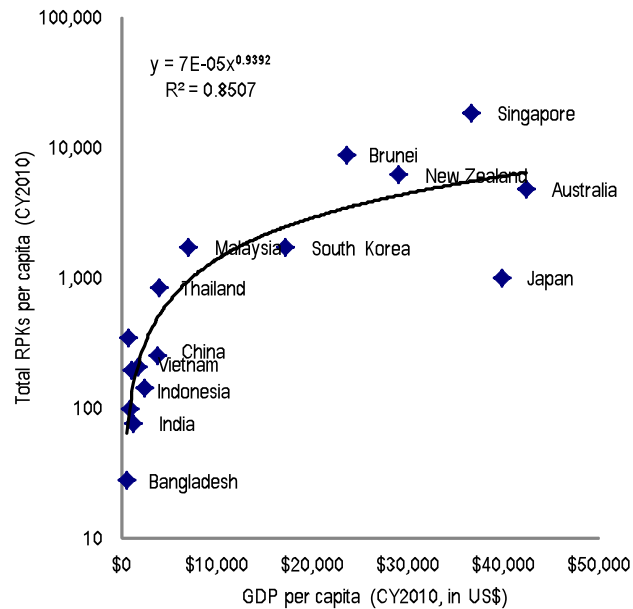
- The propensity to travel in Australia relative to the country's per capita income levels is near the expected trend line.
- Given the high per capita income in the country, expected rates of travel are high for residents in Australia.

Exhibit 4-5: Relationships Between per Capita Gross Domestic Product (GDP) And Air Travel: Selected Countries in the Asia-Pacific Region (2010)

Country	Per capita		
	Domestic and International RPKs (millions)	GDP (in current US\$)	Domestic and International RPKs
Australia	95,579	55,590	4,300
Bangladesh	4,905	638	30
Brunei	5,260	31,228	12,614
Cambodia	18,000	814	1,260
China	400,610	4,382	299
India	99,692	1,265	82
Indonesia	46,974	3,015	200
Japan	138,079	42,820	1,083
Lao PDR	3,000	984	466
Malaysia	51,564	8,423	1,825
New Zealand	25,512	32,143	5,839
Philippines	28,087	2,007	299
Singapore	87,674	43,117	16,975
South Korea	91,759	20,591	1,876
Thailand	57,201	4,992	895
Vietnam	21,095	1,174	239

Source: Reference files include ICAO, 2010 Annual Report. Note: Amounts include domestic and international air travel to/ from reporting airports in the countries shown and may include some transfer passengers. Some amounts are estimated.

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4.4.2 Population and Urbanization

Exhibit 4-6 below documents population data for selected countries in Asia and Pacific Region.

The population of Southeast Asia is estimated by the IMF to grow at a CAAGR of 1.5% from 2012 to 2017, which compares to a CAAGR estimate of 1.2% for the world.

- Australia's population is forecast by the IMF to grow at a CAAGR of 1.3% from 2012 to 2017
- New Zealand's population is forecast to grow at a CAAGR of 1.0% during the same period.

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Exhibit 4-6: Population Indicators: Selected Countries in Asia and the Pacific (2000~2017)

Country	Population			Estimated		CAAGR (%)	
	Actual		2010	2012E	2017E	Historical CY 2000 ~ CY 2010	Projected CY 2012 ~ CY 2017
	2000	2005					
China	1,267,430,000	1,307,560,000	1,341,414,000	1,354,861,000	1,389,073,000	0.6	0.5
India	1,024,250,000	1,110,000,000	1,190,524,000	1,223,170,000	1,305,774,000	1.5	1.3
Indonesia	206,265,000	221,398,000	237,641,000	244,468,000	262,404,000	1.4	1.4
Japan	126,831,000	127,752,000	127,594,000	127,329,000	124,543,000	0.1	-0.4
Philippines	76,790,000	85,260,000	94,010,000	97,737,000	107,871,000	2.0	2.0
Vietnam	77,635,000	83,106,000	88,257,000	90,388,000	95,943,000	1.3	1.2
Thailand	61,879,000	62,418,000	63,878,000	64,460,000	66,418,000	0.3	0.6
Myanmar	50,130,000	55,392,000	61,187,000	63,672,000	70,334,000	2.0	2.0
South Korea	47,008,000	48,138,000	48,876,000	49,136,000	49,791,000	0.4	0.3
Malaysia	23,275,000	26,477,000	28,251,000	29,219,000	31,789,000	2.0	1.7
Australia	19,273,000	20,544,000	22,448,000	23,013,000	24,488,000	1.5	1.3
Cambodia	12,680,000	13,828,000	14,953,000	15,524,000	16,032,000	1.7	1.0
Laos	5,403,000	5,880,000	6,437,000	6,678,000	7,320,000	1.8	1.9
Singapore	4,138,000	4,401,000	5,184,000	5,366,000	5,849,000	2.3	1.7
New Zealand	3,863,000	4,142,000	4,369,000	4,463,000	4,692,000	1.2	1.0
East Timor	818,000	946,000	1,067,000	1,119,000	1,254,000	2.7	2.3
Brunei	325,000	370,000	414,000	434,000	484,000	2.4	2.2
World Total	5,970,583,000	6,410,136,000	6,815,272,000	6,945,111,000	7,362,940,000	1.3	1.2

Source: IMF World Economic Outlook Database, April 2012
Some amounts are estimated

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Population and urbanization share (the share of a country's population living in urban areas) for most countries in the world, including Australia and New Zealand, are expected to grow in the future, as shown in **Exhibit 4-7**, below.

Increases in urbanization rates can lead to increases in air travel as larger portions of an area's population become more concentrated around airports and as the incomes of people moving to urban areas increase, allowing them more access to air travel and the income levels to afford air travel.

4.4.3 Global Trade and Tourism

Increased intra-regional business and reduced trade barriers between countries generate cross-border travel demand. High levels of trade and other commercial activities lead to increased demand for travel, including travel by air for business and tourism. Countries with competitive aviation industries and strong pricing competition generate increased levels of aviation activity per capita.

According to the World Trade Organization, global trade growth has slowed in recent years.

- The primary reasons were slow economic growth, particularly in European countries, and shocks to the global economy such as the earthquake and tsunami in Japan.
- However, despite the decreasing growth, trade is expected to continue growing¹⁰.
- Most countries in Asia have been moving toward increased business relationships, reduced trade barriers, increased trade and tourism, and increased air travel levels.

4.4.4 Oil and Aircraft Fuel Supply and Demand

Fuel price changes affect aviation traffic as airline cost structures are sensitive to changes in aircraft fuel. Political turmoil, terrorism, war and other events affecting major suppliers of oil have led to large fluctuations in fuel prices since 1980, ranging from 60% increases to 47% decreases in inflation-adjusted costs per barrel year over year¹¹.

The resulting airline cost structure changes have resulted in changes in airline service, fares, and traffic. Fares typically increase after fuel prices increase. However, because the full effects of fuel price increases typically cannot be passed on to customers, airline profits typically decrease.

¹⁰

World Trade Organization, 12 April 2012,

http://www.wto.org/english/news_e/pres12_e/pr658_e.htm

¹¹

Based on historical data provided by IOGA and WTRG Economics, http://inflationdata.com/inflation/inflation_Rate/Historical_Oil_Prices_Table.asp

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Exhibit 4-7: Population and Urbanization Indicators: Select Countries in Asia and the Pacific (Multiple Years)

Country	Population		Urbanization (Share of Total Population Living in Urban Areas)		Cities of 1 million persons or greater	
	Estimated 2011E	CAAGR (%) 2011E ~2015	Urbanization (Share of Total Population Living in Urban Areas)		Number of Cities (a)	Share of urban population in cities of > 1 million
			Actual (%) 2010	Forecast (%) 2020	Actual 2010	Actual (%) 2010
China	1,348,121,000	0.5	47.0	55.0	94	43.6
India	1,206,917,000	1.3	30.0	33.9	43	41.2
Indonesia	241,030,000	1.4	44.3	48.1	7	20.2
Japan	127,819,000	-0.4	90.5	95.3	8	54.9
Philippines	95,856,000	2.0	48.9	52.6	2	28.7
Vietnam	89,316,000	1.2	30.4	37.0	2	33.6
Thailand	64,076,000	0.6	34.0	38.9	2	42.9
Myanmar	62,417,000	2.0	33.7	40.7	3	31.2
South Korea	49,006,000	0.3	82.9	85.4	8	57.7
Malaysia	49,006,000	1.7	72.2	78.5	3	17.9
Australia	28,731,000	1.3	88.9	93.8	5	70.6
Cambodia	22,729,000	1.0	21.1	23.8	1	47.8
Laos	15,103,000	1.9	33.2	44.2	-	-
Singapore	6,556,000	1.7	100.0	100.0	1	100.0
New Zealand	5,274,000	1.0	86.2	86.8	1	37.0
East Timor	4,416,000	2.3	100.0	100.0	-	-
Brunei	1,093,000	2.2	100.0	100.0	-	-
World Total	6,865,208,000	1.2	50.4	54.4	449	39.8

Source: IMF World Economic Outlook Database, April 2012 and UN World Urbanization Prospects: 2011 revision

Note: 2010 ~ 2015 population growth rates represent IMF forecasts

(a) Cities or agglomerations with populations of greater than 1 million persons

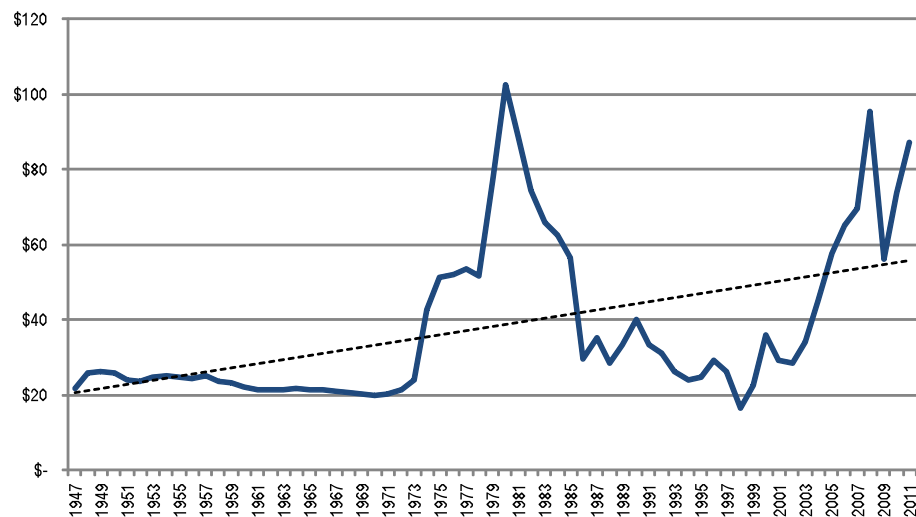
(b) Average urbanization share not available because the IMF does not publish 2020 population forecasts

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Fuel price changes have been a particularly significant issue since 2011 as turmoil in the Middle East has resulted in sharp increases in fuel prices. Fuel prices decreased during the global financial crisis, but have increased again recently as economic growth has improved and political change has occurred in the Middle East.

Exhibit 4-8, below, illustrates how crude oil prices have increased from 1947 to 2011.

**Exhibit 4-8: Annual Average Domestic Crude Oil Prices,
US Average; Inflation Adjusted US\$ per bbl.**



Based on data from IOGA. http://inflationdata.com/inflation/inflation_Rate/Historical_Oil_Prices_Table.asp, July 2012.

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4.4.5 Geographical Characteristics

Countries with widely distributed population centres such as Australia, or with large surrounding bodies of water or mountains tend to have higher-than-average aviation activity levels. The combination of Australia's large size and the separation of population centres by large areas of land provide an ideal market for air travel.

The introduction and growth of low air fares in Australia has greatly reduced the cost barrier to air travel and created a competitive transport substitute for ground travel for many people.

4.4.6 Global and Regional Events

There have been several shocks that have had direct impact on the global aviation industry.

- The 2010 and 2011 earthquakes in New Zealand, which caused a significant decrease in tourism demand in Christchurch.
- The recent instability in Europe, which has impacted aviation demand in Europe as well as global traffic to and from Europe. Although still experiencing positive growth in airline traffic in 2012, airline traffic growth rates have slowed in Europe during 2011 and 2012, with just 0.3% growth from April 2012 to March 2012 and forecasts by some industry analysts for reductions in demand in 2012¹².
- Bank failures and subprime mortgage defaults, which led to a long recession in the US beginning in 2007 and a global economic downturn, eventually resulting in a contraction in global GDP. 2009 saw the largest downturn in aviation traffic since the after-effects of the terrorist events of 2001, with a 2.3% decline in global RPKs from 2008 to 2009¹³.
- Tourism levels dipped in 2003 and 2006—particularly with respect to Australian tourism in Indonesia—due to the impact of the Bali bombings in October 2002 and October 2005.
- The tsunami resulting from the 2004 Indian Ocean earthquake killed an estimated 230,000 people in the Asia. This event resulted in significant declines in tourism in the region and an overall decrease in aviation traffic, particularly in Indonesia and Thailand in 2005.
- In late 2002, the first case of SARS (Severe Acute Respiratory Syndrome) appeared in Asia and spread rapidly to other areas during 2003. Tourism in Asia declined significantly due to public

¹² IATA, press release May 2012, and Eurocontrol Forecasts as quoted by AP, February 2012

¹³ World Bank, World Development Indicators, 2012, and Boeing Current Market Outlook, 2011.

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fears about the disease and official travel restrictions designed to identify and reduce the spread of infected travellers.

- The major US and world economic slowdown following the September 11th 2001 terrorist attacks had particularly negative effects on aviation traffic as travel fears and inconveniences added to the economic restrictions of a slowing economy. Global aviation traffic declined 3.4% from 2000 to 2001, according to analysis by the Boeing Company¹⁴.
- The Asian economic crises of 1997 resulted in decreases in traffic in Asia and a slowing of global RPKs from a 10.2% growth rate in 1995 to a 4.1% rate in 1997.

4.4.7 Regulatory Environment

Studies have shown that the liberalisation of air services can lead to new and better air services, thereby increasing trade in airlines services, gains in consumer welfare and economic growth. Liberal aviation agreements allow for increased competition on routes and lower airfares, thereby stimulating additional activity.

Traffic growth subsequent to liberalisation of air services agreements between countries typically averaged between 12% and 35%, significantly greater than during years preceding liberalisation.

- In a number of situations, growth exceeded 50%, and in some cases reached levels nearly 100% greater than those of the pre-liberalization period.
- The creation of the Single European Aviation Market in 1993 led to a CAAGR in passenger movements from 1995 to 2004 that was nearly double the rates of growth during the preceding five years.

Countries throughout the world, including Australia, are liberalizing broadly the bilateral and multilateral agreements that can, in their extreme, regulate items such as the precise number and type of carriers that can operate, the number of total seats that can be provided, and the levels of airfares that can be charged.

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Boeing Current Market Outlook, 2011

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5.0 SUNSHINE COAST ECONOMIC GROWTH

5.1 Gross Regional Product and Per Capita Income

5.1.1 Historical GRP

According to the Sunshine Coast Council, the Coast's economy has doubled in size in the last decade with a gross regional product now estimated at \$13.8 billion for FY2011. Growth has been strong as the area has emerged from the GFC, as shown in **Exhibit 5-1** below.

The Sunshine Coast has had stronger growth than Queensland as a whole during this time period.

Exhibit 5-1: Gross Regional Product (GRP) for FY2008~FY2011

Description	Financial Year				CAAGR
	2008	2009	2010	2011	FY 2008 ~ 2011
GRP (\$ millions)	11,633	12,198	12,738	13,815	
Growth (%)		4.9	4.4	8.5	5.9

Source: Sunshine Coast Regional Council, *Economic Profile for the Sunshine Coast*, May 2012

Economic growth has been affected by many of the “top-down” global and national factors outlined previously such as slower economic growth in Europe and the US, the strong Australian Dollar, and Australian economic growth factors such as the resources sector boom.

Sunshine Coast is ranked 12th amongst the 14 regions in Queensland in terms of GRP per capita¹⁵. This is attributed in part to the area being considered a lifestyle region, where retired residents and others attracted to the area demand less in income due to offsetting lifestyle factors that make up for the lower incomes.

Exhibit 5-2: Sunshine Coast Economy by Industry (% Contribution) for FY2011

Industry	% of Contribution	
	GRP	Employment
Construction	11.0	12.8
Retail trade	9.3	15.6
Financial and insurance services	9.3	3.0
Health care and social assistance	8.5	13.0
Manufacturing	6.2	7.5
Professional, scientific and technical services	5.5	5.9
Accommodation and food services	4.2	9.7
Rental, hiring and real estate services	4.2	3.3
Education and training	3.8	5.6
Public administration and safety	3.4	4.3
Transport, postal and warehousing	3.3	3.3

¹⁵ Sunshine Coast Business Council, compilation of data from OESR, Queensland Treasury

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Industry	% of Contribution	
	GRP	Employment
Wholesale trade	3.2	2.1
Agriculture, forestry and fishing	2.8	2.7
Information media and telecommunications	2.1	1.3
Administrative and support services	2.1	3.2
Electricity, gas, water, and waste services	1.7	1.2
Other services	1.7	3.8
Arts and recreation services	0.5	1.5
Mining	0.3	0.2

Source: *Economic Profile of the Sunshine Coast*, Sunshine Coast Regional Council, AECgroup based on Australian Bureau of Statistics

Note: Columns do not add up to 100% due to exclusion of ownership of dwellings and taxes less subsidies.

As shown in **Exhibit 5-2** above, the construction sector is the largest sector of the economy in terms of GRP share, and the third largest in terms of employment share.

- Due to the volatility of the construction industry, this generates some risk to the economy of the Sunshine Coast.
- While it is a benefit in times of growth, when population growth slows and housing demand decreases, construction industry employment and contribution can be expected to slow, affecting most other sectors of the economy.

Many of the sectors listed such as retail trade, accommodation and food service are contributors and beneficiaries of the tourism industry, examined in detail in a separate section of this report.

The Sunshine Coast has higher portions of the economy involved in these industries than most other regions, highlighting the large tourism presence.

- Construction has been affected by the resources industry boom. The Coast has seen some economic activity from the boom, but also losses with employment demand in areas where greater resources employment opportunities exist.
- The GFC has affected incoming tourism as fewer Europeans and Americans have had the discretionary income for travel to Australia.
- The strong dollar has affected tourism as other international locations have become more financially feasible relative to domestic destinations such as the Sunshine Coast.

5.1.2 Population and Urbanization

Population growth on the Coast has been strong over the past decade, increasing at a CAAGR of 15% over the past 15 years. But growth has

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slowed in recent years with the slowing in employment and other economic indicators.

- During much of the past decade, the population of the Sunshine Coast was increasing by over 8,000 people per year.
- In 2011, fewer than 5,000 people moved to the Coast.
- Population is forecast to increase at a CAAGR of 2.1% from 2011 to 2031¹⁶.

Population growth is driven partly by in-migration to the area for employment opportunities and retirement.

- The population in the Sunshine Coast is aging more quickly than some other regions in the country. The attractiveness of the Coast as a retirement community brings older residents to the area.
- Additionally, young adults entering the labour force are attracted to other regions such as the large cities and resource industry areas, leading to increased urbanization toward more established urban centres in Australia.

A result of these factors is a lower labour participation rate on the Coast, leaving the Sunshine Coast ranking 12th of 14 regions in Queensland in GRP per capita¹⁷.

5.1.3 Potential Effects of Economic Growth on Air Travel

Economic indicators are always considered strong factors in forecasting long-term air travel. However, on the Sunshine Coast, there are more significant short-term and medium-term factors that are discussed in detail in the bottom-up section of the report (Section 6).

While population and income will determine long-term demand for air travel by local residents, the large tourism component of air traffic at the Airport results in a significant portion of travel influenced strongly by local tourism infrastructure and changes in air service.

¹⁶ Sunshine Coast Regional Council, Economic Profile for the Sunshine Coast, May 2012

¹⁷ Sunshine Coast Business Council, compilation of data from OESR, Queensland Treasury.

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6.0 BOTTOM UP AND INFRASTRUCTURE DEMAND ANALYSIS

6.1 Historical Airline Service at Sunshine Coast Airport

Airline service changes have significant effects on passenger traffic and operations at the Sunshine Coast Airport due to several factors. Because of the small number of airlines currently serving the Airport, one new airline entrant with a few new operations per week can significantly increase the percentage growth in traffic, and vice versa.

The Sunshine Coast is located close enough to Brisbane to allow for bleed of passengers to Brisbane Airport.

- Although inconvenient due to distance and traffic, the larger number of flights, flight times, and destinations offered at Brisbane Airport can outweigh inconveniences for certain travel plans.
- Additionally, although service interruptions due to airport infrastructure limitations have historically affected only 2% of flights at Sunshine Coast Airport, potential travellers may have perceived higher reliability rates by travelling through Brisbane Airport rather than SCA.

The high volume of tourism traffic at the Airport also results in some volatility in service offerings as service level decisions can be made based on aircraft availability after optimal service is allocated on business or higher revenue producing flights to and from other airports.

Airline strategies have also changed significantly over the last decade with low cost carrier operations commencing operations at SCA and other business and operational issues having significant impacts on the airlines serving the Airport.

These factors have resulted in significant positive and negative historical airline traffic growth rates at the Airport, although the trend has primarily been positive over the long term.

6.2 Full-Service Carriers: Qantas and Virgin Australia

6.2.1 Qantas Airways

Qantas Airways is Australia's largest airline. The carrier has faced several challenges in the last decade that reflect the changes in Australian aviation industry.

- After the introduction of LCC operations in 2000 by Virgin Blue (now operated under a different business strategy and name, Virgin Australia) and subsequent entry by Tiger Airways in 2007, Qantas has had to make modifications to its strategy to compete with the lower cost airlines.

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- The GFC exacerbated the challenges faced by Qantas as demand fell. Following the GFC, challenges have continued as high fuel costs, a strong Australian dollar, and weak demand from Europe and the US have all affected profitability.

Qantas made significant changes to their strategy over the past few years attempt to maintain profitability and compete.

- The most significant change was the introduction of Jetstar Airways in 2004.
- Recently Qantas has also reduced capacity in many areas, adjusted service offerings in other areas, and streamlined operations throughout the airline.

These major changes in strategy have caused conflicts with Qantas employees, particularly the unionized pilots and other workers as growth in capacity and opportunity has been in the Jetstar subsidiary that has less favourable pay and work rules from the pilots' perspective, and layoffs have occurred at Qantas.

- Qantas also established Jetstar Asia and Jetstar Japan.
- Due to labour disputes, in October 2011 the airline was grounded for two days and required Government action to begin flying again.

Recently the pilots' union has put forward proposals aimed at steps the government could take to help the company maintain competitiveness and survive.

- The proposals include reducing taxes on the airline and restricting open skies policies. Qantas management claims the major changes are necessary to compete in the future as Qantas needs to adapt to the LCC trend and competition against Asian airlines with large hubs pulling passengers from many origins to fill international flights.
- Currently, Qantas loses money on international routes but is profitable domestically. Strategic changes at Qantas will likely impact aviation services in Australia.

6.2.2 Virgin Australia

Virgin Australia (the rebranded name for Virgin Blue Airlines) began operations in August 2000 and today covers all major Australian destinations.

The 2001 failure of Australia's second largest domestic carrier, Ansett Australia, gave Virgin Blue the opportunity to grow in both leisure and business markets. The failure of Ansett also allowed Virgin Blue to have access to the vacant terminal space left behind by Ansett Australia.

Virgin Australia has grown rapidly since its inception.

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- The carrier currently serves 50 destinations with its fleet of 5 A-330s, 63 B-737s, 5 Boeing 777s, and 18 Embraer E-190 regional jets.

Although Virgin Australia launched as a traditional LCC and introduced LCC service to Australia, over the past several years it has introduced services in common with those of full service carriers, such as airport lounges, a frequent flyer program, interlining and codesharing with full-service carriers, as well as a business class cabin in their aircraft, and is now considered by most industry analysts to be a full service carrier, rather than a LCC.

- The strategic shift from LCC to more of a full service carrier has impacted airline service at SCA as Virgin has focused more on business traffic and the “golden triangle” of Sydney, Melbourne and Brisbane service, rather than SCA’s leisure-oriented market.
- Virgin’s service at SCA, which in the past included twice daily services to Sydney and Melbourne, is now limited to just one daily operation to/from each destination.

6.3 Low Cost Carriers in Australia

Over the past four decades, and particularly during the most recent decade, the low cost carrier (LCC) model has grown rapidly to become a dominant model in the industry. Many of the most successful LCCs started without the connections and restrictions of a mainline carrier and have driven significant growth in airline traffic around the world. Due to the success of LCCs, the market share of LCCs globally has grown rapidly.

LCCs now account for significant shares of activity in the world’s major aviation markets.

- Globally, LCCs comprise 26.2% of seat capacity. In the Asia-Pacific region, LCCs now comprise 24.8% of total seat capacity¹⁸.
- At Australian airports, LCC operations now account for approximately 52.0% of departing domestic seats and 19.2% of departing international seats. These shares reflect substantial increased 2001 levels, when the share were 5.7% of departing domestic seats, no international services in operation¹⁹.
- At SCA, Jetstar serves as the Airport’s LCC operator while Virgin operates full-service operations.

6.3.1 Jetstar Airways

Jetstar Airways is a fully owned subsidiary of Qantas Airways that began operations in May 2004. Jetstar Airways was established in response to the threat posed by Virgin Blue (now Virgin Australia).

¹⁸ CAPA (Centre for Aviation) based on OAG data, May 2012. 2012 data reflects activity for January ~ May.

¹⁹ CAPA (Centre for Aviation), May 2012.

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- The carrier currently operates both domestic routes and medium- and long-haul international routes from Australia using a mix of 53 Airbus A320s (177 seats) and A321s (210 seats) and 11 Airbus A330-200s (303 seats, in a two-class configuration) aircraft.
- Jetstar has 15 Boeing 787 aircraft on order to replace its current fleet of Airbus A330s.
- Jetstar currently flies to 18 domestic destinations and 16 international destinations in 7 countries across Asia, North America, and Oceania.

6.3.2 Tiger Airways Australia

Tiger Airways Australia began operations in Australia in November 2007 and is based at Melbourne (Tullamarine) Airport. Tiger Airways Australia is a subsidiary of Tiger Airways Holdings, a Singapore-based company owned by Singapore Airlines.

- Tiger Airways Australia operates ten Airbus A320 aircraft (180 seats) to five destinations in four states across Australia.
- Tiger Airways Australia previously operated flights to up to 17 destinations in Australia, but some of these destinations were discontinued after the grounding of the airline's entire fleet by the CASA in July 2011, including flights to SCA.
- Since the grounding, Tiger Airways flights have not been re-introduced at SCA.
- Tiger expects, by October 2012, to return to its pre-grounding level of flights²⁰.

6.3.3 The Future of LCCs

In markets where LCCs begin operations in Asia, growth in LCC service offerings, competition, and market share of LCCs all increase. Due to the rapid ascent of the LCC market, for many new travellers the LCC model is their first and only experience with airline travel, which will facilitate growth of the model as these new generation customers will not have to adjust to giving up traditional offerings and paying for ancillary products or services. Aviation demand in Australia has been significantly affected by the introduction and growth of the LCC model and is expected to benefit from continued growth in service that offers lower prices and stimulates demand.

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www.smh.com.au, 2012

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7.0 HISTORICAL AND CURRENT AVIATION ACTIVITY AT SUNSHINE COAST AIRPORT

7.1 Historical Airline Service Events

Exhibit 7-1 below describes historical changes in airline service and strategies at SCA for the past several decades. This table has been updated from the last forecast report to include recent events²¹.

Exhibit 7-1: Airline Service Events (1978~Present)

Period	Events
1978 to 1988	East- West Airlines operated throughout the period (known as Eastwest Airlines from 1987 onwards)
December 1978	Air NSW commenced services
March 1980	Australian Airlines commenced services
December 1981	Australian Airlines services ceased
July 1983	Air Queensland commenced services
December 1986	Air Queensland ceased services
April 1986	Ansett Airlines of Australia commenced services
March 1988	Ansett Airlines ceased services
August to October 1989	Eastwest Airlines ceased services due to pilot dispute
October 1990	Eastwest introduced the BAE - 146 aircraft
February 1991	Australian Airlines services recommenced
1993	Eastwest merged with Ansett Australia
Early to mid 1990s	Boeing 737 services become permanent feature at SCA, although introduced in 1987
August 1992	Australian Airlines introduced Boeing 737 aircraft four services per week Melbourne/ Sydney to Sunshine Coast
1994	Ansett Australia introduced Boeing 737 aircraft
October 1998	Sunshine Express commenced operations in October 1998 providing regional connection to Brisbane
September 2001	Ansett collapse
October 2002	Virgin Blue commenced eight times weekly SYD services
May 2003	Virgin Blue commenced four times weekly MEL services
May 2004	Jetstar commenced services from Sydney and Melbourne, replacing Qantas services
March 2006	Jetstar commenced services from Adelaide
September 2006	Sunshine Express ceased scheduled operations
December 2007	Tiger Airways commenced services from Melbourne
July 2008	Jetstar's Adelaide services cancelled
2008	Jetstar increased services to Melbourne from 2 per day to 3 per day, then back to 2 per day. Sydney service remained at 3 per day
April 2009	Tiger increased services to Melbourne from three weekly to daily from December 2008, then back to 4 per week from April 2009

²¹

Source: SCA, August 2012.

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Period	Events
2011	Tiger Airways withdrew service from SCA completely due to grounding, after having had daily services on Melbourne and introducing and then withdrawing Sydney services Virgin Australia introduced Embraer Aircraft service to Sydney, then discontinued Introduction of Closed Charter operations
July 2012	Seasonal Trans- Tasman services to Auckland introduced by Air New Zealand

7.2 Current Airline Service

Exhibit 7-2, below, documents activity levels during the week of 2~8 July 2012. As shown, scheduled commercial services at SCA are offered by three airlines (Jetstar, Virgin Australia, and, for the season, Air New Zealand) to three cities (Sydney, Melbourne and Auckland).

Exhibit 7-2: Scheduled Commercial Departures per Week (2~8 July 2012)

Carrier	Destination	Departing Flights							Total
		Mon	Tue	Wed	Thu	Fri	Sat	Sun	
Jetstar	SYD	4	4	4	4	4	4	4	28
Jetstar	MEL	2	3	2	3	2	3	2	17
Virgin Australia	SYD	1	1	1	1	1	1	1	7
Virgin Australia	MEL	1	1	1	1	1	2	1	8
Air New Zealand	AKL	-	1	-	-	-	-	1	2
Subtotal		8	10	8	9	8	10	9	62
Skytrans (Charter)	CMQ	1	-	-	1	-	-	-	2
Total		9	10	8	10	8	10	9	64

Source: SCA Monthly Flight Schedule Report, July 2012

During the sample week in July 2012:

- Jetstar provided the most departures per week (45) at the Airport with 28 departures to Sydney Airport and 17 departures to Melbourne Airport.
- Virgin Australia, SCA's other major carrier providing scheduled domestic services, provided 15 departures per week, 7 to Sydney Airport and 8 to Melbourne Airport.
- Air New Zealand operated 2 flights during the week, to Auckland International Airport.

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Air New Zealand's service was launched recently and is being operated for an 11-week period during the Kiwi winter season. Introduction of this international service was strongly supported by organizations in the Sunshine Coast and New Zealand to demonstrate potential demand from trans-Tasman service.

- A significant share of international visitors to the Sunshine Coast is New Zealand residents, who previously used Brisbane Airport as their port of entry.
- In addition, New Zealand offers ski destinations that may attract locals from the Coast during this time of year.

The two peak days are for the Airport in terms of departures are Tuesday and Saturday, with 10 departures per day each.

- However, two days have 9 departures per day and there have 8, indicating that there is not a significant amount of variation between days in the week.

A typical busy day is shown in **Exhibit 7-3**, below. As shown, airline scheduling of flights currently reflects the leisure nature of activity at Sunshine Coast.

- Arrivals at SCA occur after 9:00, following aircraft use for high-yield, early-morning business flights to Sydney and Melbourne.
- Arrivals and departures at SCA occur primarily mid-day, when aircraft are more readily available for lower-margin leisure travel services.
- The scheduling allows for aircraft to arrive back in Melbourne and Sydney before 5:00pm, in time for aircraft to be utilized for flights from those airports during the peak evening business hours
- Additional operations, after the 5:00pm peak time period, are also scheduled at the airport after aircraft use in other larger markets.

APPENDIX A2:B

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Exhibit 7-3: Busy Day Schedule (Sample Date: Tuesday, 3 July 2012)

Hour	Arrivals	Departures
9:00	9:55 SYD JQ	
10:00		10:25 SYD JQ
11:00	11:50 MEL DJ 11:55 AKL NZ	
12:00	12:05 MEL JQ 12:45 SYD DJ	12:20 MEL DJ 12:35 MEL JQ 12:55 AKL NZ
13:00		13:15 SYD DJ
	13:35 MEL JQ	
14:00	14:20 SYD JQ	14:05 MEL JQ
15:00		14:50 SYD JQ
16:00		
17:00	17:45 SYD JQ	
18:00	18:30 MEL JQ	18:15 SYD JQ
19:00	19:15 SYD JQ	19:00 MEL JQ 19:45 SYD JQ

Source: SCA Monthly Flight Schedule Report

As shown in the passenger characteristics section that follows (Section 7.3), due to the leisure-focused characteristics of the airline schedules at the Airport, business passengers are reported to often be attracted to the more frequent and more business-friendly flight timings at Brisbane Airport.

SCA's current flight schedule, combined with some dispatch reliability issues (due to runway restrictions in force during windy conditions) and the limited number of destinations offered at the Airport make it difficult for convention and conference organizers to employ SCA flights for their customers.

As traffic over the long term grows and if more flights and destinations are added at the times of day preferred by business travellers, demand currently served by Brisbane Airport could instead shift to SCA.

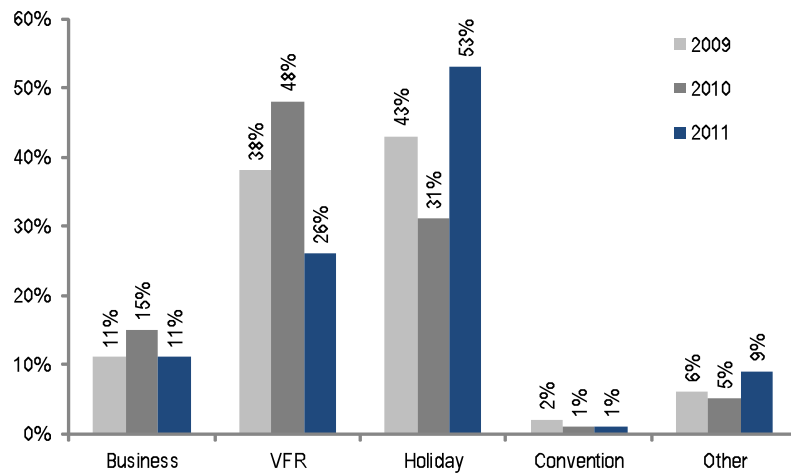
7.3

SCA Passenger Characteristics

The Sunshine Coast frequently surveys airport passengers and local resident travellers to determine the characteristics of travellers. The most recent surveys from 2011 resulted in the following information, as shown in **Exhibit 7-4**.

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Exhibit 7-4: Reasons for Travel: Sunshine Coast Airport Passengers Survey (2009~2011)



Source: Sunshine Coast Airport Passenger Survey, 2011
VFR: Visiting friends and relatives.

7.3.1 Airport Passengers

During 2011

- The majority of visitors were holiday visitors at 53%, followed by visiting friends and relatives (VFR) at 26%, and business at 11%.
- Among local-only visitors, 30% were travelling on holiday, 39% were VFR, and 19% were travelling for business purposes.
- 29% of airport survey respondents were local residents while 71% were visitors.
- 52% of local resident SCA passengers had flown out of Brisbane during the previous 12 months.
- Among the reasons cited for flying out of Brisbane, 67% of passengers cited Brisbane Airport's breadth of destinations, 8% cited its flight schedules/timings, and the remainder cited price or other factors.

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7.3.2 Local Residents

During 2011

- Local residents travelled frequently: 81% of residents travelled outside of Queensland, 35% travelled to Sydney, and 28% travelled to Melbourne.
- 60% of respondents had flown into or out of the Airport in the previous 12 months.
- One third of residents travelling to Sydney and Melbourne fly from Brisbane Airport rather than Sunshine Coast Airport with 33% of those using non-SCA airports flying for business.
- Local residents most frequently request new services from SCA to Cairns, Mackay, and Townsville.
- Mackay is the most frequent destination for Sunshine Coast residents travelling to mining destinations.
- 31% of local resident business travellers report being employed in the resources and mining sector
- Among frequent flyers from the Coast, the most requested improvement for air service at SCA is for morning departure times.

7.4 Sunshine Coast Airline Service Prospects

Airline service prospects for the future include the potential for further growth at the Airport, although growth may continue along a somewhat volatile trend as it has in the past. As airlines adjust and change strategies in response to the recent dynamic trends in the airline industry, it can be expected that more changes will occur at the Airport, with overall growth in the long term.

LCC service is expected to continue to grow with continued focus on lowering costs, but with additional potential changes in hybridization of low cost carriers as with the recent changes with Virgin Australia.

As traffic at the Airport reaches higher levels, volatility should decrease as changes in flights will have smaller percentage changes in overall traffic. Additionally, as service offerings grow into different time slots and additional destinations, business and other traffic could be captured that is currently leaking to Brisbane Airport, resulting in growth at higher levels than underlying socioeconomic factors.

International service can be expected to be viable at the Airport with the initial New Zealand service being implemented this year. Although flights to further destinations in Asia may come further in the future, trans-Tasman service could prove viable if the current seasonal service is successful.

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If demand is found to justify flights to resource industry areas from the Airport, there is potential for future growth in the capture of travel related to that strong industry²².

7.5 Tourism Development Effects on Airline Passenger Growth

7.5.1 Historical Domestic and Foreign Visitor Arrivals in Australia

As shown in **Exhibit 7-5** below, visitor arrivals in Australia have grown at a relatively stable rate over the past ten years.

- The CAAGR for visitor arrivals was 1.9% from 2001 to 2011.
- Growth slowed following the events of 11 September 2001 and again as a result of the GFC.
- Growth recovered slightly, but declined 0.2% from 2010 to 2011 before increasing again in 2012, to 3.1% for January through May 2012 vs. January to May 2011.
- Over the past decade, the largest growth in visitors has come from China, although more visitors still come from New Zealand and the UK.
- Visitor growth from China is set to overtake visitors from the UK as visitor growth from the UK has been negative over the past decade as a whole.

²²

In July 2012, Virgin Australia announced new service from Brisbane to Mount Isa (5 times per week using 100-seat Embraer E190 aircraft) to serve resource sector business travel. Passenger numbers on the route had increased 10% between March 2011 and March 2012. Virgin Australia has also added two additional return-flight services per day between Brisbane and Gladstone in response to the increase in demand from the area's resource sector, increasing to a total of 58 flights and 1,600 new seats per week.

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Exhibit 7-5: International Visitor Arrivals: Australia (2001~2011)

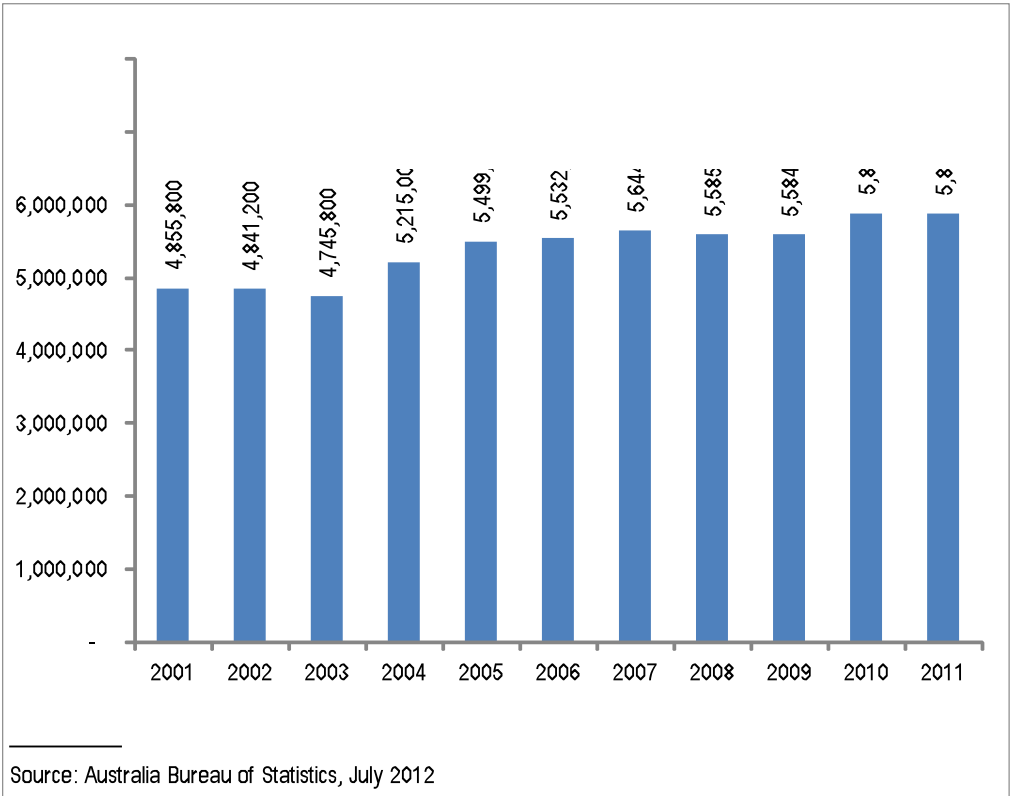
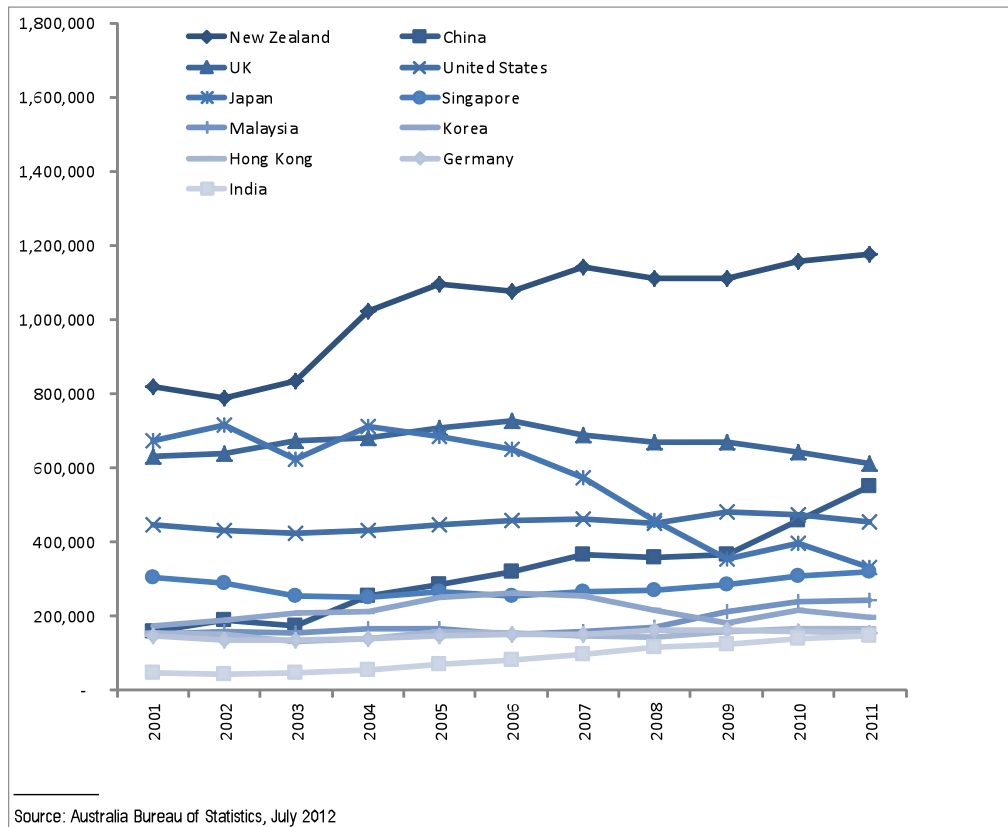


Exhibit 7-6 below highlights Australia’s international visitor arrivals by country of origin.

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Exhibit 7-6: International Visitor Arrivals by Country of Origin: Australia (2001~2011)



Tourism Australia and Virgin Australia have signed a strategic plan to spend \$6 million over the next three years on a range of joint marketing activities focusing on ten of Australia's key overseas markets, including the US, New Zealand, Europe, China and India.

The plan ties into Tourism Australia's strategic goal of doubling annual overnight visitor expenditures to reach \$140 billion by the end of the decade²³.

7.5.2 Sunshine Coast Tourism Background

According to Sunshine Coast Destinations Ltd, the unique tourism characteristics of the Sunshine Coast are its relaxed coastal and hinterland attributes that offer a wide variety of tourism and leisure experiences both on the coastal beaches and scenic hinterland and national parks.

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The marketing phrase adopted by the organization is “Naturally Refreshing”, which differentiates the Sunshine Coast from other destination and highlights the areas strengths in providing relaxing experiences in nature, the beaches, and quality accommodations and food options.

The area offers proximity to Brisbane and Fraser Island, and a more relaxed alternative to neighbouring Gold Coast.

7.5.3 Sunshine Coast Visitors

Total tourism visitors to the Sunshine Coast was 7.5 million in 2011, of which 2.7 million was domestic overnight visitors and 239,000 was international overnight visitors. It is estimated that tourism provides 14,700 jobs and \$1.1 billion to the Coast's economy²⁴.

As shown in **Exhibit 7-7** below, the largest number of international visitors arrives from New Zealand.

- Arrivals have been decreasing from all international origins, although German visitor levels have been relatively stable.

International visitor levels have been declining recently due in part to the weak economic situations in other countries combined with a strong Australian Dollar, driven by the resources industry boom. The recent earthquake in New Zealand resulted in less international travel from that country.

Although Asian visitor levels have declined slightly, the decline is much less than declines in other regions in Australia such as the Gold Coast and Tropical North Queensland, resulting in increasing market share in Asian visitors for the Sunshine Coast.

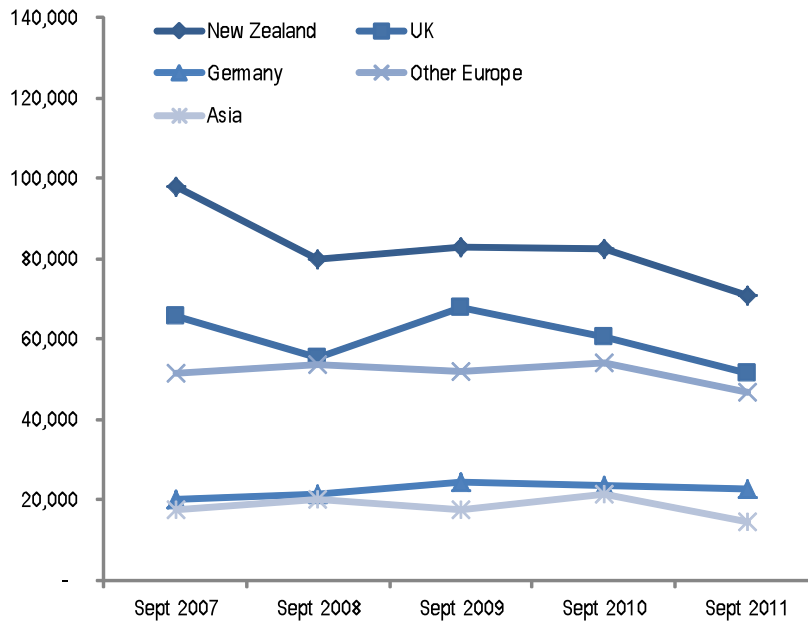
- Domestic visitors decreased in 2009 and 2010 with the global recession and flooding issues in the Sunshine Coast.
- Currently, the Australian dollar results in Australians finding bargains travelling abroad.
- However, growth rebounded in 2011 and is expected to continue growing slightly in 2012.
- Growth from 2010 to 2011 was 6.3%, with total nights stayed up 0.8%²⁵.

²⁴
²⁵

Sunshine Coast Destinations Ltd, December 2011 Quarterly Report
Source: SC 2011 report, page 15.

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Exhibit 7-7: International Visitors to the Sunshine Coast (2007~2011)



Source: Sunshine Coast Destination Ltd. December 2011 Quarterly Report,
based on International Visitor Survey data.

7.5.4 Queensland Tourism Outlook

As shown in **Exhibit 7-8** below, visitor nights in Queensland are forecast by Tourism Queensland to increase through FY2020.

- Domestic visitor nights are forecasted to grow at a CAAGR of 0.7% from FY2013 to FY2020.
- International visitor nights are forecasted to grow at a CAAGR of 4.5% from FY2013 to FY2020.
- Total visitor nights are forecasted to grow at a CAAGR of 2.2% during the period.

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Exhibit 7-8: Total Visitor Nights: Queensland (FY2013~FY2020)



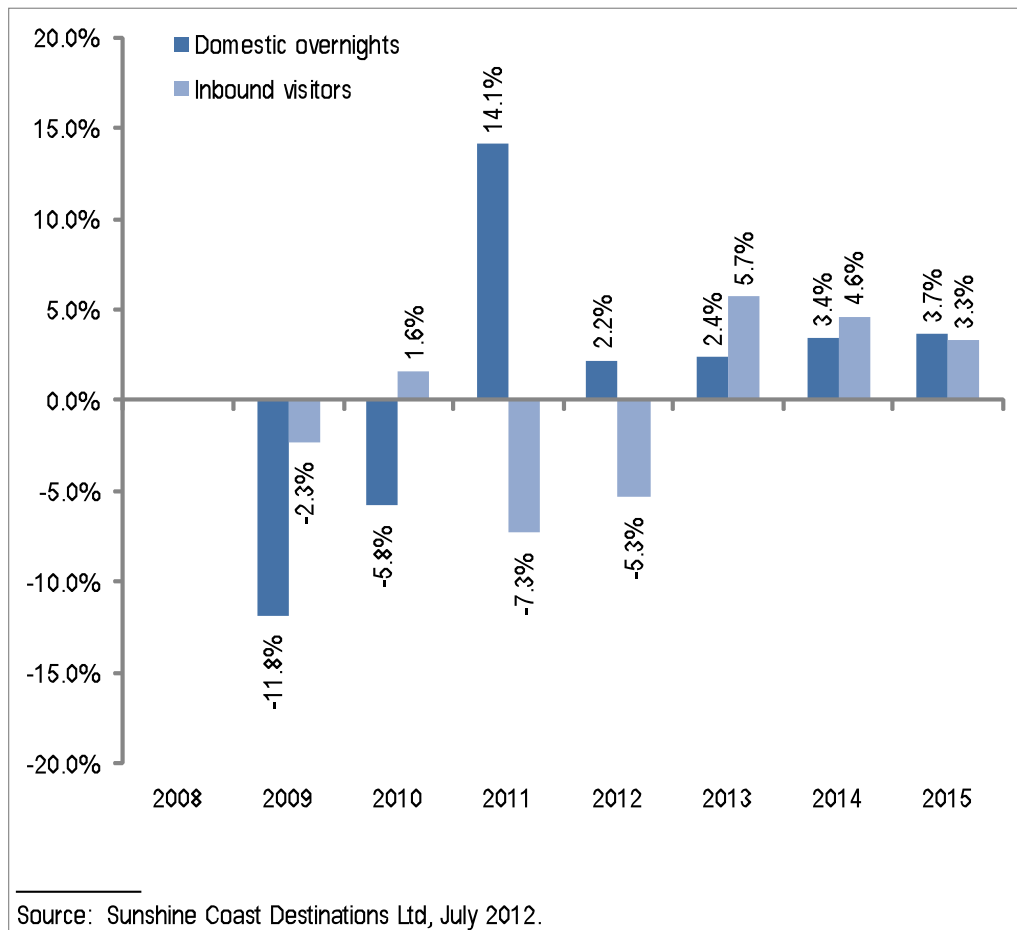
7.5.5 Sunshine Coast Tourism Outlook

Forecasts for the Sunshine Coast prepared by Sunshine Coast Destinations Ltd are shown in **Exhibit 7-9**, below.

- International visitors are forecast to decrease again in 2012 but as recovery has already started, the forecast is for positive growth in both domestic and international visitors from 2013 forward.
- The international visitor forecasts are based on the assumption that the global economy continues to improve and the Australian dollar reaches a more balanced equilibrium.

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Exhibit 7-9: Tourism Forecasts: Domestic Overnights and Inbound Tourists (2013~2020)



Sunshine Coast Destinations Ltd. has developed a strategy for future tourism development that highlights the strengths of the area through marketing and branding and aims to coordinate stakeholders in building on the marketing.

The strategy identifies opportunities for growth in the region that include expansion of airport infrastructure and air service offerings as well as leveraging current strengths of the area to develop tourism infrastructure. The strategy includes three main areas of focus:

1. Marketing and promotion, by imbedding the “naturally refreshing” brand into all marketing activity to differentiate the Sunshine Coast and leverage its core strengths

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2. Product and infrastructure development, including development of natural and ecotourism offerings such as the national parks, trails, and scenic reserves, as well as supporting airport capacity expansion.
3. Industry development, through support of industry programs to support quality products and culture.

The strategy identifies growth markets including near-term expansion of tourism from Sydney and Melbourne, the current primary origins of visitors, as well as New Zealand, United Kingdom, North America, China, and other European and developing Asian markets, with Hong Kong, India and Korea as longer-term focus areas.

The strategic plan indicates the potential for tourism growth in the area which could affect future demand for air service at the Airport.

- China is a particularly important growth market given its size, rapid development, and already established increase in tourism presence in the country of Australia.
- China is already the third largest market for inbound tourist in Australia, and is projected to soon overtake the UK as the second largest market behind New Zealand.
- It can be expected that as tourism from China continues to grow in Australia, interest will increase in the Sunshine Coast.

Recently, new services between Mainland China and Queensland have been announced:

- China Eastern Airlines plans to introduce three weekly flights between Shanghai and Cairns later in 2012. The carrier has operated charters into Queensland during Chinese New Year in the past.
- China Southern Airlines plans to increase its Guangzhou-Brisbane services to daily, while adding new service to Cairns on a thrice-weekly basis, starting in December 2012.
- The introduction of these services serves as an important indicator of the potential demand for Chinese tourism in Queensland.

7.5.6 Potential Constraints to Tourism Growth

There are several potential constraints to the tourism growth expected by local tourism officials including the following:

- Continued weakness in global economies
- Continued strength of the Australian Dollar, resulting in less affordability of Australian destinations.

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- Infrastructure growth plans such as the recent Palmer Resort growth announcements may receive government approval or necessary financial backing.
- Cultural and strategic targets currently part of the Sunshine Coast marketing plan may not fit characteristics sought by tourists from China or other growth areas, but those markets may evolve over time to fit the culture and amenities in the Sunshine Coast.

7.6 Business and Industry Development and Changes

7.6.1 Introduction

There are several projects in various stages of progress that will have catalytic impacts on the region, affecting economic growth and income and therefore potential future passenger traffic at the Airport. Because many of these projects are in planning or early development stages, it seems appropriate to include analysis of their potential for stimulating the local economy in a way that would affect future airport traffic.

One of the projects listed by many business leaders and government officials in the area is the Airport project itself. It is assumed that there will be a symbiotic relationship between airport expansion and other business and tourism development projects in the area, each making the other more likely to happen and potentially more successful. Some of the significant projects in development on the Sunshine Coast are listed below.

7.6.2 Catalyst Projects in Development in the Sunshine Coast

There are several projects currently in various stages of planning and development that could have a transformative effect on the economy of the Sunshine Coast. These projects represent potential “bottom-up” drivers of aviation activity at the Airport.

7.6.3 Airport Expansion

The airport expansion project will, of course, have significant impacts on the ability and likelihood of airlines increasing service at the Airport. A new runway will allow for unconstrained service to destinations such as the current Auckland route, as well as service to other potential markets at greater distances from the Airport compared to the current Sydney and Melbourne markets served.

The expansion project will also allow for fewer disruptions in service as constraints on the existing runway result in redirected or cancelled flights when winds or weather preclude safe landings due to the runway size.

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A third benefit of the Airport expansion project could be an increase in confidence and attractiveness of the area for investment in other business and tourism infrastructure projects such as the other projects listed below.

7.6.4 Kawana Hospital Development

The Kawana Hospital development includes \$2 billion investment in the Sunshine Coast University Hospital, as well as a private hospital already under construction, a research centre, a commercial precinct, and Kawana town centre. The private hospital is scheduled to be completed in 2013 while the University hospital is scheduled to be completed in 2016.

- Overall, the projects are expected to generate 4,500 new permanent jobs for the area, as well as 11,000 construction jobs during construction. Hospital and health-related employees are generally higher than average income earners that would be more likely using air service when travelling.
- A tour of newly constructed neighbourhoods in the development area showed obvious signs that significant numbers of homes have already been constructed and occupied in the area despite the first hospital being only partly constructed at this time.

7.6.5 Maroochydore Principal Activity Centre (PAC)

The Maroochydore PAC is a planned development in the space of the current Horton Park Golf Club Course that could provide a city centre and natural capital of the Sunshine Coast. Plans include development of commercial, retail, and residential, parklands, walkways, and public transport infrastructure.

- Master planning of a new golf course is already underway to replace the existing course.
- The development could create thousands of new jobs and facilitate tourism in the area.

7.6.6 Convention Centre

This is another project that has been identified by several parties as having the potential to increase visitor numbers to the Sunshine Coast. It also has the potential to work together with the Airport expansion project to elevate the visitor potential of the Sunshine Coast. Currently no single hotel has conference facilities large enough to draw significantly large conferences.

- A convention centre would clearly provide the opportunity to attract larger conferences and a greater number of visitors to the area.
- Some conference organizers currently direct visitors to the Brisbane airport due to convenience offered by more frequent flight schedules, as well as to avoid the potential cancellations and

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redirected flights that can occur due to current runway restrictions at SCA.

7.6.7 Palmer Resort

In 2012, Billionaire Clive Palmer purchased the Hyatt Regency Hotel in Coolumb. He has since announced for plans for significant expansion and development of the surrounding area. Expectations are high that stimulation of the Coast's economy will occur if the project moves forward.

7.6.8 Upgraded Roads

Currently the Bruce Highway that runs between Brisbane and the Sunshine Coast is only two lanes each way. This results in significant traffic to and from Brisbane. Upgraded roads could increase the ease of travel for visitors to come to the Sunshine Coast. This could have a potentially negative affect on airport traffic relative to visitors coming by car and make it easier for Sunshine Coast residents to travel to Brisbane Airport.

However, there could also be positive impacts as this potential project could facilitate other economic growth in the region and introduce the Sunshine Coast to a greater number of visitors, all contributing to potential growth in airport traffic.

7.6.9 Resources Sector Ties

According to recent studies, the Sunshine Coast is estimated to employ over 3,000 people directly or indirectly related to the resources sector. This represents approximately 1.15% of the total resources sector employment in Queensland²⁶. Growth in the resource sector could result in growth in employment in the Sunshine Coast if the share currently held is maintained. However, if steps are taken to increase that share, employment in the sector could increase at greater rates, increasing overall employment on the Coast.

- Local efforts are currently being made to determine actions necessary to increase the share of the resource sector employment captured by the Sunshine Coast.
- If successful, these efforts could result in employment in this sector growing to over 8,000 over the next few years.

7.6.10 Conclusion

All together, these projects represent the potential for the addition of over 20,000 jobs in the area, a large percentage increase over current

²⁶

Sunshine Coast Council, based on data from Lawrence Consulting, November 2011

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employment levels and the potential to raise the region to a higher level of economic activity and recognition.

Some of these projects are already underway. Some may be longer term. But they all have the ability to build on each other.

- If the Airport expansion project moves forward, it has the potential to increase the likelihood of conference facilities being built, which could increase the demand for more business flight service, increasing the potential to capture traffic leaking to Brisbane currently and bringing increased activity back to the Airport again, etc.
- This type of dynamic change could shift the Sunshine Coast to a different level of growth that cannot be projected using historical trends and the drivers of past economic growth, such as basic population and GRP.
- It is estimated by the Sunshine Coast Business Council (SCBC) that a combination of these transformative projects could result in population increasing to a level of 250,000 as opposed to 219,000 currently projected to be reached in 2031.
- This projection represents a population growth rate change from 2.3% vs. 1.8%. Although this is only a 5 point difference in growth rates, it is estimated by the SCBC to be the difference between achieving significant economic growth vs. the potential for stagnant economic growth on the Coast.

7.6.11 Constraints to Growth

Constraints to economic growth on the Coast include all of the above projects if they are not completed as planned. If the Airport does not expand, convention facilities are not increased, roads are not improved and other business investments are not undertaken, growth could be expected to be slower on the Coast.

Opposition to change and growth could result in constrained growth, in which infrastructure lags natural growth and airline traffic grows at slower rates than would be projected given the underlying projected economic growth.

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8.0 SUNSHINE COAST AIRPORT ACTIVITY FORECASTS

8.1 Forecast Methodology

As mentioned above, this forecast report was developed primarily through qualitative “bottom-up” analysis of potential demand for aviation activities driven by factors related to the Sunshine Coast area and the business, tourism, and airline service trends affecting the area.

8.1.1 Forecast Approach

Quantitative measures were used to analyse the inputs and develop forecast scenarios, but the forecasts were not developed entirely using quantitative methods, such as regression analysis.

- Regression analysis was viewed as a limiting method of analysis due to the significant fluctuations in traffic during the past twenty years at SCA.
- Importantly, these fluctuations were due primarily to structural changes in strategy, scheduling, and operations of individual airlines rather than changes in the underlying inputs to a typical regression analysis, such as income, population, and airline fares.
- Further, for these types of underlying inputs to be useful predictors in a forecast model that relies on regression analysis, reliable forecasts of those independent variables (ie, drivers) must be available to input into the formulas.
- Given the various changes in the local and regional economies and in domestic and international airline industries, as well as uncertainty regarding future demand, reliance on regression analysis (ie, that historical drivers would be the best predictors of future aviation demand and the resultant activity) was not considered optimal.

8.1.2 Regression Analysis

Regression analysis that was performed in the evaluation of the forecasts found a very low R squared value, signifying the unreliability of the regression model. This is due to the fluctuations that tend to both overstate and understate potential future values.

- For example, the dramatic growth that occurred during the last decade at the airport was primarily due to the structural change in the airline industry that brought LCC operations to the airport and greatly expanded the affordability of travel in the area, as well as across the country and region.
- This was a structural change in the industry rather than a long-term trend. This LCC structural change has had similar results in other places, where traffic has increased dramatically and continued to

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increase at higher growth rates than the past, but not as high as the initial LCC introductory time phase.

- Additionally, the slow growth that has occurred recently due to operational issues and the withdrawal from SCA of Tiger, as well as GFC economic effects on air travel are not good predictors of long-term trends at the airport.

Due to all of these factors, the bottom-up, qualitative approach was relied upon heavily in this forecast analysis, but was checked and compared against other quantitative measures, such as regression analysis and trend analysis.

8.2 Forecast Inputs

In general, compared to the previous forecast from 2009, this updated forecast assumes higher growth rates in the near term. This is due to the assumption that growth will somewhat “catch up” after a period of slow and declining growth that was the result of several factors including the GFC, Tiger Airlines' departure, and recent flooding in the region.

- For example, if Tiger Airlines were to resume service, which is expected in the near term, and new flights are established to resource sector markets, growth could potentially increase at a much higher rate than recent years.
- Given the very high growth rates experienced at the Airport in previous years after fluctuations in service and economic downturns, a significant near-term catch-up growth rate is reasonable to expect.

All the forecasts assume some level of increase due to the multiple large projects in planning stages or underway on the Coast, including potential changes at the Palmer resort, the new Hospital development and other development initiatives.

The forecasts also assume some growth in traffic resulting from the continued growth in the resources sector of the Australian economy.

- Government studies are underway to quantify participation and growth already occurring on the Sunshine Coast resulting from the growth of the resources sector. Preliminary data and anecdotal evidence indicate significant growth potential for the Airport resulting from the introduction of new services to resources sector markets.
- The Airport has been involved in marketing efforts with airlines and resource sector stakeholders to plan for service to several potential markets within the next year, including the introduction of new services to MacKay, Emerald, and Gladstone.

Future growth is also assumed to be viable to other resource sector markets. Given the growth at other airports in resource sector

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regions, such efforts to secure resource sector-related services at the Airport are possible in the near term.

- The forecast scenarios assume that the growth in this sector will result in increased traffic at the airport either through direct new flights as well as increased passenger growth due to tourism and general economic strength from this sector.

Expansion of international markets is assumed in the forecasts.

- New Zealand service has already been initiated (in 2012, on a seasonal basis) and as a result of preliminary feedback from Airport management on these operations, it is expected that the service will again be implemented next year during the same season.
- Over the long term, expansion of trans-Tasman services to other times during the year and potentially in other markets, such as Christchurch and Wellington, are anticipated.
- Due to the growth in tourism from China and other Asian markets to Australia, it is assumed that long-term growth at the Airport will result from new service to markets in these regions.

An important assumption of the base forecast is that the new runway is developed.

- The current runway results in operational constraints due to its size. It also is operating only until 2022, at which time it will need to be expanded to continue serving even the jet traffic that it now serves.
- Furthermore, international traffic that is part of the forecasts is assumed to have operations that are unrestricted by constraints due to runway size.
- Passenger levels assume standard load factors, and service is assumed to commence only if operational constraints do not exist at the airport in the future.
- Therefore, for all scenarios, it is assumed that a new runway is constructed by the targeted date of 2020.

The forecasts are also influenced by the general positive growth trends in Asia.

- Boeing forecasts RPK growth in Asia to be 6.7% for the next twenty years. This is following a strong growth rate of 5.9% during the previous five years during which several parts of the world experienced serious economic difficulties.
- Boeing forecasts an increase in this already strong growth. As a result, we expect that Australia will benefit from that growth both in incoming and outgoing airline traffic. Even as China's economic growth begins to slow, Australia stands to benefit as resource demand will still continue, but some slowing could weaken the

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Australian dollar and result in increased relative attractiveness of local Australian tourist destinations such as the Sunshine Coast.

- A weaker dollar may also attract more domestic travellers, who have been travelling to overseas destinations due to the buying power of the Australian dollar.

8.3 Baseline, Aggressive, and Conservative Forecasts: Key Assumptions Employed

Three scenarios future aviation activity levels at SCA were assessed and documented:

- Baseline Growth Forecasts
- Conservative Growth Forecasts
- Aggressive Growth Forecasts

8.3.1 Assumptions for the Baseline Growth Forecasts

The Baseline Growth Forecast assumes a general economic recovery from recent downturns, accelerated growth in service from the resource sector, and other general positive effects from economic growth in Asia and continued growth in LCC development in the region.

- Fluctuations in economic growth are assumed, but the Baseline Forecasts assume that the current long recession and/or double dip recession will not create a continued, long-term structural change in the economy, but rather, that the economies of Europe and the US will eventually return to growth rates closer to those experienced in the past.
- The Baseline Forecasts assume some adjustments toward the historical equilibrium for the Australian Dollar exchange rates will occur (ie, that the Dollar will weaken slightly from current levels) and that the current dichotomy between the booming resources industry and other, struggling sectors of the Australian economy will be reduced and more stable, even growth will occur across the Australian economy.
- The Baseline Forecasts assume continued expansion of low cost carrier service throughout Asia and Australia.
- Although growth may not be as great as when LCCs were first introduced in Australia, the Baseline Forecasts assume that the trend of LCC growth will continue as LCCs continue to expand across the region and continue to stimulate increasing demand for travel.
- The Baseline Forecasts, as mentioned previously, assume that some of the large development projects currently underway or planned will come to fruition on the Coast.

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- The Baseline Forecasts assume that FIFO traffic will grow and be captured through growth in current charter operations as well as newly established, scheduled service at the airport to destinations in the region that specialize in the resources economy in the near term.
- The Baseline Forecasts assume long-term expansion in international service beyond New Zealand to markets in China and other countries in Asia.

Detailed route and aircraft type assumptions are detailed in the Busy Day Forecasts (Section 10).

8.3.2 Assumptions for the Conservative Forecasts

The Conservative Growth Forecasts assume a lower growth rate in traffic due in part to an assumed longer-term continuation of economic difficulties in Europe and US.

- Due to uncertainty in the economies of the US and Europe that continue at the time of this forecast, it is reasonable to assume a low forecast based on potential continued difficulties in these regions. Lower growth in this scenario could also result due to slower growth in China.
- Mounting evidence in China suggests that the economy is slowing more dramatically than previously assumed. Although it is expected that the country will continue to grow, growth may be at slower rates than forecast in the past.
- Another assumption influencing this scenario is a potential continuation of a strong Australian Dollar, making destinations outside of Australia more attractive and affordable for travellers than destinations within the country. The strong dollar could also have other potential negative influences on the Australian economy, particularly export sectors.
- Airlines in Australia are currently facing some operational and financial difficulties including Qantas' labour disputes and Tiger Airways grounding and slow reestablishment of service. These issues could continue to slow strategic changes and future growth in the airline industry in Australia.
- Other potential negative influences that could result in traffic forecast in the low scenario include continued high and potentially increasing aircraft fuel prices and other events such as natural disasters, pandemics, or financial crises.

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8.3.3 Assumptions for the Aggressive Growth Forecasts

The Aggressive Growth Forecasts assume that a significant combination of most of the qualitative and quantitative issues outlined in other scenarios combine in positive ways to elevate the Sunshine Coast to higher levels of economic activity and growth. This scenario assumes that some or most of the large projects on the Coast will be completed.

- The projects include the Kawana Hospital district, the Maroochydore PAC, highway expansion between the Sunshine Coast and Brisbane, increased convention centre space, either independently or as part of the Palmer Resort expansion.
- These projects would, under this scenario, have significant effects on aviation demand, both for domestic and international travel.

All of these projects are assumed to work symbiotically with Airport expansion projects and contribute to a higher level of business and tourism activity.

- Economic growth will be stronger, population growth and workforce participation will be higher, and all of these factors will result in a higher level of growth in airport traffic supporting the activity, as well as an increase in the capture of traffic currently leaking to Brisbane.

In terms of airline service, the aggressive growth scenario assumes that international service to New Zealand will become more viable, without operational restrictions, and that other international markets will be opened up with direct service to the Sunshine Coast.

- International growth is assumed to come particularly from New Zealand, as it is already an established origin for international tourists, but more from China and other Asian origins.
- China has already grown to become the second largest tourism origin in Australia, and likely will soon be second behind New Zealand. Due to the growth trend of Chinese tourism, and the large population with growing incomes in the country, it is assumed that this will be a large growth origin market for Australia and the Sunshine Coast.
- Additionally, some of the Chinese airlines have small-capacity long-haul aircraft (such as 220~280 seat aircraft) that are better suited to the Sunshine Coast's market size sized than the long-haul LCC aircraft (such as Scoot's 400-seat 777s) that currently fly to Gold Coast Airport.

Therefore, it is more likely that airlines with appropriately sized aircraft, as some of the Chinese airlines have, might begin service to SCA before carriers operating larger aircraft would. LCCs' Scoot and AirAsia X operate aircraft with capacities of up to 400 seats.

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8.4 Potential SCA Growth Markets

8.4.1 Potential SCA Domestic Services

Based on SCA surveys of passengers and analysis on the top markets at Brisbane Airport, but not served on a direct basis from SCA, several routes emerge as contenders for future services, as shown in **Exhibit 8-1** below.

- Most of these routes are to resource sector areas.
- Although these are the top routes based on current data and information, there are several other resource sector destinations that could be possible contenders such as Emerald and Gladstone, which are used in the busy day forecast assumptions.
- The operation of services to these destinations depends on the needs of the resource sector companies.

Exhibit 8-1: Potential Future Domestic Markets

Potential Domestic Routes; Not Currently Served at SCA		
Top weekly destinations requested by passengers (a)	Top destinations of SCA residents that currently use Brisbane Airport for the service (a)	Top destinations from Brisbane, based on size and growth potential (b)
Perth	Cairns	Cairns
Rockhampton	McKay	Townsville
Cairnes	Townsville	Mackay
Mackay	Rockhampton	Perth
Darwin	Adelaide	Adelaide

(a) Source: SCA Passenger Survey.
(b) Source: Analysis based on BITRE data.

The potential domestic markets for SCA growth are based on an assessment of the top markets served currently from Brisbane Airport. **Exhibit 8-2** below, documents Brisbane Airport's key domestic markets.

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Exhibit 8-2: Top Domestic Markets: Brisbane Airport

Brisbane Domestic Activity		
	Annual passenger movements (12 months ending May 2012)	YOY growth
Top Markets at Brisbane Airport		
Sydney (currently served from SCA)	4,370,000	-1.5%
Melbourne (currently served from SCA)	3,150,000	1.3%
Cairns	1,140,000	-0.9%
Townsville	990,000	3.8%
Mackay	960,000	13.2%
Perth	910,000	15.5%
Adelaide	690,000	-3.8%
Rockhampton	660,000	8.4%
Canberra	640,000	5.4%
Newcastle	600,000	3.9%
Darwin	370,000	1.3%
Proserpine	150,000	3.2%
Source: Bitre, http://www.anna.aero		

8.4.2 Potential SCA International Services

Summarised in **Exhibit 8-3** below, is a listing of the demand characteristics and SCA infrastructure required to serve potential international markets.

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Exhibit 8-3: Potential Future International Markets

Market	Demand characteristics	Infrastructure needed
New Zealand	Already highest international visitor origin	Need 2,300 runway even for unrestricted narrowbody 737-800, A320 operations
China, Singapore, Malaysia, Indonesia	Growth already from China, other locations have signs of demand and close proximity	Need 2,450 runway for A330, 2,300m runway for 737-800 or A320 operations
Hong Kong, India, Korea	Identified by Sunshine Coast Destinations as longer term potential markets	Need 2,450 runway for 787, 777 operations

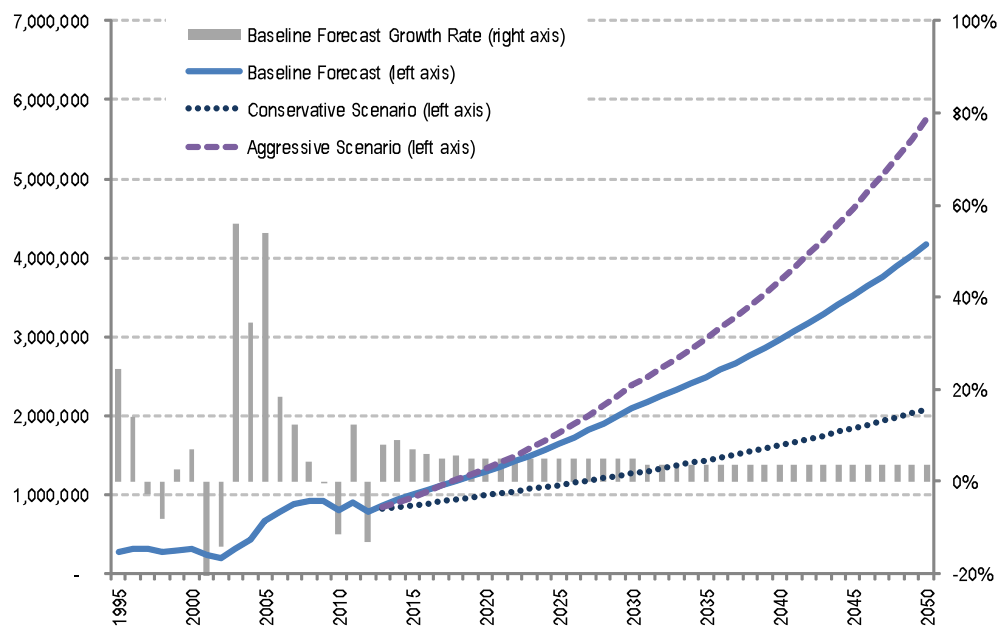
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9.0 SUMMARY: AVIATION ACTIVITY FORECASTS

9.1 Passenger Movements

Summarised in **Exhibit 9-1 and 9-2** below, are the annual passenger movements for each of the three forecast scenarios for the forecast period.

Exhibit 9-1: Historical and Forecasted Passenger Movements: Sunshine Coast Airport (1992~2050)



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Exhibit 9-2: Passenger Movements Forecasts: Sunshine Coast Airport (2012~2050)

Passenger Movements	Actual	Forecasted					CAAGR
		2012	2018	2020	2030	2050	
Baseline Scenario		1,168,449	1,288,215	2,098,367	2,959,954	4,175,307	4.4%
Conservative Scenario		943,304	991,058	1,268,639	1,623,965	2,078,812	2.6%
Aggressive Scenario		1,185,580	1,332,118	2,385,620	3,704,795	5,753,433	5.3%
Actual	790,002						

Forecasted CAAGR							
Passenger Movements (CAAGR)		2012~18	2018~2020	2020~2030	2030~2040	2040~2050	2012~2050
		6.7%	5.0%	5.0%	3.5%	3.5%	4.5%
Baseline Scenario		3.0%	2.5%	2.5%	2.5%	2.5%	2.6%
Conservative Scenario		7.0%	6.0%	6.0%	4.5%	4.5%	5.4%

Busy Day Passenger Movements	Estimated	Forecasted					CAAGR
		2012	2018	2020	2030	2050	
Baseline Scenario	2,842	4,280	4,700	7,660	10,810	15,250	4.5%
Conservative Scenario	2,842	3,460	3,620	4,630	5,930	7,600	2.6%
Aggressive Scenario	2,842	4,350	4,870	8,710	13,540	21,020	5.4%

Busy Hour Passenger Movements	Estimated	Forecasted					CAAGR
		2012	2018	2020	2030	2050	
Baseline Scenario	710	880	870	1,080	1,790	2,390	3.2%
Conservative Scenario	710	730	720	770	1,140	1,200	1.4%
Aggressive Scenario	710	880	870	1,230	2,280	3,250	4.1%

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9.2 Aircraft Movements

Summarised in **Exhibit 9-3**, below, are the annual aircraft movements for each of the three forecast scenarios for the forecast period.

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Exhibit 9-3: Aircraft Movement Forecasts: Sunshine Coast Airport (2012~2050)

Aircraft Movements		Actual	Forecasted				CAAGR		
		2012	2018	2020	2030	2040	2050	2012~2050	
Commercial Aircraft									
Baseline Scenario			8,020	8,900	13,660	18,210	24,410	4.0%	
Conservative Scenario			6,470	6,850	8,260	9,990	12,160	2.1%	
Aggressive Scenario			8,140	9,210	15,530	22,800	33,640	4.9%	
Actual		5,559							
General Aviation Helicopters		25,168 60,302	27,720 66,420	29,370 70,390	35,630 85,390	35,630 85,390	35,630 85,390	0.9% 0.9%	
Aircraft Movements (CAAGR)									
Commercial Aircraft			2012~18	2018~2020	2020~2030	2030~2040	2040~2050	2012~2050	
Baseline Scenario			6.3%	5.3%	4.4%	2.9%	2.9%	4.0%	
Conservative Scenario			2.6%	2.9%	1.9%	1.9%	2.0%	2.1%	
Aggressive Scenario			6.6%	6.4%	5.4%	3.9%	3.9%	4.9%	
General Aviation Helicopters			1.6%	2.9%	2.0%	0.0%	0.0%	0.9%	
			1.6%	2.9%	2.0%	0.0%	0.0%	0.9%	
CAAGR									
Average Commercial Aircraft Movements per Day		Actual	2012	2018	2020	2030	2040	2050	2012~2050
Baseline Scenario			22.0		24.4	37.4	49.9	66.9	4.0%
Conservative Scenario			17.7		18.8	22.6	27.4	33.3	2.1%
Aggressive Scenario			22.3		25.2	42.5	62.5	92.2	4.9%
Actual		15.2							
General Aviation Helicopters		69.0 165.2	75.9 182.0	80.5 192.8	97.6 233.9	97.6 233.9	97.6 233.9	97.6 233.9	0.9% 0.9%

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9.3 Seats and Passengers per Commercial Aircraft Movement

Summarised in **Exhibit 9-4**, below, are the seats and passengers per commercial aircraft movement assumed for each of the three forecast scenarios for the forecast period.

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Exhibit 9-4: Seats and Passengers Per Commercial Aircraft Movement Assumed: Sunshine Coast Airport (2012-2050)

Seats per Commercial Aircraft Movement	Forecasted				CAAGR 2012-2050
	Actual 2012	2018	2020	2030	2050
Baseline Scenario		172.0	170.2	180.7	191.2
Conservative Scenario		172.0	170.2	180.7	191.2
Aggressive Scenario		172.0	170.2	180.7	191.2
Actual	175.0				
					0.4%
					0.4%
					0.4%
Change in Seats per Commercial Movement	Forecasted				
	Actual 2012	2018	2020	2030	2050
Baseline Scenario		(3.0)	(1.8)	10.5	10.5
Conservative Scenario		(3.0)	(1.8)	10.5	10.5
Aggressive Scenario		(3.0)	(1.8)	10.5	10.5
Passengers per Commercial Movement	Forecasted				CAAGR 2012-2050
	Actual 2012	2018	2020	2030	2050
Baseline Scenario		146.2	144.7	153.6	162.5
Conservative Scenario		146.2	144.7	153.6	162.5
Aggressive Scenario		146.2	144.7	153.6	162.5
Actual	142.1				
					0.5%
					0.5%
					0.5%
Commercial Aircraft Load Factors	Forecasted				
	Actual 2012	2018	2020	2030	2050
Baseline Scenario		85.0%	85.0%	85.0%	85.0%
Conservative Scenario		85.0%	85.0%	85.0%	85.0%
Aggressive Scenario		85.0%	85.0%	85.0%	85.0%
Actual	81.2%				
Change (in points; for Actual and Baseline Scenario)		3.8%	0.0%	0.0%	0.0%

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9.4 Busy Day and Busy Hour Aircraft Movements

Summarised in **Exhibit 9-5** below, are the Busy Day and Busy Hour commercial aircraft movements for each of the three forecast scenarios for the forecast period.

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Exhibit 9-5: Busy Day and Busy Passenger Movement Forecasts: Sunshine Coast Airport (2012~2050)

Busy Day Commercial Aircraft Movements	Actual 2012	Forecasted				CAAGR 2012~2050
		2018	2020	2030	2050	
Average week	15.0					
Baseline Scenario (based on average/busy ratio)	20	29	33	50	67	89
Conservative Scenario (based on average/busy ratio)	20	24	25	30	36	44
Aggressive Scenario (based on average/busy ratio)	20	30	34	57	83	123
						4.0% 2.1% 4.9%

Busy Hour Commercial Aircraft Movements	Actual 2012	Forecasted				CAAGR 2012~2050
		2018	2020	2030	2050	
2012 busy hour = 12:00~12:59	5.0					
Baseline Scenario	5	6	6	9	11	14
Conservative Scenario	5	5	5	6	7	7
Aggressive Scenario	5	6	6	10	14	19
						2.7% 0.9% 3.6%

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10.0 BUSY DAY AND BUSY HOUR FLIGHT SCHEDULES

The Exhibits in this section document the Busy Day and Busy Hour flight schedules for 2012 (actual) and for forecast years 2018, 2020, 2030, 2040, and 2050. Detailed schedules showing aircraft type and potential port of destination are shown.

10.1 Runway Development Scenarios

The baseline forecasts in this report have been developed based on an unconstrained development. For the development of forecast schedules, the optional development scenarios being considered by the airport have been used. The airport management are considering 3 primary development options. Some of the options are comprised of a number of possible sub-options. However, for the purposes of the constraints to aircraft traffic development, the 3 primary options under consideration have any material impact on forecast aircraft operations. Schedules have been produced for three primary runway construction scenarios:

1. New Runway Scenario. This scenario assumes that a new runway will be built at the Airport to accommodate unrestricted narrowbody and widebody aircraft operations to unlimited domestic and international destinations.
2. Do Minimum Scenario. This scenario assumes that the Airport will do minimum work on the existing runway to avoid future restrictions imposed by CASA that could limit operations to turboprop aircraft only. This scenario is limited to narrowbody and turboprop destinations to domestic and trans-Tasman international destinations only.
3. Do Nothing Scenario. This scenario assumes no runway work is completed and the airport is restricted to primarily turboprop aircraft and jet aircraft smaller than Code 4C soon after the 2020 forecast.

10.2 Methodology

Development of the busy day flight schedules are based, in part, on the busiest day in a recent month (July 2012). The busy day used for analysis was similar to the IATA busy day definition of the second busiest day during an average week during the peak month. A more recent day was used, rather than a day in the previous fiscal year since it was similar in volume, but with more recent operational schedules, which was considered more representative of potential future service levels.

- Future busy day flight schedule forecasts were based on the passenger and movement forecasts with appropriate ratios applied.
- For busy hour projections, some smoothing of operations was implemented as the Airport's operations mature to a more typical operation.

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- Overall, the operations during the forecast busy hour grow, but at a lower rate than passenger movements grow.

The methodology employed is due, in part, to the unique nature of SCA current demand and operations, which are primarily focused on serving domestic passengers travelling for leisure and VFR purposes.

- Through the qualitative analysis and build-up of a potential future flight schedule, the forecast assumes growth in business traffic and earlier morning flights with the introduction of overnight aircraft that will arrive in the later evening, overnight at the airport, and depart in the morning hours.
- The schedule also assumes new turboprop aircraft operations to mining sector regions and international operations to China and other Asia origins.
- As these new and different types of operations are introduced at the airport, further smoothing over time periods during the day will occur and the Busy Hour operation levels will grow at a slower rate than overall operations.

10.3 New Runway Scenario: Busy Day and Busy Hour Summary

Current and forecasted Busy Day and Busy Hour aircraft movements for 2012 and for the forecast period, for the New Runway Scenario are shown in **Exhibit 10-1** below.

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Exhibit 10-1: Current And Forecasted Busy Day Movements: Sunshine Coast Airport (2012-2050) New Runway Scenario

3 July 2012		Busy Day Movements		Forecast Busy Day Movements				
Hour	Arrivals	Departures	2012	2018	2020	2030	2040	2050
6:00	-	-	-	-	-	2	2	3
7:00	-	-	-	-	1	3	4	5
8:00	-	-	-	-	2	3	4	3
9:00	9:55 SYD JQ	-	1	1	2	2	2	3
10:00	-	10:25 SYD JQ	1	2	2	2	3	4
11:00	11:50 MEL DJ	-	2	3	2	4	6	5
12:00	12:05 MEL JQ	12:20 MEL DJ	5	6	3	9	4	7
(Busy hour)	12:45 SYD DJ	12:35 MEL JQ	-	-	2	-	4	6
	12:55 AKL NZ	12:55 AKL NZ	-	-	1	3	1	-
	13:15 SYD DJ	13:15 SYD DJ	2	3	2	2	2	4
13:00	13:35 MEL JQ	-	-	-	-	1	1	3
14:00	14:20 SYD JQ	14:05 MEL JQ	2	3	2	2	3	5
15:00	-	14:50 SYD JQ	1	2	2	2	2	5
16:00	-	-	-	-	-	1	2	3
17:00	17:45 SYD JQ	-	1	1	1	3	5	5
18:00	18:30 MEL JQ	18:15 SYD JQ	2	3	3	4	5	3
19:00	19:15 SYD JQ	19:00 MEL JQ	3	4	3	4	4	5
20:00	-	19:45 SYD JQ	-	1	2	3	4	4
21:00	-	-	-	-	-	2	2	3
	-	-	-	-	-	1	1	2
	-	-	-	-	-	1	1	3
	-	-	20	29	33	50	67	89
Busy Hour			5	6	6	9	11	14

Source: Historical: SCA Monthly Flight Schedule Report. Forecasts: S-A-P, August 2012.

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10.3.1 2018 Busy Day and Busy Hour Flight Schedule and Forecasts – New Runway Scenario

10.3.1.1 Assumptions

The 2018 Busy Day and Busy Hour forecasts assume significant changes in operations at SCA. The forecast schedule includes the addition of turboprop.

- The turboprop operations are assumed to enter service in the near future to service small resource centre markets to the north of the Sunshine Coast.
- It is assumed that as this industry sector continues to grow, SCA will see airline service introduction to serve employees in this sector who currently live in the area or choose to live in the area due to the cost of living as well as proximity to resource sector areas.
- Because this service has been introduced at other airports in Australia, including Brisbane Airport and Perth Airport, it is expected that this trend will continue and will expand to areas such as the Sunshine Coast that offer affordability, standard of living, and proximity to resource sector areas.
- SCA already has charter operations related to the resource traffic. The forecast assumes that service will evolve to include both charter and scheduled turboprop service to several resource sector markets.

Skywest Airlines recently announced orders for five new ATR aircraft in addition to the eight already on order, with eight options, to enter service in Australia for Virgin Australia on regional routes.

- These orders and deliveries provide capacity for regional flights to smaller regional destinations such as those in the resources sector. Most FIFO traffic is currently operated on turboprop aircraft like ATRs.

The analysis assumes that in 2018 the crosswind runway would be closed, allowing for operations on one runway only. Despite this change at the airport, for the purposes of this forecast, it is assumed that operations currently operated on the crosswind runway would operate on Runway 18/36 as would commercial traffic, under suitable weather conditions.

10.3.1.2 Summary of 2018 Forecasts – New Runway Scenario

Forecasted Busy Day and Busy Hour aircraft movements for 2018 are shown in **Exhibit 10-2** below.

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Exhibit 10-2: Busy Day and Busy Hour Aircraft Movement Forecasts: Sunshine Coast Airport (2018) New Runway Scenario

Commercial Aircraft Movements and Seats														
Hour	All Aircraft Movements	Narrowbody Jets		Widebody Jets		Turboprops		Ports (assumed)					Arr	Dep
		Ops	Seats	Ops	Seats	Ops	Seats	Narrowbody Jets	Widebody Jets	Turboprops				
6:00	-	-	-	-	-	-	-							
7:00	-	-	-	-	-	-	-							
8:00	-	-	-	-	-	-	-							
9:00	1	1	150	-	-	-	-							
10:00	2	1	150	-	-	1	70	SYD 1		MKY 1		1	1	
11:00	3	2	175	-	300	1	70	SYD 1	AKL 1		MKY 1	2	1	
	-	-	-	-	-	-	-							
12:00	2	2	175	-	200	-	-	SYD 1	MEL 1			1	1	
12:00 (Busy hour)	3	3	175	-	-	-	-	SYD 1	MEL 2			2	1	
	1	1	-	-	300	-	-	AKL 1				1	-	
13:00	3	3	175	-	200	-	-	SYD 2	MEL 1			1	2	
	-	-	-	-	-	-	-							
14:00	3	3	175	-	-	-	-	SYD 1	MEL 2			1	2	
15:00	2	2	175	-	-	-	-	SYD 1	MEL 1			1	1	
16:00	-	-	-	-	-	-	-							
	-	-	-	-	-	-	-							
17:00	1	1	175	-	-	-	-		MEL 1			1		
18:00	3	2	175	-	-	1	70	SYD 1	MEL 1		GLT 1	1	2	
19:00	4	3	200	-	-	1	70	SYD 2	MEL 1		GLT 1	1	3	
	1	1	200	-	-	-	-		MEL 1			1		
20:00	-	-	-	-	-	-	-							
	-	-	-	-	-	-	-							
21:00	-	-	-	-	-	-	-							
	29	25	4,250	-	-	4	280	12	13	0	0	4	15	14
Total seats		4,530												
Seats per movement		156												
Busy hour movements		6												

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10.3.2 2020 Busy Day and Busy Hour Flight Schedule and Forecasts – New Runway Scenario

10.3.2.1 Assumptions

The 2020 Busy Day and Busy Hour forecasts assume significant changes in operations at SCA. The forecast schedule includes the addition of turboprop and widebody aircraft, neither of which currently operates at the airport.

Widebody operations are assumed to enter service to serve international markets including New Zealand and China.

- With operational availability of a larger runway, New Zealand flights will become viable for both inbound and outbound flights and the market will grow to a size that will support widebody operations to the airport by 2020.
- Interest in the past from China and assumed continued future growth in tourism from China, airlines from China may be among the first Asian carriers to enter service at SCA.

The 2020 Busy Day forecast assumes some smoothing in the schedule over the day as new markets are established to Sydney and Melbourne that cater more to business customers, with the introduction of early morning departures and aircraft overnights

10.3.2.2 Summary of 2020 Forecasts – New Runway Scenario

Forecast Busy Day and Busy Hour aircraft movements for 2020 are shown in **Exhibit 10-3** below.

Long-Term Forecasts of Aviation Activity at Sunshine Coast Airport for 2013-2050
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Exhibit 10-3: Busy Day and Busy Hour Aircraft Movement Forecasts: Sunshine Coast Airport (2020) New Runway Scenario

Commercial Aircraft Movements and Seats															
Hour	All Aircraft Movements	Narrowbody Jets		Widebody Jets		Turboprops		Ports (assumed)						Arr	Dep
		Ops	Seats	Ops	Seats	Ops	Seats	Narrowbody Jets	Widebody Jets	Turboprop					
6:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
8:00	1	1	175	-	-	-	-	SYD 1	-	-	-	-	-	1	
	2	1	175	-	-	1	70	MEL 1	-	EMD 1	-	-	-	2	
9:00	1	-	-	-	-	1	70	-	-	EMD 1	-	-	-	1	
	2	1	175	-	-	1	100	SYD 1	-	MKY 1	-	-	-	2	
10:00	2	1	175	-	-	1	100	SYD 1	-	MKY 1	-	-	-	2	
11:00	2	1	175	1	300	-	-	SYD 1	-	AKL 1	-	-	-	2	
	1	1	175	-	-	-	-	SYD 1	-	-	-	-	-	1	
12:00 (Busy hour)	3	2	175	1	200	-	-	SYD 1	MEL 1	China 1	-	-	-	3	
	2	2	175	-	-	-	-	SYD 1	MEL 1	-	-	-	-	2	
13:00	1	-	-	1	300	-	-	-	-	AKL 1	-	-	-	1	
	2	1	175	1	200	-	-	SYD 1	-	China 1	-	-	-	1	
14:00	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	2	2	175	-	-	-	-	SYD 1	MEL 1	-	-	-	-	1	
15:00	2	2	175	-	-	-	-	SYD 1	MEL 1	-	-	-	-	1	
16:00	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	1	1	175	-	-	-	-	-	MEL 1	-	-	-	-	1	
17:00	1	1	175	-	-	-	-	-	MEL 1	-	-	-	-	1	
18:00	3	2	175	-	-	1	70	SYD 1	MEL 1	-	-	GLT 1	-	2	
19:00	3	2	200	-	-	1	70	SYD 1	MEL 1	-	-	GLT 1	-	2	
	2	2	200	-	-	-	-	SYD 1	MEL 1	-	-	-	-	2	
20:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
21:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	33	23	4,125	4	1,000	6	480	13	10	2	2	6	17	16	

Total seats	5,605
Seats per movement	170

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10.3.3 2030 Busy Day and Busy Hour Flight Schedule and Forecasts – New Runway Scenario

10.3.3.1 Assumptions

The 2030 Busy Day forecasts assume that growth continues with Sydney and Melbourne destinations, but that more growth occurs with secondary markets, such as Perth and Cairns.

- The forecast assumes that with general growth in the area and the country, SCA will reach the size that more flights to secondary cities will become viable in the future.
- This assumption is strengthened by the trend toward LCCs which are more likely to add service on point-to-point destinations, without the need for hub operations at larger cities.

The 2030 time period is also assumed to see increases in service to China and other markets in Asia as inbound tourism grows for Australia and the Sunshine Coast.

- China is assumed, by this point, to be served by both small and large widebody aircraft.
- Other Asian markets could include hubs such as Singapore and Kuala Lumpur.

By 2030, resource sector market growth is assumed to mature into more jet traffic as well as additional turboprop service to new mining sector destinations.

10.3.3.2 Summary of 2030 Forecasts – New Runway Scenario

Forecasted Busy Day and Busy Hour aircraft movements for 2030 are shown in **Exhibit 10-4**, below.

**Long-Term Forecasts of Aviation Activity at Sunshine Coast Airport for 2013~2050
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Exhibit 10-4: Busy Day and Busy Hour Aircraft Movement Forecasts: Sunshine Coast Airport (2030) New Runway Scenario

Commercial Aircraft Movements and Seats															
Hour	All Aircraft Movements	Narrowbody Jets			Widebody Jets			Turboprops			Ports (assumed)				
		Ops	Seats	Ops	Seats	Ops	Seats	Ops	Seats	SYD 1	PER 1	Widebody	Turboprops	Arr	Dep
6:00	2	2	200	-	-	-	-	-	-	SYD 1	PER 1				2
7:00	1	1	175	-	-	-	-	-	-		MEL 1				1
	3	3	175	-	-	-	-	-	-	SYD 1	MKY 2			3	
8:00	3	3	175	-	-	-	-	-	-	SYD 1	MKY 2				3
9:00	-	-	175	-	-	-	-	-	-						
	3	2	175	-	1	70	70			SYD 1	MEL 1		ROK 1	3	
10:00	4	3	175	-	1	70	70			SYD 1	MEL 1	CNS 1	ROK 1	1	3
11:00	2	1	175	1	300	-	-					CNS 1	AKL 1	1	1
	1	1	175	-	-	-	-				MEL 1			1	
12:00	5	4	175	1	300	-	-			SYD 2	MEL 1	China 1	AKL 1	3	2
	3	2	175	1	300	-	-			SYD 2		China 1	China 1	1	2
(Busy hour)	1	1	175	-	-	-	-				China 1			1	
13:00	2	1	200	1	300	-	-			SYD 1		China 1		1	1
14:00	-	-	200	-	-	-	-								
	2	2	175	-	-	-	-			SYD 1	MEL 1			1	1
15:00	1	1	175	-	-	-	-				MEL 1				1
16:00	1	-	175	1	300	-	-						Asia 1	1	
17:00	1	1	175	-	-	-	-				MEL 1			1	
	4	2	175	1	300	1	100			SYD 1	MEL 1	Asia 1	GLT 1	2	2
18:00	4	3	175	-	-	1	100			SYD 1	MEL 1	Asia 1	GLT 1	2	2
19:00	3	2	175	-	1	70	70				MEL 1	Asia 1	EMD 1	1	2
	1	-	-	-	1	1	70						EMD 1	1	1
20:00	1	1	175	-	-	-	-					PER 1		1	
	1	1	200	-	-	-	-				MEL 1			1	
21:00	1	1	200	-	-	-	-			SYD 1				1	
	50	38	6,775	6	1,800	6	480				14	12	6	6	25

Total seats	9,055
Seats per movement	181

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10.3.4 2040 Busy Day and Busy Hour Flight Schedule and Forecasts – New Runway Scenario

10.3.4.1 Assumptions

The 2040 Busy Day forecasts assume that growth continues with Sydney and Melbourne destinations, but that more growth occurs with secondary markets, such as Perth and Adelaide.

- The forecast assumes that with general growth in the area and the country, SCA will reach the size that more flights to secondary cities will become viable in the future.
- This assumption is strengthened by the trend toward LCCs which are more likely to add service on point-to-point destinations, without the need for hub operations at larger cities.

The 2040 time period is also assumed to see increases in service to China and other markets in Asia as inbound tourism grows for Australia and the Sunshine Coast.

By 2040, resource sector market growth is assumed to mature into more jet traffic as well as additional turboprop service to new mining sector destinations.

10.3.4.2 Summary of 2040 Forecasts – New Runway Scenario

Current and forecasted Busy Day and Busy Hour aircraft movements for 2040 are shown in **Exhibit 10-5** below.

Long-Term Forecasts of Aviation Activity at Sunshine Coast Airport for 2013-2050
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Exhibit 10-5: Busy Day and Busy Hour Aircraft Movement Forecasts: Sunshine Coast Airport (2040) New Runway Scenario

Commercial Aircraft Movements and Seats																		
Hour	All Aircraft Movements	Narrowbody Jets				Widebody Jets				Turboprops				Ports (assumed)			Arr	Dep
		Ops	Seats	Ops	Seats	Ops	Seats	Ops	Seats	Ops	Seats	Ops	Seats					
6:00	2	2	200	-	-	-	-	-	-	SYD 1	PER 1						2	
7:00	-	-	-	-	-	-	-	-	-	SYD 1	MEL 1	MKY 2						
8:00	4	4	200	-	-	-	-	-	-	SYD 1	MEL 1	MKY 2					3	
9:00	1	-	200	-	-	-	-	1	70				TSV 1				1	
10:00	2	1	200	-	-	-	-	1	70				TSV 1				2	
11:00	3	2	175	-	-	-	-	1	100				ROK 1				2	
	5	3	175	1	300	1	300	1	100	SYD 1	MEL 1	CNS 1	AKL 1	ROK 1			3	
	-	-	-	-	-	-	-	-	-								2	
12:00	4	4	175	-	-	-	-	-	-	SYD 2	MEL 1	China 1					2	
(Busy hour)	4	3	175	1	300	-	-	-	-	SYD 2	MEL 1	China 1					2	
13:00	3	2	175	1	300	-	-	-	-	SYD 1		China 1	AKL 1				3	
	2	1	200	1	300	-	-	-	-	SYD 1			China 1				1	
	1	1	200	-	-	-	-	-	-			DRW 1					1	
14:00	3	3	175	-	-	-	-	-	-	SYD 1	MEL 1	DRW 1					1	
15:00	2	2	175	-	-	-	-	-	-		MEL 1	ADL 1					2	
16:00	2	1	200	1	300	-	-	-	-								1	
	2	2	200	-	-	-	-	-	-			ADL 1	Asia 1				1	
	2	2	200	-	-	-	-	-	-		MEL 1	ADL 1					2	
17:00	5	3	200	1	300	1	300	1	100	SYD 1	MEL 1	ADL 1	Asia 1	GLT 1			3	
18:00	5	3	200	1	300	1	300	1	100	SYD 1	MEL 1	Asia 1	Asia 1	GLT 1			2	
19:00	4	3	200	-	-	-	-	1	70	SYD 1	MEL 1	Asia 1		EMD 1			2	
	4	2	200	1	300	1	300	1	70	SYD 1		ADL 1	Asia 1	EMD 1			1	
20:00	2	2	200	-	-	-	-	-	-								1	
	1	1	200	-	-	-	-	-	-		MEL 1	ADL 1					1	
21:00	1	1	200	-	-	-	-	-	-			PER 1					1	
	66	50	9,525	8	2,400	8	680	16	14	20	8	8	8	8	33	33		

Total seats	12,605
Seats per movement	191

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10.3.5 2050 Busy Day and Busy Hour Flight Schedule and Forecasts – New Runway Scenario

10.3.5.1 Assumptions

The 2050 Busy Day forecast is a continuation of trends that occur through 2040, including more service to Asia and China, additional turboprop service migrating to jet service, and some increase in turboprop aircraft size, but no additional turboprop during this time period.

Additionally, more domestic growth occurs to regional destinations rather than significant growth in the Sydney and Melbourne markets.

10.3.5.2 Summary of 2050 Forecasts – New Runway Scenario

Current and forecasted Busy Day and Busy Hour aircraft movements for 2050 are shown in **Exhibit 10-6** below.

Long-Term Forecasts of Aviation Activity at Sunshine Coast Airport for 2013-2050 Pre-Final Report

Exhibit 10-6: Busy Day and Busy Hour Aircraft Movement Forecasts: Sunshine Coast Airport (2050) New Runway Scenario

Commercial Aircraft Movements and Seats													
All Aircraft		Narrowbody Jets				Widebody Jets				Turboprops			
		Ops	Seats	Ops	Seats	Ops	Seats	Ops	Seats	Ops	Seats	Ops	Seats
Hour	Movements												
6:00	3	3	200	-	-	-	-	-	-	-	-	-	-
	1	1	200	-	-	-	-	-	-	-	-	-	-
7:00	5	4	200	1	300	-	-	-	-	-	-	-	-
8:00	3	3	175	-	-	-	-	-	-	-	-	-	-
	2	1	175	1	300	-	-	-	-	-	-	-	-
9:00	3	2	200	1	300	-	-	-	-	-	-	-	-
10:00	4	2	175	1	300	1	70	-	-	-	-	-	-
11:00	5	3	175	1	300	1	70	-	-	-	-	-	-
	2	1	175	-	-	-	-	-	-	-	-	-	-
12:00	7	5	200	1	300	1	100	-	-	-	-	-	-
(Busy hour)	6	5	200	1	300	1	100	-	-	-	-	-	-
	1	-	-	1	300	-	-	-	-	-	-	-	-
13:00	4	3	200	1	300	-	-	-	-	-	-	-	-
	3	2	200	1	300	-	-	-	-	-	-	-	-
14:00	5	3	200	1	300	1	100	-	-	-	-	-	-
15:00	5	3	200	1	300	1	100	-	-	-	-	-	-
16:00	3	3	200	-	-	-	-	-	-	-	-	-	-
	2	2	200	-	-	-	-	-	-	-	-	-	-
17:00	5	3	200	1	300	1	100	-	-	-	-	-	-
18:00	3	2	200	-	-	-	-	-	-	-	-	-	-
19:00	5	4	200	1	300	1	100	-	-	-	-	-	-
	4	3	200	1	300	-	-	-	-	-	-	-	-
20:00	3	2	175	-	-	-	-	-	-	-	-	-	-
	2	1	175	1	300	-	-	-	-	-	-	-	-
21:00	3	2	175	-	-	-	-	-	-	-	-	-	-
	89	63	12,225	16	4,800	10	880	-	-	-	-	-	-

Total seats	17,905
Seats per movement	201

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**10.4 Do Minimum Scenario: Busy Day and Busy Hour
Summary**

**10.4.1 Do Minimum Runway Scenario: 2018 Busy Day and
Busy Hour Flight Schedule and Forecasts**

10.4.2 Assumptions

The Do Minimum Scenario assumes that minimal modifications will be made to the existing runway to enable small narrow-body and turboprop aircraft operations to continue into the future, avoiding CASA restrictions that would come into effect after the 2020 forecast, limiting operations to turboprop aircraft only.

10.4.3 Summary of 2018 Forecasts – Do Minimum Scenario

Forecasted Busy Day and Busy Hour aircraft movements for 2020 are shown in **Exhibit 10-7**, below.

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Exhibit 10-7: Busy Day and Busy Hour Aircraft Movement Forecasts: Sunshine Coast Airport (2018) Do Minimum Scenario

Commercial Aircraft Movements and Seats											
Hour	All Aircraft Movements	Narrowbody Jets			Widebody Jets			Turboprops			Dep
		Ops	Seats	Ops	Seats	Ops	Seats	Ops	Seats		
6:00	-	-	-	-	-	-	-	-	-	-	-
7:00	-	-	-	-	-	-	-	-	-	-	-
8:00	-	-	-	-	-	-	-	-	-	-	-
9:00	-	-	-	-	-	-	-	-	-	-	-
10:00	1	1	150	-	-	-	-	-	-	-	1
11:00	2	1	150	-	-	-	-	1	70	MKY 1	1
	3	2	175	-	-	-	-	1	70	MKY 1	2
	-	-	-	-	-	-	-	-	-	-	-
12:00	2	2	175	-	-	-	-	-	-	-	1
(Busy hour)	2	2	175	-	-	-	-	-	-	-	1
	1	1	175	-	-	-	-	-	-	-	1
13:00	2	2	175	-	-	-	-	-	-	-	2
	-	-	175	-	-	-	-	-	-	-	-
14:00	3	3	175	-	-	-	-	-	-	-	1
15:00	2	2	175	-	-	-	-	-	-	-	2
16:00	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	1
17:00	1	1	175	-	-	-	-	-	-	-	1
18:00	3	2	175	-	-	-	-	1	70	GLT 1	2
19:00	4	3	200	-	-	-	-	1	70	GLT 1	2
	1	1	200	-	-	-	-	-	-	-	1
20:00	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
21:00	-	-	-	-	-	-	-	-	-	-	-
	27	23	4,075	-	-	-	-	4	280	-	14
				12	11	0	0	4	4	14	14
Total seats 4,355											
Seats per movement 161											
Busy hour movements 5											

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**10.4.4 Do Minimum Runway Scenario: 2020 Busy Day and
Busy Hour Flight Schedule and Forecasts**

10.4.4.1 Assumptions

As described above, the Do Minimum Scenario would allow for continued jet operations, limited to Code 4C aircraft such as Boeing 737s and Airbus A320s.

10.4.4.2 Summary of 2020 Forecasts – Do Minimum Scenario

Forecasted Busy Day and Busy Hour aircraft movements for 2020 are shown in **Exhibit 10-8**, below.

Long-Term Forecasts of Aviation Activity at Sunshine Coast Airport for 2013-2050
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Exhibit 10-8: Busy Day and Busy Hour Aircraft Movement Forecasts: Sunshine Coast Airport (2020) Do Minimum Scenario

Commercial Aircraft Movements and Seats																
Hour	All Aircraft Movements	Narrowbody Jets		Widebody Jets		Turboprops		Ports (assumed)							Arr	Dep
		Ops	Seats	Ops	Seats	Ops	Seats	Narrowbody Jets	Widebody Jets	Turboprop						
6:00	-	-	-	-	-	-	-									
7:00	-	-	-	-	-	-	-									
8:00	1	1	175	-	-	-	-	SYD 1							1	
	2	1	175	-	-	1	70		MEL 1		EMD 1				2	
9:00	1	-	-	-	-	1	70									
	2	1	175	-	-	1	100	SYD 1							1	
10:00	2	1	175	-	-	1	100								2	
	2	2	175	-	-	-	-	SYD 1							2	
11:00	1	1	175	-	-	-	-	SYD 1	AKL 1						2	
								SYD 1							1	
12:00	2	2	175	-	-	-	-									
	2	2	175	-	-	-	-	SYD 1	MEL 1						1	
(Busy hour)	1	1	175	-	-	-	-	SYD 1	MEL 1						1	
								AKL 1							1	
13:00	1	1	175	-	-	-	-	SYD 1							1	
	-	-	-	-	-	-	-									
14:00	2	2	175	-	-	-	-	SYD 1	MEL 1						1	
15:00	2	2	175	-	-	-	-	SYD 1	MEL 1						1	
16:00	-	-	-	-	-	-	-									
	1	1	175	-	-	-	-		MEL 1						1	
17:00	1	1	175	-	-	-	-		MEL 1						1	
18:00	3	2	175	-	-	1	70	SYD 1	MEL 1			GLT 1			2	
19:00	3	2	200	-	-	1	70	SYD 1	MEL 1			GLT 1			2	
	2	2	200	-	-	-	-	SYD 1	MEL 1						2	
20:00	-	-	-	-	-	-	-									
	-	-	-	-	-	-	-									
21:00	-	-	-	-	-	-	-									
	31	25	4,475	-	-	6	480	13	12	0	0	6	16	15		
Total seats		4,955														
Seats per movement		160														
Busy hour movements		5														

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**10.4.5 Do Minimum Runway Scenario: 2030 Busy Day and
Busy Hour Flight Schedule and Forecasts**

10.4.5.1 Assumptions

As described above, the Do Minimum Scenario would allow for continued jet operations, limited to Code 4C aircraft such as Boeing 737s and Airbus A320s.

10.4.5.2 Summary of 2030 Forecasts

Forecasted Busy Day and Busy Hour aircraft movements for 2030 are shown in **Exhibit 10-9**, below.

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Exhibit 10-9: Busy Day and Busy Hour Aircraft Movement Forecasts: Sunshine Coast Airport (2030) Do Minimum Scenario

Commercial Aircraft Movements and Seats														
Hour	All Aircraft Movements		Narrowbody Jets		Widebody Jets		Turboprops		Ports (assumed)					
	Movements	Ops	Seats	Ops	Seats	Ops	Seats	Ops	Seats	Narrowbody Jets	Widebody	Turboprops	Arr	
6:00	2	2	200	-	-	-	-	-	-	SYD 1	SYD 1	-	2	
7:00	1	1	175	-	-	-	-	-	-	MEL 1	-	-	1	
	3	3	175	-	-	-	-	-	-	SYD 1	MKY 2	-	3	
8:00	3	3	175	-	-	-	-	-	-	SYD 1	MKY 2	-	3	
9:00	-	-	175	-	-	-	-	-	-	-	-	-	3	
	3	2	175	-	-	-	-	1	70	SYD 1	MEL 1	-	3	
10:00	4	3	175	-	-	-	1	70	SYD 1	MEL 1	CNS 1	ROK 1	3	
11:00	2	2	175	-	300	-	-	-	-	AKL 1	CNS 1	-	1	
	1	1	175	-	-	-	-	-	-	MEL 1	-	-	1	
12:00 (Busy hour)	3	3	175	-	300	-	-	-	-	SYD 2	MEL 1	-	2	
	3	3	175	-	300	-	-	-	-	SYD 2	AKL 1	-	3	
13:00	-	-	175	-	-	-	-	-	-	-	-	-	-	
	1	1	200	-	300	-	-	-	-	SYD 1	-	-	1	
14:00	-	-	200	-	-	-	-	-	-	-	-	-	-	
	2	2	175	-	-	-	-	-	-	SYD 1	MEL 1	-	1	
15:00	1	1	175	-	-	-	-	-	-	MEL 1	-	-	1	
16:00	-	-	175	-	300	-	-	-	-	-	-	-	-	
	1	1	175	-	-	-	-	-	-	MEL 1	-	-	1	
17:00	3	2	175	-	300	-	-	1	100	SYD 1	MEL 1	GLT 1	2	
	3	2	175	-	-	-	-	1	100	SYD 1	MEL 1	GLT 1	2	
18:00	2	1	175	-	-	-	-	1	70	MEL 1	-	EMD 1	1	
	1	-	-	-	-	-	-	1	70	-	-	EMD 1	1	
19:00	1	1	175	-	-	-	-	-	-	-	-	-	-	
20:00	1	1	175	-	-	-	-	-	-	-	SYD 1	-	1	
	1	1	200	-	-	-	-	-	-	MEL 1	-	-	1	
21:00	1	1	200	-	-	-	-	-	-	SYD 1	-	-	1	
	42	36	6,425	-	-	-	6	480	14	14	8	0	6	
Total seats														21
6,905														21
Seats per movement														21
164														21
Busy hour movements														21
6														21

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**10.4.6 Do Minimum Runway Scenario: 2040 Busy Day and
Busy Hour Flight Schedule and Forecasts**

10.4.6.1 Assumptions

The Do Minimum Scenario results in limited growth in 2040 due to restrictions to narrow-body aircraft operations.

10.4.6.2 Summary of 2040 Forecasts – Do Minimum Scenario

Forecasted Busy Day and Busy Hour aircraft movements for 2040 are shown in **Exhibit 10-10**, below.

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Exhibit 10-10: Busy Day and Busy Hour Aircraft Movement Forecasts: Sunshine Coast Airport (2040) Do Minimum Scenario

Commercial Aircraft Movements and Seats														
Hour	All Aircraft Movements		Narrowbody Jets		Widebody Jets		Turboprops		Ports (assumed)					Dep
	Movements	Ops	Ops	Seats	Ops	Seats	Ops	Seats	Narrowbody Jets	Widebody	Turboprops	Arr		
6:00	2	2	2	200	-	-	-	-	SYD 1	SYD 1			2	
7:00	-	-	-	-	-	-	-	-	SYD 1	MEL 1	MKY 2		3	
8:00	4	4	4	200	-	-	-	-	SYD 1	MEL 1	MKY 2		1	
9:00	1	-	-	200	-	-	1	70				TSV 1	1	
10:00	2	1	1	200	-	-	1	70		MEL 1		TSV 1		
11:00	3	2	2	175	-	-	1	100	SYD 1	MEL 1	CNS 1	ROK 1	2	
12:00	4	3	3	175	-	-	1	100	SYD 1	MEL 1	CNS 1	ROK 1	2	
13:00	1	1	1	175	-	-	-	-			AKL 1		1	
14:00 (Busy hour)	5	5	5	175	-	-	-	-	SYD 2	MEL 1	MEL 2		2	
	3	3	3	175	-	-	-	-	SYD 2	MEL 1			1	
	2	2	2	175	-	-	-	-	SYD 1		AKL 1		2	
15:00	1	1	1	200	-	-	-	-	SYD 1				1	
16:00	1	1	1	200	-	-	-	-			DRW 1		1	
17:00	2	2	2	200	-	-	-	-	SYD 1	MEL 1	DRW 1		2	
18:00	3	3	3	175	-	-	-	-		MEL 1	ADL 1		1	
19:00	1	1	1	200	-	-	-	-			ADL 1		1	
20:00	2	2	2	200	-	-	-	-		MEL 1	ADL 1		2	
21:00	4	3	3	200	-	-	1	100	SYD 1	MEL 1	ADL 1	GLT 1	2	
22:00	3	2	2	200	-	-	1	100				GLT 1	2	
23:00	3	2	2	200	-	-	1	70	SYD 1	MEL 1		EMD 1	1	
24:00	3	2	2	200	-	-	1	70	SYD 1		ADL 1	EMD 1	2	
25:00	2	2	2	200	-	-	-	-		MEL 1	ADL 1		1	
26:00	1	1	1	200	-	-	-	-			SYD 1		1	
27:00	1	1	1	200	-	-	-	-	SYD 1				1	
28:00	58	50	50	9,475	-	-	8	680	16	14	20	8	29	
Total seats									10,155					
Seats per movement									175					
Busy hour movements									10					

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**10.4.7 Do Minimum Runway Scenario: 2050 Busy Day and
Busy Hour Flight Schedule and Forecasts**

10.4.7.1 Assumptions

The Do Minimum Scenario results in continued limited growth in 2050, with narrow-body turboprop domestic and trans-Tasman operations only.

10.4.7.2 Summary of 2050 Forecasts – Do Minimum Scenario

Forecasted Busy Day and Busy Hour aircraft movements for 2050 are shown in **Exhibit 10-11**, below.

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Exhibit 10-11: Busy Day and Busy Hour Aircraft Movement Forecasts: Sunshine Coast Airport (2050) Do Minimum Scenario

Commercial Aircraft Movements and Seats																
Hour	All Aircraft Movements		Narrowbody Jets		Widebody Jets		Turboprops									
	Ops	Seats	Ops	Seats	Ops	Seats	Ops	Seats								
6:00	3	3	200	-	-	-	-	-								
7:00	1	1	200	-	-	-	-	-								
	4	4	200	-	-	-	-	-								
8:00	3	3	175	-	-	-	-	-								
	1	1	175	-	-	-	-	-								
9:00	1	1	200	-	-	-	-	-								
	3	2	175	-	1	70	-	70								
10:00	4	3	175	-	1	70	-	70								
	2	1	175	-	1	100	-	100								
12:00	5	4	200	-	1	100	-	100								
	4	4	200	-	-	-	-	-								
(Busy hour)	2	2	200	-	-	-	-	-								
	2	2	200	-	-	-	-	-								
13:00	2	2	200	-	-	-	-	-								
	2	2	200	-	-	-	-	-								
14:00	4	3	200	-	-	-	-	100								
	4	3	200	-	1	100	-	100								
15:00	4	3	200	-	-	-	-	-								
	3	3	200	-	-	-	-	-								
16:00	2	2	200	-	-	-	-	-								
	4	3	200	-	1	100	-	100								
17:00	3	2	200	-	1	100	-	100								
	3	2	200	-	1	100	-	100								
18:00	4	4	200	-	-	-	-	-								
	2	2	200	-	-	-	-	-								
19:00	3	2	175	-	1	70	-	70								
	1	1	175	-	-	-	-	-								
20:00	3	2	175	-	1	70	-	70								
	1	1	175	-	-	-	-	-								
21:00	3	2	175	-	1	70	-	70								
	70	60	11,625	-	-	10	880	880								
Total seats		12,505														
Seats per movement		179														
Busy hour movements		11														

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10.5 Do Nothing Runway Scenario: Busy Day and Busy Hour Flight Schedules

10.5.1 Do Nothing Runway Scenario: 2018 Busy Day and Busy Hour Flight Schedule and Forecasts

10.5.1.1 Assumptions

The Do Nothing Scenario assumes that after 2020, the CASA exemption given to the airport would expire and the airport would be limited to turboprop aircraft only. The Do Nothing scenario assumes that no runway modifications would be made at any time during the forecast period through 2050.

10.5.2 Summary of 2018 Forecasts – Do Nothing Scenario

Forecasted Busy Day and Busy Hour aircraft movements for 2020 are shown in **Exhibit 10-12**, below.

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Exhibit 10-12: Busy Day and Busy Hour Aircraft Movement Forecasts: Sunshine Coast Airport (2018) Do Nothing Scenario

Commercial Aircraft Movements and Seats													
All Aircraft		Narrowbody Jets				Widebody Jets				Turboprops			
		Ops	Seats	Ops	Seats	Ops	Seats	Ops	Seats	Ops	Seats	Ops	Seats
Hour	Movements												
6:00	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00	-	-	-	-	-	-	-	-	-	-	-	-	-
8:00	-	-	-	-	-	-	-	-	-	-	-	-	-
9:00	1	1	150	-	-	-	-	-	-	-	-	-	-
10:00	2	1	150	-	-	-	-	1	70	-	-	-	-
11:00	3	2	175	-	-	-	-	1	70	-	-	-	-
12:00	2	2	175	-	-	-	-	-	-	-	-	-	-
(Busy hour)	2	2	175	-	-	-	-	-	-	-	-	-	-
13:00	2	2	175	-	-	-	-	-	-	-	-	-	-
14:00	3	3	175	-	-	-	-	-	-	-	-	-	-
15:00	2	2	175	-	-	-	-	-	-	-	-	-	-
16:00	-	-	-	-	-	-	-	-	-	-	-	-	-
17:00	1	1	175	-	-	-	-	-	-	-	-	-	-
18:00	3	2	175	-	-	-	-	1	70	-	-	-	-
19:00	4	3	200	-	-	-	-	1	70	-	-	-	-
20:00	1	1	200	-	-	-	-	-	-	-	-	-	-
21:00	-	-	-	-	-	-	-	-	-	-	-	-	-
	27	23	4,075	-	-	-	-	4	280	-	-	-	-
Total seats		4,355											
Seats per movement		161											
Busy hour movements		5											

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10.5.3 Do Nothing Runway Scenario: 2020 Busy Day and Busy Hour Flight Schedule and Forecasts

10.5.3.1 Assumptions

Continued limited growth due to restrictions to turboprop aircraft only.

10.5.3.2 Summary of 2020 Forecasts – Do Nothing Scenario

Forecasted Busy Day and Busy Hour aircraft movements for 2020 are shown in **Exhibit 10-13**, below.

Exhibit 10-13: Busy Day and Busy Hour Aircraft Movement Forecasts: Sunshine Coast Airport (2020) Do Nothing Scenario

Commercial Aircraft Movements and Seats									
Hour	All Aircraft Movements	Narrowbody Jets		Widebody Jets		Turboprops		Arr	Dep
		Ops	Seats	Ops	Seats	Ops	Seats		
6:00	-	-	-	-	-	-	-		
7:00	-	-	-	-	-	-	-		
8:00	2	1	175	-	-	-	70		1
	1	-	-	-	-	1	70		2
9:00	2	1	175	-	-	1	100		1
10:00	2	1	175	-	-	1	100		2
11:00	1	1	175	-	-	-	-		2
	1	1	175	-	-	-	-		1
12:00	2	2	175	-	-	-	-		1
(Busy hour)	2	2	175	-	-	-	-		1
13:00	1	1	175	-	-	-	-		1
	-	-	-	-	-	-	-		
14:00	2	2	175	-	-	-	-		1
15:00	2	2	175	-	-	-	-		1
16:00	-	-	-	-	-	-	-		1
	1	1	175	-	-	-	-		1
17:00	1	1	175	-	-	-	-		1
18:00	3	2	175	-	-	1	70		2
19:00	3	2	200	-	-	1	70		1
	2	2	200	-	-	-	-		2
20:00	-	-	-	-	-	-	-		
	-	-	-	-	-	-	-		
21:00	-	-	-	-	-	-	-		
	29	23	4,125	-	-	6	480		
Total seats			4,605						
Seats per movement			159						
Busy hour movements			4						

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10.5.4 Do Nothing Runway Scenario: 2030 Busy Day and Busy Hour Flight Schedule and Forecasts

10.5.4.1 Assumptions

Continued limited growth due to restrictions to turboprop aircraft only.

10.5.4.2 Summary of 2030 Forecasts – Do Nothing Scenario

Forecasted Busy Day and Busy Hour aircraft movements for 2030 are shown in **Exhibit 10-14**, below.

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Exhibit 10-14: Busy Day and Busy Hour Aircraft Movement Forecasts: Sunshine Coast Airport (2030) Do Nothing Scenario

Commercial Aircraft Movements and Seats												
Hour	All Aircraft		Narrowbody Jets		Widebody Jets		Turboprops		Ports (assumed)			
	Movements		Ops	Seats	Ops	Seats	Ops	Seats	Narrowbody Jets	Widebody	Turboprops	Arr Dep
6:00	-	-	-	-	-	-	-	-				
7:00	1	-	-	-	-	-	1	70			BNE 1	1
8:00	1	-	-	-	-	-	1	70			BNE 1	1
9:00	1	-	-	-	-	-	1	70			MKY 1	1
10:00	1	-	-	-	-	-	1	70			ROK 1	1
11:00	1	-	-	-	-	-	1	70			ROK 1	1
12:00	1	-	-	-	-	-	1	70			EMD 1	1
13:00	1	-	-	-	-	-	1	70			EMD 1	1
14:00	-	-	-	-	-	-	-	-			BNE 1	1
15:00	-	-	-	-	-	-	-	-			BNE 1	1
16:00	-	-	-	-	-	-	-	-				
17:00	1	-	-	-	-	-	1	100			GLT 1	1
18:00	1	-	-	-	-	-	1	100			GLT 1	1
19:00	1	-	-	-	-	-	1	70			EMD 1	1
20:00	1	-	-	-	-	-	1	70			EMD 1	1
21:00	-	-	-	-	-	-	-	-				
14	-	-	-	-	-	-	14	1,040	0	0	14	7
Total seats												
1,040												
Seats per movement												
74												
Busy hour movements												
2												

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10.5.5 Do Nothing Runway Scenario: 2040 Busy Day and Busy Hour Flight Schedule and Forecasts

10.5.5.1 Assumptions

Continued limited growth due to restrictions to turboprop aircraft only.

10.5.5.2 Summary of 2040 Forecasts – Do Nothing Scenario

Forecasted Busy Day and Busy Hour aircraft movements for 2040 are shown in **Exhibit 10-15**, below.

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Exhibit 10-15: Busy Day and Busy Hour Aircraft Movement Forecasts: Sunshine Coast Airport (2040) Do Nothing Scenario

Commercial Aircraft Movements and Seats													
Hour	All Aircraft Movements		Narrowbody Jets		Widebody Jets		Turboprops		Ports (assumed)				
	Hour	Movements	Ops	Seats	Ops	Seats	Ops	Seats	Narrowbody Jets	Widebody	Turboprops	Arr	Dep
6:00		-	-	-	-	-	-	-			BNE 1	1	
7:00		1	-	-	-	-	-	1	70		BNE 1		1
8:00		1	-	-	-	-	-	1	70		BNE 1		1
		1	-	-	-	-	-	1	70		MKY 1		1
9:00		1	-	-	-	-	-	1	70		MKY 1		1
10:00		1	-	-	-	-	-	1	70		ROK 1		1
11:00		1	-	-	-	-	-	1	70		ROK 1		1
		1	-	-	-	-	-	1	70		EMD 1		1
12:00		1	-	-	-	-	-	1	70		EMD 1		1
(Busy hour)		1	-	-	-	-	-	1	70		BNE 1		1
13:00		1	-	-	-	-	-	1	70		BNE 1		1
		-	-	-	-	-	-	-					
14:00		1	-	-	-	-	-	1	100		TSV 1		1
15:00		1	-	-	-	-	-	1	100		TSV 1		1
		-	-	-	-	-	-	-					
16:00		1	-	-	-	-	-	1	100		BNE 1		1
		1	-	-	-	-	-	1	100		BNE 1		1
17:00		1	-	-	-	-	-	1	100		GLT 1		1
18:00		1	-	-	-	-	-	1	100		GLT 1		1
19:00		1	-	-	-	-	-	1	70		EMD 1		1
		1	-	-	-	-	-	1	70		EMD 1		1
20:00		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
21:00		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					
		-	-	-	-	-	-	-					

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10.5.6 Do Nothing Runway Scenario: 2050 Busy Day and Busy Hour Flight Schedule and Forecasts

10.5.6.1 Assumptions

Continued limited growth due to restrictions to turboprop aircraft only.

10.5.6.2 Summary of 2050 Forecasts – Do Nothing Scenario

Forecasted Busy Day and Busy Hour aircraft movements for 2050 are shown in **Exhibit 10-16**, below.

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Exhibit 10-16: Busy Day and Busy Hour Aircraft Movement Forecasts: Sunshine Coast Airport (2050) Do Nothing Scenario

[illegible]

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10.6 Summary of Runway Scenarios

Exhibit 10-17, below, shows Busy Day and Busy Hour operations for the forecast scenario years for each of the runway scenarios.

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Exhibit 10-17: Forecast Aviation Activity for 2013-2050 - Runway Development Scenarios
Sunshine Coast Airport

Busy Day Commercial Aircraft Movements	Actual		Forecasted				CAAGR 2012-2050
	2012	2018	2020	2030	2040	2050	
<i>Busiest day of average week in 2012</i>	15						
Scenario 1 - New Runway (Baseline)	20	29	33	50	67	89	4.0%
Scenario 2 - Do Minimum - Narrowbody/turboprop or	20	27	31	42	58	78	3.6%
Scenario 3 - Do Nothing - Turboprop only	20	27	29	14	18	20	0.0%

Busy Hour Commercial Aircraft Movements	Actual		Forecasted				CAAGR 2012-2050
	2012	2018	2020	2030	2040	2050	
<i>2012 busy hour = 12:00-12:59</i>	5						
Scenario 1 - New Runway (Baseline)	5	6	6	9	11	14	2.7%
Scenario 2 - Do Minimum - Narrowbody/turboprop or	5	5	5	6	10	12	2.3%
Scenario 3 - Do Nothing - Turboprop only	5	5	4	2	2	4	-0.6%