

EXECUTIVE SUMMARY

Introduction

The Nanaimo Airport Commission engaged Jacobs Consultancy Canada Inc. (JC) to review the historic traffic trends and develop a passenger activity forecast, including Peak Hour forecast, to 2026.

Passenger traffic has fluctuated greatly over the past 20 years. Taken over the entire period 1986 to 2006, traffic has grown at an average rate of 2.7% per year.

Socio-Economic Factors Influence Traffic Levels

1. Population

The airport's primary catchment area includes all those areas where Nanaimo Airport (YCD) is the closest airport offering scheduled service and extends from Duncan in the south, to Tofino in the west, and to Qualicum in the north. The population of the primary catchment area was over 231,000 in 2005. Potential air services to destinations not served from Comox or Campbell River would attract passengers from a secondary catchment area that extends northwards from the primary area.

The Nanaimo Regional District forecasts a growth rate of 2.9% per year over the 25 years 2001 to 2026. Population growth will positively impact future traffic levels.

The aging of the population in the region could impact passenger travel over the period 2006 and 2026. JC estimates this will likely reduce the overall growth in passenger traffic based purely on population growth by a relatively minor 0.15% per year.

The population of the Nanaimo Regional District has a high mobility status in terms of their place of residence. The ties between the population of the region and the rest of Canada will continue to strengthen and likely result in a continuation of the strong air travel demand in the region. This will positively affect travel demand.

2. Economy

BC GDP growth is expected to be in the range 3.0% to 3.5% in 2007, a little slower than in 2005-06. Growth is expected to remain strong at around 3.1-3.4% through 2010. The recent strong economic growth has led to substantial growth in air travel in the region and is likely to continue.

3. Leakage to Nearby Airports

Vancouver Island is served by three major airports running from south to north:

- Victoria International Airport (YYJ);
- Nanaimo Airport (YCD); and
- Comox Airport (YQQ).

In addition, Vancouver International Airport (YVR) is only three-and-a-half hours travel from Nanaimo, via ferry, and offers service by 32 airlines to destinations world-wide. Campbell River is further north on the Island.

The closeness of the alternate airports and the large range of airlines and destinations served by those airports has led to a high proportion of the passenger traffic to/from the Nanaimo area using these alternates. Flight delays and cancellations due to weather are also driving passengers to use other airports. JC found that only 45% of Nanaimo area passengers currently use YCD.

The observed high leakage of Nanaimo area demand is consistent with an analysis of passenger traffic generation rates carried out by JC. The ratio of origin/destination (O/D) passengers (i.e., excluding connecting passengers) at each of the top 35 airports in Canada to the population of the surrounding metropolitan area shows an average ratio over these airports/cities of **3.4 O/D passengers per head of population. The ratio for Nanaimo is only 1.2**, well below the average. This significant leakage of travel demand within the primary catchment area could be recaptured with the right air service.

Forecast Growth in Area Travel Demand

A model was developed by Jacobs Consultancy of passenger traffic at YCD which related traffic to BC GDP, population growth and changes in Low Cost Air Service (LCAS). This model is used to determine the inherent relationship between GDP and population growth for the area, excluding the effects of LCAS. The relationship was then used in conjunction with forecasts of BC GDP and Nanaimo area population growth to estimate growth rates in air travel demand for the region.

Over the forecast period, economic and demographic factors are expected to be continuing drivers of passenger air travel in the region. Tourism is a strong contributor to growth in air travel and is closely related to overall economic growth in BC and Canada as a whole.

Other factors that will work positively to support enhanced air service include:

- A major expansion of hotel and conference facilities is planned for Nanaimo and is expected to be completed by late 2008;
- Malaspina University-College in Nanaimo has a major expansion underway;
- The changing demographic profiles associated with significant growth in net immigration of Baby Boomers;
- New residential development and tourism development in Port Alberni, West Coast Communities, Qualicum, Parksville, Nanaimo, Ladysmith, Chemainus, Duncan and the Cowichan Valley;
- Expansion of the Nanaimo Regional General Hospital;
- The Nanaimo Ice Centre;
- Significantly increased investment in destination marketing in Nanaimo and Parksville; and
- The continuing selection of Vancouver Island as a premier travel destination on a global scale.

The forecast total demand in the Nanaimo primary catchment area and the average annual growth rates are summarized below. The average annual growth rate over the 20 years is forecast to be 3.65% and area demand is forecast to increase from 295,000 to 604,000 by 2026.

Forecast Primary Catchment Area Total Travel Demand and Average Annual Growth Rates

Year	Forecast Enplaned/Deplaned (E/D) Passengers	Year Range	Avg. Annual Growth Rate
2006	295,000	2006-2010	5.7%
2011	386,000	2011-2015	4.0%
2016	465,000	2016-2020	2.9%
2021	534,000	2021-2026	2.5%
2026	604,000	2006-2026	3.6%

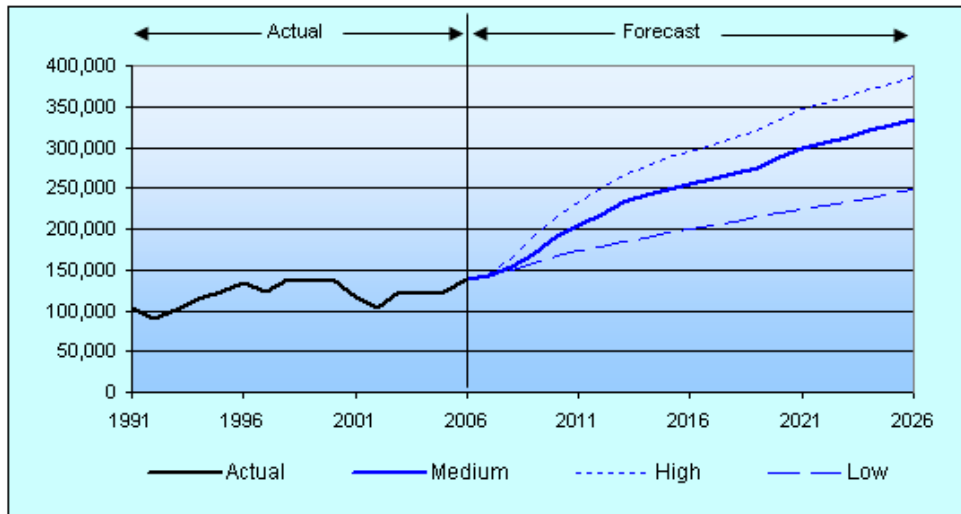
Note: Based on 252,000 in 2003 and estimated 17.1% growth from 2003 to 2006.

For comparison, TC's 2005 to 2018 forecast average annual growth rate was 3.3% for Canada and 3.6% for the Pacific Region. JC's forecasts for the 2006-2018 period while still conservative are higher at 4.35%, due primarily to the higher population and economic growth rates for the Nanaimo catchment area than for the Pacific region as a whole, and the major expansion to the conference facilities.

Forecast Passengers at Nanaimo Airport

Passenger forecasts for YCD were developed using the model outlined earlier. Three scenarios were developed, Medium (most likely), High and Low Scenarios. **The Medium and High Scenarios are based on the assumption that the runway extension is completed and is operational by mid-2010.**

The forecast E/D passengers at YCD under the three scenarios are presented graphically below, together with historical traffic. Under the most likely/Medium Scenario with a runway extension, traffic is forecast to increase to 334,000 by 2026 with an average annual growth rate of 4.6%. Under the Low Scenario, traffic will increase to 239,000 at an average annual growth rate of 3.0% - marginally higher than the past twenty years. Under the High Scenario, traffic will increase to 387,000 at an annual rate of 5.3%. The higher growth rates under the Medium and High Scenarios are possible due to recovery of traffic currently leaking to other airports.



Peak Hour Activity

Given the limited numbers of flights at YCD and small numbers of destinations served, the approach used to determine the peak hour activity was to forecast the likely aircraft at the gate during the forecast years.

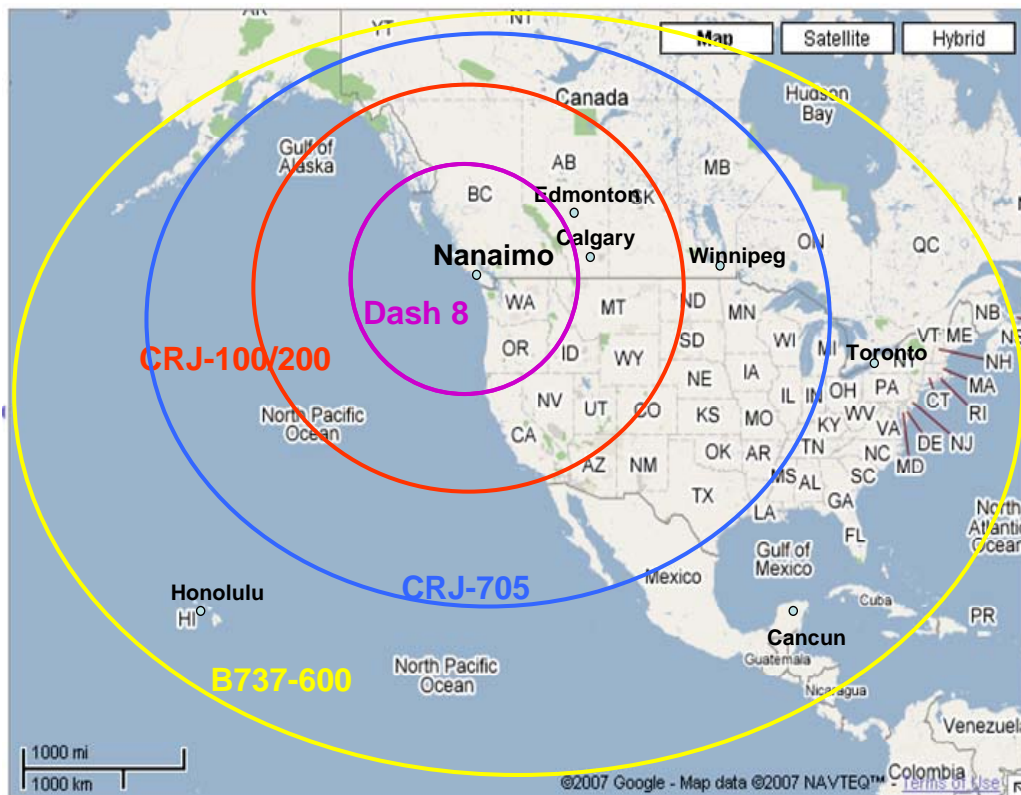
The peak hour movements of scheduled passenger service aircraft was three per hour in 2006 and is forecast to be:

- In 2010 - 2015: three movements per hour; and
- In 2020 - 2026: four movements per hour.

These figures are important because they drive the infrastructure needs and are used in other planning studies completed on behalf of the Nanaimo Airport Commission.

The table and graphic below illustrate the range of destinations that could be served from YCD and the notional runway length required. Carrier specific flight operations will determine the actual range and runway requirements.

Aircraft Characteristics				Range Sufficient to Serve Destination from YCD								
Airline and Aircraft Type	Pax	Runway Length at Max Take-Off Weight (MTOW) (ft)	Range (km)	Calgary	Edmonton	Winnipeg	Mazatlan	Toronto	Puerto Vallarta	Ixtapa	Cancun	
Regional Jet												
CRJ-100/200	50	5,010	1,574	Yes	Yes	No	No	No	No	No	No	
CRJ-200ER	50	5,800	2,491	Yes	Yes	Yes	No	No	No	No	No	
CRJ-200LR	50	6,290	3,148	Yes	Yes	Yes	No	No	No	No	No	
CRJ-705	75	5,833	3,184	Yes	Yes	Yes	No	No	No	No	No	
Narrow Body Jet												
B737-600	119	5,800-6,160	5,635	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
B737-700	136	6,700-7,050	6,115	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	



Note: Map shows indicative range. Northern extent has been reduced to fit map.