

EXECUTIVE SUMMARY

Introduction

The Nanaimo Airport Commission (NAC) engaged Jacobs Consultancy Canada Inc. (JC) to develop a Business Plan for the airport. The Business Plan incorporates the findings of the Terminal and Groundside Demand Capacity Analysis and Aviation Forecasts previously developed by JC.

Airport Background

The Nanaimo Airport (YCD) is located approximately 18 km south of downtown Nanaimo, in the community of Cassidy. The Airport is the primary air transportation gateway for the central Vancouver Island area and is closer to the Vancouver International Airport than any other Island Airport.

Ownership, Governance and Management

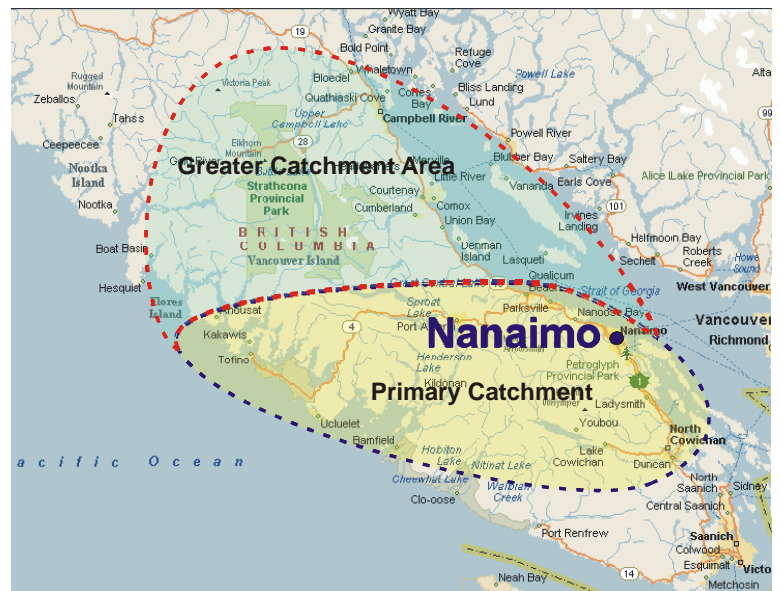
The Nanaimo Airport Commission (NAC) was incorporated in August 1990 as a not-for-profit authority under the Canada Corporations Act – Part II, and assumed management and operation of the Nanaimo Airport in April 1992. In December 1996, the commission was granted fee simple title to the Nanaimo Airport lands through the National Airports Policy transfer initiative.

NAC is governed by a Board of Directors comprising eight Directors serving terms of three years each. Directors are appointed by a range of local interests.

The Airport is managed by four full-time staff: a President & CEO, a Manager Operations and Maintenance, an Airport Administrator, and a Manager of Safety and Security.

Catchment Area

The airport's primary catchment area illustrated on the map includes a population of 231,535 and includes all those areas where YCD is the closest airport offering scheduled service. The greater catchment area includes the Regional Districts of Comox-Strathcona and Mount Waddington for an additional population base of almost 150,000.



Aviation Activity

1. Passengers

Passenger traffic has grown at an average rate of 2.7% per year over the 20 years from 1986 to 2006. The past 10 and 5-year average annual growth rates are 0.2% and 3.4% respectively.

Historical Passenger Traffic

Year	Enplaned/Deplaned (E/D) Passengers	% Change	Year	E/D Passengers	% Change
1995	123,805	8.3%	2001	115,609	-16.3%
1996	133,699	8.0%	2002	103,036	-10.9%
1997	123,361	-7.7%	2003	122,502	18.9%
1998	138,536	12.3%	2004	121,393	-0.9%
1999	135,850	-1.9%	2005	123,863	2.0%
2000	138,120	1.7%	2006	137,700	11.2%
Average Annual Growth Rates					
1986-2006	2.75%				
1996-2006	0.30%				
2001-2006	3.56%				

Source: Nanaimo Airport

Demand at Nanaimo is constrained by the type of aircraft and routes currently flown from YCD, which in turn are constrained by the airports infrastructure, most notably the existing runway length and reliability. As a result, potential traffic is lost (leaked) to Comox, Vancouver and Victoria. It is anticipated that this leakage would be recaptured with the right infrastructure and improved air service.

2. Aircraft Movements

In line with the experience at most of Canada's airports, aircraft movement traffic at Nanaimo has declined in recent years, in YCD's case at an average annual rate of 1.5% from 1994 to 2004. This trend continued through 2005 but provisional 2006 data indicates a reversal of this trend.

Historical Aircraft Movements

Year	Itinerant	Local	Total	% Change	Year	Itinerant	Local	Total	% Change
1994	37,847	9,146	46,993		2001	29,970	14,411	44,381	-11.0%
1995	38,010	9,474	47,484	1.0%	2002	28,743	11,544	40,287	-9.2%
1996	35,870	8,889	44,759	-5.7%	2003	27,133	14,606	41,739	3.6%
1997	36,548	8,730	45,278	1.2%	2004	25,423	15,043	40,466	-3.0%
1998	36,972	7,682	44,654	-1.4%	2005	25,474	11,480	36,954	-8.7%
1999	34,340	9,785	44,125	-1.2%	2006 f	25,525	8,761	34,286	
2000	33,477	16,367	49,844	13.0%					
Average Annual Growth									
1995-2005	-3.9%	2.3%	-2.4%						
2001-2005	-4.0%	-5.5%	-4.5%						

3. Cargo

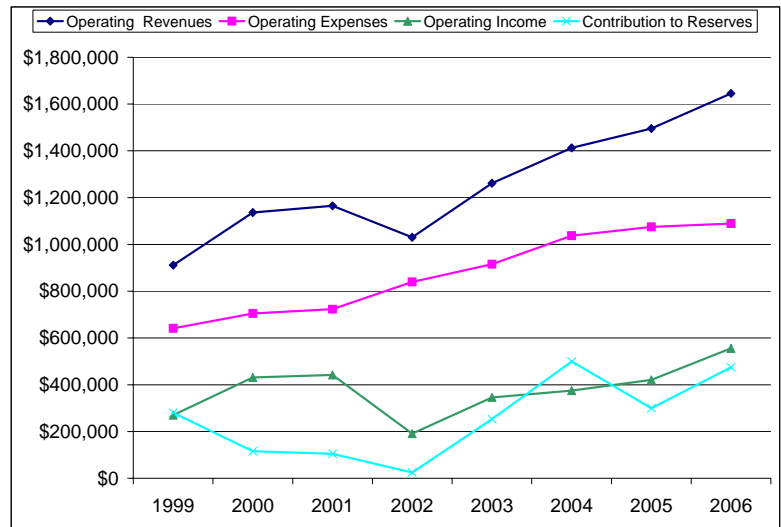
There are three commercial air cargo operators at the airport as well as six courier operators.

Financial Performance

Nanaimo Airport's financial health is strong as demonstrated by the positive net income year over year. Income dropped in 2002 when short-term revenues fell but expenditures did not to the same degree.

The margin (net operating income over revenues) of the Nanaimo Airport has varied between a high of 38% in 2000, to a low of 18.5% in 2002.

Nanaimo Airport Financial Performance - 1999-2006



Asset Summary

1. Air Terminal Building (ATB)

The original 941 sq. m. ATB was constructed in 1991 and is a modern passenger facility supporting a broad range of services and amenities. The ATB was extended by 290 sq. m. in 2004 to provide a new secure hold room and Canadian Air Transport Security Authority (CATSA) security function. From a physical review of NAC's assets in early 2006, the airport building is considered well maintained.

A March 2007 Demand and Capacity Analysis Study¹ shows that the most likely scenario of 115 peak hour passengers requires a terminal building that is approximately 1,652 square metres in size, 35% larger than the existing terminal. It predicted that most of the terminal processors and spaces will be overloaded by the year 2020.

2. Airside

The airport presently has a single asphalt runway with two taxiways:

- Runway 16/34 is 5,000' feet (1,524 m) long by 200' wide;
- Taxiway Golf is unlit and is restricted to daytime use only with a maximum gross weight of 5,000 lbs;
- Taxiways Alpha, Bravo and Charlie are asphalt/gravel and also restricted to 5,000 lbs;
- Apron II is restricted to 5,000 lbs, daytime use only; and

¹ Source: YCD Demand-Capacity Analysis undertaken by JC.

- The runway is equipped with a non-precision instrument approach that includes Distance Measuring Equipment (DME), Non Directional Beacon (NDB) and Omni-directional Aviation Lighting System (ODALS).

3. Groundside

The demand-capacity analysis indicates a requirement for approximately 348 parking spaces by the year 2026 – an increase of 85% over the current capacity.

4. Support Facilities and Equipment

The site is well equipped with relatively new vehicles and equipment. With growth however, NAC will have to meet CARs 303 requirements in which a larger emergency response vehicle will be required.



5. Industrial and Commercial Land

There is significant opportunity to develop the lands – both airside and groundside. There are 150 acres of prime groundside land that could be readily developed.

Noise and Environmental Issues

1. Noise

There are limited residential areas within the current noise contours of the airport. Any noise impacts related to an increase in gauge of aircraft from turboprops to jets will be fully addressed in a proactive stakeholder consultation that will be undertaken as the runway extension program moves into the detailed pre-construction phase.

2. Ground, Air and Water Quality

Surface run-off is directed to the Haslam River. It is expected that there would be an increase in storm water run-off ranging from 10% to 25% depending on the runway extension length. Stormwater retention can be accommodated if required.

3. Habitat and Natural Environment Enhancements

The Haslam River is designated under the Regional District of Nanaimo Official Community Plan (RDN-OCP) as an environmentally sensitive riparian ecosystem. NAC is committed to the long term environmental stewardship of this area.

Regional Demographic Changes

The City of Nanaimo is the second largest urban centre on Vancouver Island, with a population of 78,271. The Regional District of Nanaimo (RDN), including the City of Nanaimo, Parksville, and Qualicum) has a population of 137,580 (2004). During the period 1981 – 2001, the RDN experienced growth rates averaging 3%. This rate is anticipated to continue through to 2026 at which time the population will reach 215,247.

The Cowichan Valley Regional District has a current population of 76,929. During the period from 1996 – 2006, the growth rates averaged 4.6 %. A high growth rate is anticipated to continue through to 2026 at which time the population is estimated to reach 100,000.

Demographics of migrants within the Nanaimo Airport's catchment area are changing, with the highest proportion being 45-64 years of age. The average total income of Nanaimo RD residents in 2002 was \$38,661, up 4.3% from 2001.

There are many positive indicators that require the Nanaimo Airport Commission to plan for future growth. Recent or planned economic activity in Nanaimo that will likely influence future air passenger growth includes:

- A major expansion of 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 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 world- wide scale.

Airline Issues

Due to changes in the airline industry, many smaller airports in British Columbia have either lost their Air Canada Jazz scheduled passenger service to Tier III carriers or have seen a reduced service (number of carriers and frequency). Air Canada Jazz has maintained its service from Nanaimo to Vancouver and has enjoyed significant increases to passenger traffic during the past 4 years.

Regulatory Environment

In recent years, airports have faced increased operating costs as a result of growing regulatory burdens. Recent changes mean that when passenger traffic at YCD reaches 180,000 E/D annual passengers (anticipated in mid-2009), the NAC will be subject to Transport Canada Civil Aviation Regulation (CAR) 303 – Aircraft Rescue and Fire Fighting at Airports and Aerodromes, as a Category 5 airport.

Alternate Airports

People traveling to/from North-Central Vancouver Island to the BC mainland and other Canadian and foreign destinations have a wide range of travel choices and are not restricted to the use of the Nanaimo Airport. The competing choices include:

- Travel by road and ferry to Vancouver;
- Drive 1.8 hours north to Comox Valley Airport;
- Drive two hours south to Victoria International Airport;
- Drive to Seattle for flights to US and international destinations; and
- Fly from Nanaimo to Vancouver via sea plane service out of the Nanaimo Harbour or Brechin Point terminals.

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 alternate airports.

Competitive Advantage

The City of Nanaimo and its surrounding regions, have a catchment population which is more than four times greater than the Comox Valley. YCD is the natural point of departure/arrival from the mid-Island area. However, until a runway infrastructure that is capable of handling passenger jets reliably is available, Comox Valley Airport will continue to hold a significant operational advantage over YCD.

Nanaimo Airport – Strategic Direction

Nanaimo Airport's strategic direction is to provide first class services and facilities that support the economic development and passenger travel needs of the community.

The following strategies have been identified by the Nanaimo Airport Commission, in meeting its strategic objectives:

1. Improve airside infrastructure to enhance winter reliability and to attract new jet air service;
2. Focus air service marketing efforts on new domestic air service to Alberta;
3. Develop transborder service; and
4. Develop groundside infrastructure to meet forecast demand for the next 20 years.

Traffic Forecasts

1. Regional Demand

The YCD Aviation Activity and Forecast Report² predicts the average annual growth rate for total travel demand in the Nanaimo primary catchment area over the 20 year period (2006-2026) is forecast to be 3.65% and area demand is forecast to increase from 295,000 E/D passengers to 604,000 by 2026.

2. YCD Passenger Traffic Growth

Using the medium (most likely) growth scenario **with a runway extension**, passenger traffic at YCD is forecast to increase to 334,000 by 2026, with an average annual growth rate of 4.6%.

3. Aircraft Movements Growth

With implementation of the most likely new air service scenario, a total of 26,280 new (incremental) air traffic movements are anticipated during the planning period (2006-2026). On average it will total 3.6 traffic movements per day.

Infrastructure Plan

The Nanaimo Airport Commission has outlined a three-part capital program to overcome the issue of unreliability during winter weather events, and to prepare the airport for future growth. This three part program comprises:

- Extending the runway by 1,600 feet and undertaking the associated taxiway improvements;
- Installing high intensity runway lighting; and
- Achieving approved and published GPS-WAAS satellite positioning system approaches.

Additional systems are also being reviewed by the NAC.

NAC has also identified other significant capital projects intended to support their strategic direction:

- Expansion to the road system (Mustang Road) to improve access (2010);
- Expansion to Terminal Building, based on increased passenger flow within the next ten years;
- Expansion of vehicle parking lot (Phase I – 20% in 2010; Phase II – 80% in 2016);
- Relocation of the Combined Services Building (CSB) expansion;
- Emergency Response Services (ERS) vehicle enhancements to meet CAR 303 requirement;
- Installation of water and sewage treatment facility; and

² Undertaken by JC and completed in March 2007

- Apron expansion to the north which is triggered by increased and larger aircraft movements, both passenger and cargo. A nominal 2011 date has been assumed.

Runway Extension

To further the Nanaimo Airport Commission's strategic direction the NAC intends to extend the runway to 6,600 feet to allow it to meet the growing demands for air service to more locations within North America.

There is a clear and increasing demand for jet service to Alberta but the current infrastructure has deficiencies which need to be addressed, most particularly:

- Reliability issues during winter weather events due to lack of appropriate landing aids;
- Inability to accommodate commercial regional jets due to a 5,000 ft runway.

1. Benefits of a Runway Extension

The planned 1,600' runway extension confers a number of benefits including:

- Improved service for mid-Island residents and visitors to the region;
- Matched supply to increasing passenger demand;
- Enhanced transportation efficiencies;
- Enhanced economic development; and
- Enhanced safety.

2. Risks of Not Extending the Runway

The turboprop aircraft currently being used by AC Jazz to service the only currently scheduled route to YVR - the Dash 8 – has no clear replacement in its class. Eventually Air Canada will have to replace the aircraft and may choose an aircraft that either reduces the level of service (such as a 19-seater) or an RJ type of aircraft that cannot economically and consistently serve the market. Not extending the runway and improving the approach aids presents a material risk to the future of the airport and the potential economic growth in the primary catchment area.

Air Service Marketing

Initial air service marketing will be focused on air service to Alberta. As shown in the table below, most of the passengers for this service will be a recoup of existing leakage.

**Projected Annual Demand for Service to Calgary in 2007
(with Beyond Markets)**

Destination	2007 Total Catchment Area Demand (Annual E/D)	Est. Market Share New Flight will Capture	Potential Stimulation in Demand	Likely ED Passengers on New Service
Calgary	22,125	50%	10.0%	12,169
Connecting markets	116,994	14%	0.1%	16,583
Total E/D Passengers	139,119			28,752

Financial Plan

1. Capital Infrastructure Plan

Using the stated assumptions in the Business Plan, the Nanaimo Airport Commission estimates its capital requirements associated with the runway expansion, improved reliability, expanded terminal, infrastructure and parking are as shown below:

Capital Estimates	
Runway Expansion	\$10.0 million
Reliability	\$2.5 million
Flight Path Protection and Studies	\$3.2 million
Phase 1 – Sub-total	\$15.7 million
Terminal Expansion	\$4.0 million
Parking & Roads	\$1.5 million
Water & Sewer Infrastructure	\$3.0 million
Phase 2 – Sub-total	\$8.5 million
Total – All Phases	\$24.2 million

The Nanaimo Airport Commission has had a strong record of sound financial management since its inception as a self-financing community-based authority in 1992.

Over the past several years, NAC has invested \$3.2 million on issues concerning flight path protection and studies, to ensure the expansion can proceed.

NAC is able to contribute financially to the capital infrastructure plan, through available revenue streams. Its ability to contribute is balanced by the need to deliver a sustainable, operating business model, and as such, requires external funding partners to support the necessary infrastructure improvements.

2. Revenue Growth

Additional revenue streams to finance airport development are being considered, including;

- Growth in passenger traffic;
- Increased passenger fee charged to airlines;
- Airport Improvement Fee (AIF) collected from passengers;
- Non-aeronautical/groundside development revenue enhancement.

3. Capital Funding Sources

Two funding streams beyond the current operating surplus are most likely available: external sources (particularly through the Transportation Partnership Program); and internally instituted AIF.

4. Affordability

Under a realistic growth scenario, the 1,600' runway extension (including overlay) and other capital expenditures related to the expansion of the ATB and parking areas are affordable only if external grant funding is received at two-thirds of the capital cost. This assumes a \$5 AIF for the entire 20 years.

The affordability of the project under the 1/3 or no external funding scenarios could change if the level of the AIF were to increase over time.