REPORT for:

Calgary Airport Authority
5 Year Performance Review (2007-2011)

April 2012

Submitted to:
The Calgary Airport Authority
2000 Airport Rd. N.E.
Calgary, Alberta T2E 6W5
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SUMMARY OF FINDINGS

SNC-Lavalin Inc. Airports Group (SLI) was retained by the Calgary Airport Authority ("the Authority") as a qualified independent third party (the "Consultant") to conduct the fourth Five Year Performance Review of the Authority covering the period 2007-2011. The Review was undertaken pursuant to the Lease between the Authority and Her Majesty the Queen in Right of Canada represented by the Minister of Transport dated July 1, 1992 (the Ground Lease) and the Regional Airports Authorities Act of Alberta (RAAA).

The scope of the Review as defined by the Authority (which branded itself as “YYC” during the Review Period) encompassed a high level review of the airport management, operation, and financial undertaking with an emphasis on providing meaningful and useful observations regarding the Authority’s performance. It did not include a review of compliance with the Ground Lease, other than the requirements of Section 9.02, and does not constitute a financial or other formal audit of the Authority’s well being. The Review Team’s overall approach was undertaken in three broad phases:

Phase 1: Data gathering;
Phase 2: Analysis; and
Phase 3: Identification and documentation of issues, findings and opinion.

To meet YYC’s Terms of Reference for the Review, SLI carried out the following broad tasks:

- Document Review;
- Discussions with Authority Senior Staff including two days of presentations from a range of YYC staff;
- Interviews with the Board Chair, Vice-Chair and Board Committee Chairs;
- Interviews with key external stakeholders; and
- A site visit to verify documents and processes, and to conduct a physical assessment of the assets.

SLI was engaged to provide its professional opinion concerning a number of specific issues which are summarized below:

**The scope, extent and nature of the Terms of Reference of the Review issued by YYC:**

- **Finding:** In the Consultant’s professional opinion, based on its knowledge and experience of similar studies, the Terms of Reference for the Review were appropriate to ensure a comprehensive review of the five year performance of YYC. Further, it is the Consultant’s opinion that these Terms of Reference accurately reflect the intent of the federal contract calling for the Review.

**The extent to which YYC has been and is operating a safe and efficient service to the public:**

- **Finding:** Based on its extensive review of the documentation provided, its professional knowledge and experience, and its independent consultations with stakeholders, YYC employees, management and members of the Board, it is the Consultant’s professional opinion that YYC has and continues to operate a safe and efficient service to the public.

- **Finding:** In its opinion, the Consultant finds that YYC has met the many challenges inherent in its line of business, particularly those created by the global recession that occurred during the Review Period, and has appropriately responded to these changes in its external environment – be they of a regulatory, environmental, social, technological or business nature.

- **Finding:** The Consultant finds that YYC has demonstrated its commitment to customer service, many of its initiatives having been recognized positively by its customers and peers, and has implemented many tools to monitor its performance from a variety of perspectives.
The extent to which YYC has been and is operating an efficiently run undertaking in accordance with its business plans:

- **Finding**: To the satisfaction of the Consultant, YYC has demonstrated the importance it places on a comprehensive strategic and business planning process which accords with industry best practices, and has demonstrated its commitment to continuous improvement in meeting the Authority's legislated mandate.

- **Finding**: From a review of the documentation provided during the review, including such documents as the audited financial statements and Annual Reports to the Board and to the public, it is the Consultant’s professional opinion that the Authority is focused on efficiently meeting its stated goals which are relevant to such an undertaking.

The extent to which financial and management controls, information systems and management practices have been put in place and are maintained:

- **Finding**: In the Consultant’s opinion, YYC has a comprehensive and appropriate management structure which employs sound planning and control mechanisms to safeguard the Authority’s and Landlord’s assets. Furthermore, the Consultant finds that YYC appropriately safeguards and controls its assets through an ongoing program of maintenance, rehabilitation and replacement, as required.

- **Finding**: Based on its extensive review of the documentation provided, its professional knowledge and experience, and its independent consultations with stakeholders, the Authority’s employees, management and members of the Board, it is the Consultant’s professional opinion that YYC manages its financial, human and physical capital resources economically and efficiently.

- **Finding**: From observation of the airport’s operational staff and facilities the Consultant is of the opinion that airport operations have been carried out effectively and in the best interest of the various user groups which depend on the airport to provide first class facilities.

- **Finding**: YYC has demonstrated during the Review, its ongoing commitment to environmentally responsible airport operations and has in place plans, monitoring, processes and advisory mechanisms to ensure compliance.

- **Finding**: In the Consultant’s opinion, YYC has prudently managed its financial assets both in terms of trends and standing among peer airports.

Other information as required by a special resolution of the Authority:

- No other information outside of the Terms of Reference was requested during the course of the Consultant’s review.

Any concerns SI has with the preceding:

- The Consultant was afforded every opportunity to access all appropriate documentation and to consult with any and all individuals and organizations it saw fit. The Consultant found YYC’s management and staff focused and prepared for the Review, and its employees knowledgeable, committed and cooperative. The Consultant has no concerns with the preceding.

Any other relevant information about YYC:

- YYC has been proactive and open in communicating with the aviation industry at large, and with the key external stakeholders in the community. YYC staff have shown themselves to be knowledgeable, committed and enthusiastic in taking ownership of the many challenges and opportunities encountered over the Review Period.
1.0 INTRODUCTION

PURPOSE OF THE REVIEW

SNC-Lavalin Inc. Airports Group (SLI) was retained by the Calgary Airport Authority (“the Authority”) as a qualified independent third party (the “Consultant”) to conduct the fourth Five Year Performance Review of the Authority covering the period 2007-2011. The Review was undertaken pursuant to the Lease between the Authority and Her Majesty the Queen in Right of Canada represented by the Minister of Transport dated July 1, 1992 (the Ground Lease) and the Regional Airports Authorities Act of Alberta (RAAA).

Section 29 of the Regional Airports Authorities Act requires the Authority (which has branded itself as “YYC” during the Review Period) to have a review of the YYC’s management, operation and financial undertakings (the “Review”) conducted every five years. The review must be conducted by an “independent” entity as defined in s.34 of the Regional Airports Authorities Regulations, and must include a written report which will be available to the public. This report, under Section 29 of the Act must include statements by, or opinions of, the Independent Reviewer describing or dealing with:

a) The terms of reference of the review, including its scope, extent and nature;

b) The extent to which the Authority was operating:
   i. A safe and efficient service to the public, and
   ii. An efficiently run undertaking in accordance with its business plans.

c) In relation to the Authority and its subsidiaries, the extent to which their financial and management control and information systems and management practices were maintained in a manner that provided reasonable assurance that:
   i. The assets of each such corporation were safeguarded and controlled; and
   ii. The financial, human and physical resources of each such corporation were managed economically and efficiently and its operations carried out effectively.

d) Any further information that is required by a special resolution of the Authority; and

e) Any concerns or qualifications that the reviewer has with respect to the preceding.

The engagement encompassed a high level review of the airport management, operation, and financial performance with an emphasis on providing meaningful and useful observations regarding the Authority’s performance. It did not include a review of compliance with the Ground Lease, other than the requirements of Section 9.02, and does not constitute a financial or other formal audit of the Authority’s well being.

A list of organizations and Authority personnel contacted in the performance of this Review are included at Appendix A; a list of the documents reviewed are listed at Appendix B, and the Terms of Reference for the Review are included at Appendix C.
STUDY APPROACH AND METHODOLOGY

The engagement was conducted in three phases:

1. **Data Gathering** through document review and interviews with key stakeholders, including attending two full days of presentations from YYC staff and a tour of the facilities;
2. **Analysis** of the information received, including that obtained at a presentation to the Consultant by YYC staff; and
3. **Documentation of findings and opinions** concerning the overall state of the operation, management and development of the Airports under the YYC’s management during the period 2007-2011.

To meet the Terms of Reference for the Review, SLI carried out the following broad tasks:

- **Document Review.** To develop a baseline for its investigations, SLI reviewed a range of documentation provided by YYC management pertinent to the operation, management and development of the airport over the past five years;
- **Discussions with YYC Senior Staff.** SLI received presentations from and interviewed senior management and decision makers at YYC regarding their assessment of developments affecting airport activity, safety, efficiency, and financial performance and any major policy initiatives undertaken or envisioned, and challenges that have arisen;
- **Stakeholder Interviews.** A list of stakeholders to be consulted was developed and agreed with YYC at the outset of the engagement. SLI contacted the Chairman of the Board and Board Committee Chairs, representatives from Board nominating organizations, significant community stakeholders, and key tenants to discuss the issues under review;
- **Operation and Business Assessment.** SLI evaluated airport operations to a level sufficient to enable it to assess safety and efficiency issues. Specific attention was paid to:
  - Key activity statistics and indicators available from YYC;
  - Evidence of airport and public safety and security issues;
  - Airport environmental management;
  - Airport risk management;
  - Airport asset deployment and effectiveness;
  - Customer service initiatives;
  - Airport capital expenditures and financing over the five-year period;
  - Public accountability and communications issues;
  - Local and regional economic development impacts; and
  - A review of YYC’s strategic and annual business plans and the extent to which they have been implemented.
- **Asset Assessment.** Existing assets were assessed to provide the basis for an opinion on the preservation of assets and maintenance in a “first class condition”. Assets were assessed visually, condition reports were reviewed, and maintenance programs and records were reviewed; and
- **Financial Assessment.** Budgets and results for the five years ending December 31, 2011, representing the end of the fourth five year term of the 60-year Ground Lease, were reviewed. Financial performance was evaluated to ensure it provided sufficient coverage for YYC to remain financially self-sustaining. This included costs associated with the operation, maintenance and repair, capital improvements and other expenditures deemed necessary by YYC for the fiscal years under review. SLI’s Review included an assessment of the key activity statistics and indicators that drive airport revenues and expenses, and a historical perspective on changes to those key drivers where they were available.
2.0 CALGARY INTERNATIONAL AIRPORT (YYC) AND SPRINGBANK AIRPORT (YBW) - BACKGROUND

HISTORY

Calgary International Airport (YYC)

Calgary’s original airfield opened in 1914, was located in Bowness, 10 kilometres from the City, and featured a grass airstrip and ramshackle hut that served as both hangar and terminal building. In 1938, the facility was moved to its present location and was named McCall Field. In 1940, the airport was taken over by the Federal Department of Transport in support of the war effort, and was expanded to include four runways and five wartime hangars. In 1949, the airport was returned to its original owner, the City of Calgary. In 1956, the City opened Canada’s most modern air terminal in the southwest corner of the airport; however when jet aircraft were introduced five years later, the new terminal became obsolete. Given resource constraints, the City of Calgary sold the airport to Transport Canada in 1966. Around the same time, the airport became known as Calgary International Airport. Transport Canada launched a program of land acquisition and airfield construction, and in 1977, a new terminal building opened. As part of the federal government’s National Airports Program, in July 1992, the Calgary Airport Authority assumed responsibility for the operation and expansion of the airport under the terms of a 60 year Ground lease. In late 2011 (at year 20), YYC served notice that it intended to exercise its option of extending the lease term by 20-years to facilitate long-term sub-tenancy leases.

The Calgary International Airport is currently the fourth busiest airport in Canada, with passenger traffic exceeding 12.8 million. As of late 2011 YYC was undertaking a major airport development initiative that includes a new international terminal building, a parallel runway, and new parking facilities, not to mention many commercial land developments.

Calgary Springbank Airport (YBW)

The Calgary Springbank Airport, located west of Calgary, just north of the Trans Canada Highway, began operations in February 1969 although the official opening was not until 1971. The Airport was owned and operated by Transport Canada as a reliever airport to the Calgary International Airport until October 1997 when the Calgary Airport Authority assumed management of the airport under the terms of a long-term (60 year) lease agreement. YYC has not yet exercised its option to purchase YBW.

NATIONAL AIRPORTS POLICY (NAP)

While YYC moved from federal operational control in 1992 (along with Vancouver, Edmonton and the two major airports in Montreal), the National Airports Policy (NAP) came into effect only in 1994. The objective of the NAP was to replace the extant federal transportation regime, with an integrated and affordable national system that emphasized safety, reliably and efficiency, while at the same time building strong, viable, local companies through the commercialization process.

The NAP provides a framework that: defines the federal government’s role with airports as being that of regulator, but no longer operator; shifts the cost of running Canada’s airports from taxpayers to those who use the facilities; and provides the operator with the ability to efficiently develop and operate the airports based on market needs.
Calgary International is one of twenty-six airports considered part of the National Airports System (NAS) that link the country from coast to coast and internationally. NAS airports are “considered essential to Canada’s air transportation system, supporting both domestic prosperity and international competitiveness”.

Airports are like cities in and of themselves, in that they are capital intensive, have significant public exposure and accountability, have a wide variety of stakeholder interests to balance, and influence more than they control. Moreover, there is the added complexity of being heavily regulated, taxed, and having to continuously meet the evolving needs of the airlines.

While there are no “free” choices, the benefits of the NAP are many, particularly that Airport Authorities have the local ability to plan, design, finance and construct based on cost versus service decisions that serve the economic development of the region.

**OWNERSHIP AND GOVERNANCE**

The Calgary Airport Authority was incorporated in July 1990 as a non-share capital, not-for-profit Corporation pursuant to the Regional Airports Authorities Act (RAAA) and commenced negotiation for the transfer of the Calgary International Airport.

Transfer of YYC to the Authority by way of a long-term, 60 year lease (with an additional 20-year option that was exercised in 2011) was limited to operation, management and development of the airport property. Ownership of the airport lands remains with the Government of Canada. YYC pays rent to the Government, based on a negotiated rent formula. The Calgary Springbank Airport was transferred to YYC in 1997 by way of similar long-term lease, with a term concurrent with the Ground Lease for the Calgary International Airport.

The operations of the Authority are governed by a set of by-laws last updated in June 2008.

**AIRPORT ROLES**

**Calgary International Airport (YYC)**

As listed in annual reports and in the 2009-2013 Strategic Operating Plan:

“As one of Canada’s busiest airports, Calgary International Airport is an important component of the Canadian civil air transportation system. The airport functions as an important hub for domestic, transborder and international passengers and air cargo. Working within the framework of the Regional Airports Authorities Act (Alberta), the Calgary Airport Authority is responsible for operating the facility in a safe, financially self-sufficient manner for the benefit of the region, Canada and the international community. The operation, development and capacity management of the Calgary International Airport will be directed to supporting commercial and corporate air transport operations and their associated services.”

---

1 Transport Canada website
Calgary Springbank Airport (YBW)

The role of the Calgary Springbank Airport was clarified slightly during the development of the 2009-2013 Strategic Operating Plan, and now reads as follows:

“Springbank Airport is a certified aerodrome and the most significant general aviation airport in the Calgary Region. The operations and development of Springbank Airport will be directed to supporting light aircraft activity including flight training, recreational flying, corporate and air charter activity, and compatible aircraft maintenance, manufacturing and support operations.”

AIRPORT FACILITIES AND SERVICES

Calgary International Airport (YYC)

At YYC, the Authority controls the facilities associated with airside activity, terminal activity, on-site roadways, vehicle parking, signage, facility maintenance, terminal cleaning and commercial leases.

The airport currently has the following facilities:

- Total Land Area: 2,081 ha
- Terminal Building: 141,648 m² (gfa)
- Loading Bridges: 34 jetway bridges + 14 ground load positions
- Three Runways
  - 16-34: 3,863 m (12,675 ft)
  - 10-28: 2,438 m (8,000 ft)
  - 07-25: 1,890 m (6,200 ft)
- Commercial Land under Lease: 316 ha
- Third Party Industrial Space: 409,000 m²

The following passenger services are provided either directly or through third party commercial leases:

- Four parking choices (short term, long-term economy, overnight), plus a cell phone waiting lot
- Retail shopping (55 outlets)
- Pharmacy
- Food and beverage services (43 outlets)
- Wi-Fi (free)
- Baggage carts (free)
- Bank machines (4 full-service) and currency exchange
- Kids’ play areas
- Medical centre
- Visitor Information Centre / Tourism Calgary
- Lost and Found
- Coat and luggage storage
- Club car shuttle service
- Kiosks for greeting and information stations
- Three travel lounges (Servisair Chinook Lounge, Rocky Mountain Lounge, AC Maple Leaf Lounge)
- Ground transportation (car rentals, public bus, taxi, sedan and limousine, hotel shuttles, bus tours)
- Porter service
- SpacePort education and entertainment facility
- Chapel
- Hair salon
- Arcades
- Shoe shine service
- Wellness spa
- Shiatsu massage chairs
- Courier / shipping service
- Luggage wrap express
- Customs and Immigration Services (Canada and US)
- Volunteer ambassadors (White Hats)
In an effort towards creating a positive passenger experience, the Authority has devoted a great deal of effort to positively influence a wide range of other services providers at YYC, including passenger check-in, pre-board security screening, US pre-clearance, on-time departures, baggage handling and delivery, and customs and immigration.

The following services are available at the airport to airlines and aircraft owners:

- De-icing
- Aircraft servicing
- Fuelling
- Check-in processing
- Air navigation services
- Ground handling
- Commissary
- Weather information
- Aircraft maintenance
- Airside perishable facilities (cooler/freezer)
- Main deck loader capability to 60,000 lbs
- Crane accessibility
- Onsite freight forwarding and brokerage
- Live animal facility complete with animal handling facilities, animal loading and penning systems, weighing station and onsite crating
- Onsite CFIA veterinary services

YYC has the following air cargo and warehousing facilities:

- 655,487 ft² airside warehouse space (142,687 ft² in McCall North and 512,800 ft² in Deerfoot South)
- 64,197 ft² airside office space (27,997 ft² in McCall North and 36,200 ft² in Deerfoot South)
- Two 500,000 ft² dedicated cargo aprons (one in McCall North and one in Deerfoot South)
- Nose tethers in ground fuelling
- 655,487 ft² airside warehouse space (142,687 ft² in McCall North and 512,800 ft² in Deerfoot South)

**Calgary Springbank Airport (YBW)**

YBW has the following facilities and activities:

- 1,000 acre campus within the County of Rocky View
- Two asphalt runways
  - 16/34: 5,000’ x 98’
  - 07/25: 3,423’ x 100’
- Calgary Flying Club - Flight training (all ratings including Mountain flying)
- Full NAV Canada air traffic control services between 07:00-23:00 daily
- Av-gas 100LL and Jet A-1 fuel
- Fire fighting facilities
- Car rental

**AVIATION ACTIVITY**

**Passenger Traffic**

YYC is the fourth busiest airport in Canada. Passenger traffic at YYC crossed over the 12 million mark for the first time in 2007 and at the end of 2011 stood at 12.8 million.
Traffic during the Review Period has grown a total of 4.4% or at an average annual rate of 1.1%. YYC ranks fourth among the top 8 airports in Canada in terms of total and average annual passenger growth during the Review Period.

Traffic at YYC is largely dominated by domestic passengers, averaging around 70% of the total traffic, followed by transborder at 20% and international at 10%.

The largest growth during the Review Period has been in the international sector, particularly during the period 2007-2008 and 2009-2010, as shown in the table below:

<table>
<thead>
<tr>
<th>Years</th>
<th>YYC Passenger Traffic - % Growth</th>
<th>Domestic</th>
<th>Transborder</th>
<th>International</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-2008</td>
<td>1.3%</td>
<td>1.8%</td>
<td>10.3%</td>
<td>2.2%</td>
<td></td>
</tr>
<tr>
<td>2008-2009</td>
<td>-3.2%</td>
<td>-2.7%</td>
<td>2.4%</td>
<td>-2.6%</td>
<td></td>
</tr>
<tr>
<td>2009-2010</td>
<td>2.4%</td>
<td>4.4%</td>
<td>12.9%</td>
<td>3.8%</td>
<td></td>
</tr>
<tr>
<td>2010-2011</td>
<td>1.7%</td>
<td>0.6%</td>
<td>-2.1%</td>
<td>1.1%</td>
<td></td>
</tr>
<tr>
<td>Avg p.a.</td>
<td>0.5%</td>
<td>1.0%</td>
<td>5.7%</td>
<td>1.1%</td>
<td></td>
</tr>
</tbody>
</table>

The Authority monitors passenger traffic on a per capita basis, and compares it to peer airports. A review of the Authority’s data indicates that in each year of the Review Period, Calgary has the most traffic per capita than the other top seven airports in the country. The graph below shows the results as of December 2010, as prepared by YYC.
Air Traffic Movements

Overall, air traffic activity at YYC has declined 4.6% during the Review Period, or at an average annual rate of 1.2%. This is greater than the total average decline of 1.0% among the top eight Canadian airports during the same period or the average annual decline of 0.3%.

Overall, air traffic activity at YBW has declined 27% during the Review Period, or at an average annual rate of 7.5%. YBW is primarily a training airport, and training activity is historically unusually sensitive to changes in the economy; thus the sharp decline between 2007 and 2008. During the Review Period, there was a chance in how flights were counted. YYC moved away from reporting all movements, to reporting airport only movements, thus reflecting a truer indication of capacity; however also contributing to the decline in reported traffic figures. Flight activity at YBW during the first quarter of 2012 is up 27% over 2011.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>AIR TRAFFIC MOVEMENTS Calgary International Airport (YYC)</th>
<th>YEAR</th>
<th>AIR TRAFFIC MOVEMENTS Springbank Airport (YBW)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% Change</td>
<td>Total</td>
</tr>
<tr>
<td>2007</td>
<td>248,548</td>
<td>2.4%</td>
<td>2007</td>
</tr>
<tr>
<td>2008</td>
<td>246,370</td>
<td>-0.9%</td>
<td>2008</td>
</tr>
<tr>
<td>2009</td>
<td>233,145</td>
<td>-5.4%</td>
<td>2009</td>
</tr>
<tr>
<td>2010</td>
<td>234,239</td>
<td>0.5%</td>
<td>2010</td>
</tr>
<tr>
<td>2011</td>
<td>237,161</td>
<td>1.2%</td>
<td>2011</td>
</tr>
</tbody>
</table>

Source: Statistics Canada

Cargo Services

YYC is one of the fastest growing cargo airports in the country. Cargo can be shipped from Calgary to anywhere in the world within 48 hours.
Cargo traffic has fluctuated from a high of 134,250 metric tonnes in 2007 to a low of 111,000 tonnes in 2009, reflecting the sharp world-wide downturn in air freight. During the Review Period, cargo traffic declined at an average rate of 3.6% which is a lower rate than at most other air cargo gateways.

**CONCLUSION:**

**BACKGROUND**

During the course of this Review, the Consultant has observed many indicators that YYC has established clear roles for each airport; the facilities and services have been improved and are appropriate and customer driven; and despite aviation growth in passenger traffic, capacity constraints, and much construction, the level of service remains high.
3.0 EXTERNAL ENVIRONMENT

LEGISLATIVE AND REGULATORY ENVIRONMENT

Overview

Safety and security within the aviation sector is tightly controlled and the federal government has created an intricate network of legislation and regulation that YYC must comply with. Canadian aeronautics legislation comprises the Aeronautics Act, the Canadian Aviation Regulations (CARs) and the associated standards, and the Canadian Aviation Security Regulations (CASRs). The legislation was created to protect the public from potentially unsafe aviation practices and activities. The CARs are developed by Transport Canada in partnership with the aviation community through the Canadian Aviation Regulation Advisory Council (CARAC). Other relevant legislation includes the Canadian Transportation Act (CTA); the Environmental Protection and Assessment Act; and the proposed Canada Airports Act. Unique to airports in Alberta is the Regional Airport Authorities Act, and the Airport Vicinity Protection Area (AVPA).

The industry is also subject to the general business regulations applicable to any federally regulated entity. While not required by law to comply with provincial or local legislation and regulation, YYC strives to meet or exceed these.

National Airports Lease Monitoring Audit

As YYC is a NAS airport, under the terms of the NAP, YYC is subject to an annual Transport Canada lease monitoring audit. A review of the 2007 through 2011 audit reports indicates that in each year, Transport Canada has found that:

- “… the Authority is in general compliance with the Terms and Conditions of the Ground lease and other instruments”;
- “… the Airport is being managed, operated and developed by the Authority as a Major International Airport and a First Class Facility in a professional and reputable manner. The Authority is acting as a prudent tenant by carrying out its responsibility for maintaining the Demised Premises and planning and implementing a major capital program for the improvement and upgrade of services and facilities”;
- “… the Authority is in general compliance with regards to the Safety and Security legislation and regulations and the obligations related to these areas under the Ground Lease”;
- “… the Authority continues to operate the Airport with a high level of due diligence with respect to the protection of the environment. The Authority is generally in compliance with the environmental stewardship requirements of the Ground Lease”;
- “… The Authority is in general compliance with the Public Accountability Principles as agreed and reflected in 1997 First Modification of the Ground Lease and the Memorandum of Agreement”; and
- “… As a designated Airport Authority under the Airport Transfer (Miscellaneous Matters) Act, the Authority is obliged under … the Official Languages Act. The Department has not received any information that the Authority is not in compliance with these obligations from the Official Languages Commissioner”.

The only matter identified for follow-up action was with regard to lien being filed on federally-owned property, and this matter has been resolved.
Changing Policy and Regulatory Environment

In the past decade, airports and their customers have been faced with much regulatory change; sometimes resulting in significant cost that is eventually passed on to the passenger and puts Canadian airports at a competitive disadvantage as compared to US border airports, or to other modes of transportation.

Regulatory change and/or areas of advocacy for YYC during the Review Period included:

Safety Management Systems

In 2008, the Federal Government implemented regulatory amendments, introducing a requirement for certified airports to develop and implement a Safety Management System (SMS) using a phased approach. Class I airports, such as YYC were to have had their final phase documentation submitted to Transport Canada by March 31, 2011, and fully operational including the completion of a full audit by March 31, 2012. YYC has met all deadlines for SMS development and implementation.

Security Management Systems / Airport Security Program

In February 2011, the Federal Government introduced proposed changes to the Canadian Aviation Security Regulations (CASRs) requiring certified airports to develop an Airport Security Program (ASP), similar in concept to Safety Management Systems. In anticipation of the new regulations, and illustrative of YYC’s proactive approach to safety & security issues, YYC developed an Airport Security Management System (SeMS) which contains most of the elements required for Phase I of the new ASP requirements.

Runway Safety

Since 2006, requirements have been in place governing landings in low visibility conditions. A regulatory amendment on safe winter runway operations was published in the Canada Gazette proposing that airport operators develop standardized procedures related to winter runway maintenance, and also requiring the accurate and timely reporting of surface conditions at airports in winter. Additionally, TP312 – Aerodrome Standards and Recommended Practices is being revised to address: provision of additional visual aids for pilots to help assess landing distances; harmonization of Canadian and international Runway End Safety Area (RESA) standards; and recognizing the engineered material arresting system (EMAS) as an additional measure to increase safety. Transport Canada has tabled Notices of Proposed Amendment (NPA) to the CARS to adopt a 150 m total RESA requirement, and is currently assessing the potential benefits of extending the RESA to 300 m. YYC is actively working with the regulator to consider the potential impacts on YYC of these proposed changes.

Air Cargo Security

Since 2006, Transport Canada has been working with the air cargo industry to develop a risk-based Air Cargo Security (ACS) program. In 2010 and 2011, TC introduced changes to the regulatory framework for air cargo security in Canada that outlined new requirements for Approved Participants for air carriers operating in Canada. The measures apply to domestic, transborder and international passenger flights transporting screened passengers from Canada’s designated airports. They require air carriers to secure all air cargo before loading onto the aircraft to the same level of security as that for passenger baggage; recognize technological and other screening processes as acceptable ways to screen air cargo; detail performance standards for screening equipment, cargo screeners and their training, and supply chain operations; formalize supply chain security requirements for those handling air cargo from the time cargo is accepted until it is loaded onto aircraft; and provide for adding specific measures for all-cargo flights.
Bilateral Agreements

New or expanded air service agreements with Barbados, Philippines, Panama, Dominican Republic, EU, Korea, Singapore, Cuba, Costa Rica, Turkey, South Africa, Morocco, El Salvador, Egypt, Trinidad and Tobago, Jamaica, Tunisia, Ethiopia, Mexico, Japan, PR China, Brazil, Qatar, India and Algeria were completed during the period. YYC air service development initiatives have set out to capture the opportunities that these expanded agreements represent for the Calgary region.

Approved Destination Status (ADS)

In summer 2010, Approved Destination Status (ADS) was granted to Canada by the People’s Republic of China. YYC has been actively investing in in-bound tourism opportunities that this change represents for the Region.

Arrivals Duty Free

More than 50 countries have established Arrivals Duty Free (ADF) shopping. By implementing this type of program in Canada, passengers arriving in Canada would have the opportunity to purchase duty free products on the ground at Canadian airports before passing through Canada Border Services Agency inspections. It is anticipated that in the next few years, travellers will have the ability to pre-order goods from their computer or smartphone, or even on board a flight, and collect them on departure or after arrival. YYC has been actively pursuing this change.

Airport Rent

Through the Canadian Airports Council, airports continue to lobby the Federal Government to reduce or eliminate airport rent as one method of reducing passenger traffic leakage to US border airports and to spur economic output in Canada. YYC has been active in its championing changes to the federal rent regime to reduce the burden it represents to a competitive Canadian aviation industry.

Foreign / Free Trade Zones

Through the Canadian Airports Council, the Canadian Chamber of Commerce, and the Canadian Manufacturers and Exports, airports are requesting that the Federal Government develop proper Foreign / Free Trade Zones (FTZ) for Canada, similar to those in place in other countries. By lowering barriers to trade, these zones help countries improve their relative competitiveness as hubs of trade and transportation. While the Canadian Government introduced similar incentives through the Export Distribution Centre and other programs, Canada remains the only G8 country that does not offer a true FTZ program. YYC has been active in this pursuit.

AIRLINE INDUSTRY

Considerable changes have occurred in the airline industry during the period of the review in response to negative global economic events, mergers, further airport security improvements and increases in fuel prices and other operating costs reflecting on general financial difficulties experienced by most airlines. Smaller disturbances in air travel at YYC were also caused by other world events during the Review Period such as the H1N1 outbreak, the Icelandic volcano eruption, and the Japanese earthquake and tsunami.

Airline specific outcomes related to YYC during the Review Period include:

- WestJet continues to expand its offering of transborder services to many leisure destinations in the US from YYC increasing total destinations served from 27 in 2007 to 40 in 2011. It also has been able to obtain codeshare agreements with large airlines such as Delta, American Airlines, KLM, Cathy Pacific and other smaller ones. Over the Review Period new destinations added to WestJet’s YYC network included
four domestic new routes (Grand Prairie, Kamloops, Windsor and Moncton) and 11 new transborder and leisure market routes (Cancun, Honolulu, Puerto Vallarta, Newark, Kauai/Maui, Chicago, San Diego, San Francisco, and Orange County). WestJet has also increased significant daily seat capacity to many existing destinations increasing scheduled seats by 16% during the Review Period. WestJet announced it would begin service to new short-haul regional markets in Canada using +/- 70-seat turboprop aircraft starting in late 2013. The intent is to connect smaller communities to their major hubs in Calgary and Toronto where these aircraft will be based and where passengers can connect to long haul domestic and international services provide by WestJet or their partner airlines. This will intensify competition in selected smaller domestic markets which will be positive for both business and leisure travellers and increase passengers significantly at YYC;

- Air Canada, which has gone through many financial and union issues during the Review Period, has decreased scheduled seat capacity by 5% at YYC with the largest decrease happening in transborder markets. Total destinations decreased by 2 from 40 in 2007 to 38 in 2011;
- U.S. based airlines still have significant transborder presence at YYC. However with mergers, world economic events and WestJet building a greater transborder presence, US based carriers seats have decreased by 15% over the Review Period. Delta Air Lines and Northwest Airlines merged in 2008 and have struggled with some of its routes resulting in a decrease in scheduled seats of almost 30% over the Review Period. Similarly, United and Continental announced a merger in 2010 and have decreased scheduled seats by 8% over the Review Period. Frontier Airlines discontinued service to Calgary in 2007, while American Airlines increased scheduled seats by 27% during the Review Period; and
- Airlines flying to international destinations have increased scheduled seats by 38% during the Review Period thanks mostly to WestJet, Sunwing, and Air Transat. Nine airlines currently fly international routes. Mexico and the Caribbean have seen the largest increase more than doubling scheduled seats since 2007. While scheduled seats remain slightly unchanged to the United Kingdom, seats to other parts of Europe have increased by over 60%.

There is evidence of significant and focused attention by YYC staff on developing air service opportunities.

**SOCIAL AND ENVIRONMENTAL ISSUES**

Communities are increasingly concerned with the long-term social and environmental impacts of airports. Airports in general often create interest from activists in the community who are concerned about noise and protecting flora and fauna. During the Review Period, the local community was particularly concerned about the impacts of the ADP, including the closure of Barlow Trail as a local commuter route.

YYC has in place a communications strategy (see Chapter 4) as well as a comprehensive Environmental Management System (EMS). The Consultant found evidence of commitment (at all levels within YYC) to its local stakeholders, as well sound strategies and plans to address social and environmental issues and concerns.

**Community Outreach**

YYC actively pursues partnerships with the community it serves, and participates and/or supports a variety of community based charities and events. The Consultant found evidence that YYC has successfully implemented numerous socially responsible programs and encourages staff involvement in community charities, including but not limited to:

- Dreams Take Flight – an Air Canada undertaking supported by YYC for many years
- YYC Pipe Band
• Stampede BBQs
• Pumpkin carving contests
• Volunteering at the Mustard Seed Foothills shelter – employees donate their time as part of the cooking / servicing team. YYC sends a team downtown the third Thursday of every month
• ‘Walk with Wallis’
• Christmas decorations
• Rotary Challenger Park – a barrier free multi-sport facility built on airport lands
• Rotary Challenger Park Charity Golf tournament
• United Way
• Gift wrapping / re-wrapping during Christmas season (the Christmas Touch)
• Mayor’s annual Environmental Expo
• Calgary Commuter Challenge
• Formal signatory to ‘imagineCALGARY’ a community initiative to improve the quality of life for all Calgarians in the years ahead
• Aviation Interfaith Ministry
• Each year over 5,600 students participate in educational programs at the SpacePort facility located in the terminal building
• YYC matched employee donations to a Haitian relief effort (2010)
• Team YYC participation in Rangeland Derby

YYC also hosts community events. For example, in 2008, YYC hosted a week-long event in support of the Juno Awards; in 2009, Springbank Airport was the location of the annual general meeting of COPA; in 2010 YYC sponsored a visit by the Lancaster bomber, and Viking’s new Twin Otter took its first flight; and in 2012, YYC will be hosting the ACI-world Annual General Assembly and North America Annual Conference & Exhibition which it has been planning during the Review Period. YYC also hosts the largest indoor Remembrance Day ceremony in Calgary.

**Environment Management and Sustainability**

YYC has an impressive record in implementing sustainability initiatives and a culture of sustainability permeates throughout the organization. While operational efficiency is often the most important driver of a decision to implement a measure, sustainable options are always considered, and final decisions are made based on a combination of environmental, financial (long-term), operational and social (EFOS) impacts.

Examples of YYC’s commitment to environmental management and sustainability include:

• IFP being designed to LEED Gold standards
• Use of environmental friendly products throughout the terminal building
• Noise Abatement Program
• Corporate Environmental Policy and strategies
• Commitment to sustainable development beyond the requirements of applicable laws and regulations

Additional details can be found in Chapter 4.

**Aviation Security**

In response to growing aviation security concerns worldwide, Transport Canada and CATSA planned and implemented many changes during the Review Period, including but not limited to: the Air Cargo Security Program; the Nexus Program; full-body screening technology; and a pilot Passenger Behaviour Observation Program. Transport Canada has also drafted new Canadian Aviation Security Regulations which will impose new requirements on airports.
**TECHNOLOGICAL ENVIRONMENT**

Technology has the ability to change passenger facilitation processes, airport facilities requirements, management processes, and information access. Examples of this in recent years include: self-serve check-in kiosks that require less physical space and staffing level; increased use of WiFi throughout the terminal allowing passengers to stay in touch with their customers, staff and loved ones; the use of biometrics for enhanced security related to restricted area pass control as well as customs and immigration; new computer passenger risk assessment systems and full body scanning at passenger screening points, and object tagging for baggage. Technology is also enhancing the efficiency of aircraft – for example, some aircraft can be electrically powered while taxiing, reducing jet fuel burn.

YYC has been quick to respond and many examples of the use of technology to enhance the passenger experience, improve safety and security, and manage energy costs are found in the passenger terminal building.

**REGIONAL ECONOMY**

During the Review Period, global economic conditions changed rapidly and the weak economic conditions in the United States and in Europe spread to other jurisdictions. The weakness and failure of some large financial and other institutions led to unprecedented worldwide government intervention. The Canada, Alberta and Calgary economies have been less severely impacted than other jurisdictions and YYC has continued to capitalize on robust regional growth during in the last five years.

Calgary is located in the southern part of Alberta, some 80 km east of the Canadian Rockies, and 294 km south of Edmonton. With a population of just over one million in the City of Calgary (2011) and a metropolitan population of 1.2 million, Calgary is the third largest municipality and fifth largest metropolitan area in Canada.

| Population | 1,365,200 (2011) |
| Labour Force | 26.4% (2002-2011) (2nd highest in Canada) |
| Participation Rate | 74.5% (2011) (highest in Canada) |
| Unemployment Rate | 5.8% (2011) (2nd lowest in Canada) |
| Housing Starts (CMA) | 10,000 / yr (2007-2011) |

Economic activity in Calgary is mostly centred on the petroleum industry, agriculture, and tourism, although the dominance by the oil and gas industry is decreasing. Calgary has been designated as a global city by the Globalization and World Cities Research Network, and was ranked first in Canada and 51st in the world by the Brookings Institution for having a top performing local economy in 2011.

Calgary is one of the fastest growing regions in the Country and benefits from a relatively strong job market compared to the rest of the province. Calgary is the head office for many major oil and gas related companies (such as BP Canada, Canadian Natural Resources Limited, Cenovus Energy, Encana, Imperial Oil, Suncor Energy, Shell Canada, TransCanada, Nexen) as well as other large employers such as WestJet, Canada Safety Limited, Westfair Foods Ltd, Agrium, Shaw Communications and CPR Railway.

Calgary has the second highest concentration of head offices in Canada, behind Toronto, and has the highest head office employment per capita in the country. Calgary is also a major distribution and transportation hub with its convenient access to highways and railroads.

**CALGARY RANKINGS**

- #33 (of 221 global cities) – Quality of Life and #17 for Personal Safety (Mercer 2011)
- #3 Top-10 Major Cities Quality of Life and #10 Opt-10 Major Cities FDI Strategy (FDI Magazine – American Cities of the Future 2011-12)
- #16 – Canada’s Best Places to Live (MoneySense 2011)
- #3 – Global Scorecard on Prosperity (Conference Board of Canada 2011)
- #5 – Most Livable Cities in the World (Economist Intelligence Unit 2011)
- #4 – Top Metro Award (Site Selection Magazine 2010)
- One of the World’s Fastest Growing Cities – Focuses on Emerging Powerhouses (Forbes)
During the Review Period, global economic conditions changed rapidly and the weak economic conditions in the United States and in Europe spread to other jurisdictions. The weakness and failure of some large financial and other institutions led to unprecedented worldwide government intervention.

In early 2012 the Conference Board of Canada predicted that in spite of global economic turmoil, high prices for agricultural products, minerals and oil are likely to continue, and Canada’s prairie cities will reap the benefits of this global demand for commodities. Continued strong growth in Alberta’s energy sector and solid domestic demand are expected to boost Calgary’s real GDP by 3.6% in 2012, and Calgary is expected to lead all of Canada’s cities with growth of 4.9% in 2013.

**Airport’s Economic Impact**

In 2011, YYC commissioned economic impact studies for both YYC and YBW. The results showed that in 2010, activity at YYC created over $6 Billion in GDP and supported over 40,000 jobs.

<table>
<thead>
<tr>
<th>Impact</th>
<th>Calgary International (YYC) – 2010</th>
<th></th>
<th>Calgary Springbank (YBW) - 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jobs</td>
<td>21,411</td>
<td>43,737</td>
<td>356</td>
</tr>
<tr>
<td>Labour Income</td>
<td>$1,109.610 M</td>
<td>$2,334,134 M</td>
<td>Labour Income</td>
</tr>
<tr>
<td>Other Expenditures</td>
<td>$1,699.479 M</td>
<td>$3,676,124 M</td>
<td>Other Expenditures</td>
</tr>
<tr>
<td>Total Value-Added GDP</td>
<td>$2,890.089 M</td>
<td>$6,010,258 M</td>
<td>Total Value-Added GDP</td>
</tr>
<tr>
<td>Taxes</td>
<td>$2.28 billion</td>
<td></td>
<td>Taxes</td>
</tr>
</tbody>
</table>

Source: 2010 Economic Impact, R.P. Erickson

Each time a Boeing 777 lands at YYC, it supports 1.3 full-time equivalent jobs, creates $65,000 in annual labour income, and generates $167,000 in GDP.

**Conclusion: External Environment**

During the course of the Review, the Consultant observed many indications that YYC has proactively met the changing needs of its customers, the Regulator, and the community. It also weathered the storm of the recession while at the same time embarking on a major airport redevelopment project. YYC takes its fiscal, environmental and social responsibilities seriously and is committed to being a good neighbour and contributor to the regional and provincial economy.
4.0 GOVERNANCE, PLANNING AND PERFORMANCE ASSESSMENT

AUTHORITY’S MANDATE

The Calgary Airport Authority was incorporated in 1990 under the Regional Airports Authorities Act of Alberta. Its mandate is to operate and develop the Calgary International and Springbank Airports. Both airports are operated under long-term lease from the Government of Canada, Calgary International since July 1992 and Springbank since October 1997.

CORPORATE LEGISLATION

The Calgary Airport Authority is a not-for-profit, non-share capital corporation, incorporated under the Province of Alberta’s Regional Airports Authorities Act which sets out the basic organization structure of the Authority, the constitution of the Board of Directors, the permitted purposes of the Authority, and the required disclosure and relations with both the Appointers and the Public.

As the Business Corporations Act of Alberta does not apply to the Authority, the Alberta Government included many of the corporate governance provisions that are contained in that Act in the Regulations of the RAAA. The Regulations include but are not limited to: appointments and terms of Directors; Directors’ qualifications; liabilities and duties of care of Directors and Officers; conflict of interest policies; corporate records; requirements for public meetings; corporate finance provisions and corporate borrowing.

YYC also operates within the legal framework defined by its Articles of Incorporation, which prescribe the basic organizational structure and requirements of YYC, and its Corporate By-laws.

THE BOARD

The Board’s role statement, as quoted in the Board Handbook and shown below, was last approved in June 2011:

“The primary responsibility of the Board, is to foster long-term success of YYC. Pursuant to the RAAA, the Board is responsible for the general management of the undertaking and affairs of YYC.”

As stated in the 2009-2013 Strategic Operating Plan as well as in the Board Handbook, the objectives of the YYC Board of Directors are to:

- Adopt a strategic plan for the corporation and regularly monitor progress towards the achievement of that plan, updating the plan when appropriate;
- Understand the principal risks which the corporation faces and ensure the corporation is adequately protected against those risks;
- Appoint qualified senior management to direct the business of the corporation, ensuring training is available for current and prospective senior management, regularly assess the performance of senior management and provide for succession;
• Ensure there are effective communication processes in place to allow the corporation to communicate effectively with and receive feedback from its stakeholders; and

• Ensure there are effective internal controls and financial reporting systems to ensure the corporation’s financial reports may be relied upon with confidence as to their integrity and accuracy.

Upon appointment, Board Directors are provided with a handbook that documents:

• Relevant legislation (RAAA, Regulations, Articles of Incorporation, Bylaws, Airport Transfer Act)
• Governance including the role of the Board and specific accountabilities
• Terms of Reference for Directors (last updated in 2001)
• Roles and Responsibilities of the Board Chair (December 1999) and the procedure to appointment the Board Chair (February 2008)
• Code of Business Conduct and Conflict of Interest policy (2009)
• Lobbyist Registration Act
• Indemnity Agreement signed by each Director
• Board self-evaluation process
• Annual reporting requirements timeline
• Robert’s Rules of Order – Procedural Summary
• List and Contact Information as well as records of current terms of appointment and Director’s rates of remuneration
• Board committee composition and schedule for the year, and terms of reference for each year
• Organizational charts
• Planning documentation (strategic Operating Plan, 10 year development plan, Springbank MP
• Authorities Framework
• Key Policies (Corporate communication, environmental policy, succession management policy, pension plan investment policies and goals)
• Teleconference call procedures

The Board of Directors comprises a maximum of 14 members nominated by the long-range planning committee of the Calgary Chamber of Commerce (8 members), the City of Calgary (3 members), the Federal Government (2 members), and the Municipal District of Rocky View (1 member). The maximum number of Directors was reduced from 17 to 14 during the Review Period. Each appointment is for a term of 4 years, with a maximum of two full terms. Directors cannot be elected officials or government employees. Annually, Directors are required to acknowledge, by signature, the Code of Business Conduct and Conflict of Interest Policy. A sampling of signed acknowledgements was reviewed by the consultant and was in order.

Board meetings are conducted following Robert’s Rules of Order Procedures (2001). The Board meets on a quarterly basis and also holds an annual planning session. A sample of Board minute meetings was reviewed. The documents included the March 30, 2011 minute book include: call to order, approval of agenda, Annual Director Conflict of Interest Declarations (all 14, signed), 2011 Confidential Summary report on Directors Conflicts of Interest and Listing of Affiliations, Letter to Appointers setting out conflicts of interest disclosed by Directors, Consent Agenda, Sole Source Procurement, TD Operating Facility Line Amendment, CBSA Funding Requirements, 2010 Financial Statements, Airport Trail Extension/ Tunnel Discussion, previous minutes, previous committee reports, and Other such as maps, motions, acronyms, Board calendar (full Board and committees), and emergency evacuation plan.

Bi-annually, each Director participates in a Board self-evaluation process, enabling them to comment on how the board operates and make suggestions for improvements. The completion of a ‘survey’ is followed up by one-on-one meetings with the Chairman.
Board Standing Committees

There are currently five standing committees (reduced from six during the Review Period), each with documented terms of reference. These standing committees can be complemented by task forces on an as required basis to deal with particular matters:

- **Audit & Finance.** The terms of reference were last updated and approved in June 2010. This committee, with a current six members, generally meets bi-monthly;
- **Governance & Compensation.** The terms of reference were last updated and approved in June 2010. This committee, with a current six members, generally meets three times a year;
- **Infrastructure and Environment.** The terms of reference were last updated and approved in June 2010. This committee, with a current six members, generally meets three times a year;
- **Airport Development Program.** The terms of reference were last updated and approved in June 2010, and were again updated in November 2010. This committee, with a current six members, generally meets monthly with some exceptions (10 times in 2011); and
- **Nominating.** The terms of reference were last updated and approved in June 2010 (previous update in 2008). This committee, with a current four members, meets as required.

PUBLIC ACCOUNTABILITY / ACCOUNTABILITY FRAMEWORK

YYC’s Accountability Framework is described in its 2009-2013 Strategic Operating Plan, as well as in its annual reports. It includes:

- An Annual General Meeting open to the public;
- Publication of an Annual Report and financial results;
- Independent reviews every five years;
- Compliance with the Canada Lease;
- Regulatory compliance;
- Annual meeting and report to all Appointers by the Board and senior management;
- Annual meetings with key stakeholders and government officials;
- Public notices of fee increases;
- Community Noise Consultation Committee; and
- Regular meetings with airport operators and tenants.

Transport Canada notes in its Lease Monitoring Reports that YYC is in general compliance with the Public Accountability Principles, and has bilingual signage in the terminal building that meets the demands of the public with respect to public health, safety and security.

AUTHORITIES FRAMEWORK

The purpose of the Authorities Framework Document is to ensure a clear understanding of the respective Authorities of the Board and management relative to the business operations of YYC. It is approved by Board resolution, and subsequently issued to all YYC managers with corporate resource responsibilities. The Authorities Framework Document is subject to the By-laws of the Corporation and in the case of inconsistency, the By-laws shall govern.
The Authorities Framework document is reviewed annually and re-issued in January of each year and states:

“To the extent practicable and with due consideration to Canada’s international obligations, YYC endeavours to optimize Canadian content and industrial benefits in its procurement of goods, services and construction contracts, particularly in the area of high technology services and equipment and construction contracting in line with good private sector commercial practices where there is sufficient competition for such procurement in the Canadian market.”

**Board Approvals**

The following reflects the current Board of Director approval levels:

- Personal expenditures (Chairman of the Board approves expenses of Board Directors as well as President and CEO; Chairman of the Audit & Finance Committee approves expenses of Board Chairman);
- Annual business plan (November of each year);
- New capital projects in excess of $1M, and changes to capital projects over $5M where the change exceeds 10% of the approved budget;
- Sole source contracts in excess of $1M not permitted under the proprietary service providers’ exemption;
- ADP Contingencies - Management Reserve over 50% of reserve (ADP Committee / Board);
- Annual external audit service fees (Audit and Finance Committee); and
- Tariff of aviation fees.

**Management Approvals**

The following reflects the current management approval levels:

- Personal expenditures of direct reports;
- New capital projects of less than $1M, and changes to capital projects over $5M where the change is less than 10% of the approved budget;
- YYC to vary the financial distribution of individual capital projects between years subject to a final recap on multi-year and carry-over capital projects being presented to the Audit & Financial Committee after year-end;
- Contracts over $250,000 must be executed by a Signing Officer; all other contracts executed by the Director, Procurement & Contracts or his delegate except that Budget Centre Managers may exercise purchase order authority for goods and services not exceeding $25,000 per purchase;
- Sole source contracts of unrestricted value with proprietary service providers; sole source contracts up to $100,000 can be approved by a staff Director, those up to $500,000 by a Vice-president; and up to $1M by the President and CEO. All sole source contracts over $100,000 must be reported to the Board;
- Individual ADP project contingency draw-down limits: IFP/RFP Project Directors up to $2M; Senior VP Planning & Engineering up to $5M; Executive Steering Committee over $5M;
- ADP Contingencies - Management Reserve up to 50% of reserve (Executive Steering Committee);

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2 Section 5.6 Authorities Framework (January 2012)
• Payment instruments (any Signing Officer, the Director Accounting Services / Controller, or the Assistant Controller). All payment instruments must be signed by two signing authorities: under $25,000 by any two signing authorities; between $25,000 and $100,000 one signing authority must be a Signing Officer; and all over $100,000 must be signed by two Signing Officers; and
• All revenue contracts must be approved by a Signing Officer of YYC.

Signing Officers of YYC are defined as: President and CEO; Senior VP Planning and Engineering; VP Finance, CFO and Corporate Secretary; VP and Chief Commercial Officer; and VP Operations.

THE YYC BRAND

In 2008, as part of the development of the 2009-2013 Strategic Operating Plan, the Board developed and approved a new Brand for YYC, including a new logo, recognizing YYC’s unique personality and the promise it makes to its customers. The logo incorporates the airport’s call letters signifying the important role of all airports partners; the colour red represents the City of Calgary and reflects Western hospitality; and the typeface is known as “arrival”. The new look was designed to be a bold, confident reflection of YYC’s growing reputation for efficiency, innovation and sustainability.

CORPORATE COMMUNICATIONS

YYC’s external communications toolkit includes: the external website (www.yyc.com) that was redesigned in 2009, social media outlets such as Twitter and Facebook (@flyyyyc), public quarterly stakeholder reports, media releases and interviews, community consultation (ongoing and environmental impact assessment consultation), information brochures, and presentations to the community and to stakeholders.

Rather than flooding the media, YYC only sends out media releases when it has something important to say. When there are public “events” such as the closure of Barlow Trail, or the introduction of the Park Closer lot, YYC develops strategic communications e.g., mail outs to all Calgarians. YYC enjoys a positive relationship with print and TV media outlets. YYC has on staff, a photographer/videographer so that the public can view ADP updates almost ‘live’ on YYC’s website.

The focus of YYC’s communications during the Review Period has been the ADP and the airport’s role as an economic generator.

YYC’s communications staff has began using social media such as Twitter and Facebook in the last year and a half, as a method of getting information out to the general public. For example, simple messages (tweets) such as “everyone’s running on time” during a bad weather event. With a current 1,000+ Twitter followers and almost 500 Facebook ‘likes’, this method is proving effective.
### BUSINESS AND PLANNING FRAMEWORK

YYC has a comprehensive business and planning framework that includes both short term (annual) and long term (20 years +) documents, driven by the corporate mandate, vision and mission, and measured accordingly.

In 2008, the Board unanimously approved a new Strategic Operating Plan, following a series of Board level retreats, discussions and seminars.

In achieving its mandate, YYC strives to find the optimum balance among a diverse range, and sometimes conflicting, interests and issues, including: community impact, environment, infrastructure needs, air carriers, aeronautical fees, airport services, cargo, tenants, commercial revenue, consumer prices, corporate aviation, business development, general aviation, and cost control.

#### Corporate Objectives and Strategies

The 2009-2013 Strategic Operating Plan outlines the corporate key objectives and strategies, in line with YYC’s mandate. These objectives are balanced, incorporating both internal and external factors. These are reviewed and approved annually by the Board.

<table>
<thead>
<tr>
<th>KEY OBJECTIVE</th>
<th>STRATEGIES</th>
</tr>
</thead>
</table>
| ENSURE we have a knowledgeable, skilled and engaged workforce | - Ensure recruitment and orientation programs enhance the collective capability of the Authority and reflect the diversity of our community
- Provide training, development and succession planning programs that enable staff to meet the evolving needs of the Authority
- Maintain effective performance management and recognition programs
- Implement communication strategies that result in an engaged and knowledgeable workforce |
| OPERATE our airports in a safe, secure and sustainable manner | - Provide a service-oriented operation at the lowest practical cost and ensure the infrastructure, vehicles and equipment are renovated and replaced when appropriate
- Provide responsible environmental stewardship of the assets and operations of the airport and incorporate responsible investing criteria into all facility renovations and expansion
- Promote the YYC brand through enhancement of the customer experience
- Develop a leading SMS for both regulated and non-regulated aspects of the operation
- Be prepared for an effective response to a wide range of disruptive incidents and emergencies |
| OPTIMIZE commercial and business development | - Develop airport lands in support of cargo, logistics and aviation development
- Develop the optimum number of non-stop and one-stop air service destinations
- Optimize all sources of commercial revenue
- Maintain reasonable aeronautical fees to air carriers |
| RENOVATE and EXPAND airport infrastructure | - Achieve the highest practical utilization of existing infrastructure before undertaking expansion
- Build to meet forecast demand in an incremental, sequential and cost-effective manner
- Ensure thorough stakeholder consultation on all major projects
- Manage long-term debt within acceptable risk parameters |

Source: Year In Review Reports

#### Key Business Principles:

During the development of the 2009-2013 Strategic Operating Plan, YYC updated its business principles within which it operates. These are also published in YYC’s Annual reports:

1. **Employee Engagement.** YYC strives to create a culture of accountability whereby employees are engaged and supported in meaningful work that complements the objectives or the organization.
2. **Health & Safety.** At YYC, an all-encompassing safety culture is the foundation of responsible management and safe airport operations. The goal is to meet or exceed recognized industry standards.

3. **Emergency Preparedness.** YYC has a comprehensive emergency response plan which involves support and cooperation from response agencies and airport partners.

4. **The Environment.** YYC is committed to protecting the environment through responsible airport operations.

5. **Facility Restoration and Development.** YYC will ensure that all assets are maintained and restored in a manner which provides reasonable assurance that systems will perform as expected and reach their expected serviceable life; and planning and development will be organized and undertaken in a responsible and prudent manner to provide adequate capacity to meet marketplace requirements.

6. **Financial Operations.** YYC will conduct its financial planning and operations to remain a viable corporation over the long-term.

7. **Community Involvement.** YYC believes that community involvement is integral to its long-term success, and provides ongoing corporate and employee support to a number of charitable organizations.

**Annual Business Plan**

An annual Business plan is prepared by management and presented for Committee review and Board approval in November of each year. The business Plan includes:

- An overview of the external environment include world events, the economy, the air carrier industry and the aerospace industry;
- A YYC situational assessment
- A YYC risk assessment (environmental risk, major project risk, project risks, regulatory risks, capacity risks, competing airport risk, significant negative event risk)
- Fiscal framework update
- Operations Sector proforma financials for the upcoming year supported by analysis
- Expansion Sector proforma financials for the upcoming year supported by analysis
- ADP Program Update
- Corporate goals for the upcoming year including strategies and performance targets
- Tariff of Aviation Fees for the upcoming year
- Updated Authorities Framework document

**Measuring Success**

As part of the annual business planning process, the Board reviews and approves performance measures in line with the corporate objectives and goals. Measurement factors are externally focused, and YYC sets targets relative to peer airports where appropriate.

<table>
<thead>
<tr>
<th>MEASUREMENT FACTOR</th>
<th>CORPORATE OBJECTIVE (Strategic Performance Targets)</th>
<th>PERFORMANCE TARGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger Satisfaction</td>
<td>Provide a quality airport experience for the air travelling public</td>
<td>Achieve a 4.0 rating or better out of 5 (80%) on the ACI Service Quality Survey</td>
</tr>
<tr>
<td>Air Service</td>
<td>Provide a high number of air travel opportunities for the air travelling public</td>
<td>Achieve top quartile performance when comparing passenger and air carrier movements per capita to other major Canadian airports</td>
</tr>
<tr>
<td>Cost Containment</td>
<td>Maintain operating costs at the lowest practical level</td>
<td>Achieve top quartile performance when comparing direct operating costs per passenger to other major Canadian airports</td>
</tr>
<tr>
<td>Aviation Fees</td>
<td>Keep YYC at a competitive level with other major Canadian airports</td>
<td>Maintain aviation fees lower than the average of other major Canadian airports</td>
</tr>
</tbody>
</table>

Source: 2012 Fiscal Business Plan
Physical Planning

The Planning and Engineering Department is responsible for: airport master planning; the airport land use plan; land development planning; preparation of facility plans (e.g., demand / capacity analysis for terminal & airfield; sub-systems plans); simulation & forecasting; tenant development applications (due diligence, compliance, internal coordination / communication); and development referrals for off-airport development within the City of Calgary and the County of Rocky View (review OLS, electronic zoning, AVPA land use review). YYC participates in the CAC/ACI-NA Planning Development and Infrastructure Committee, Transport Canada’s Forecasting Committee, the City of Calgary’s Technical Planning Committee, and YCC committees including the AOC, TOC and ACC.

Physical planning is governed by a number of agreements and frameworks including but not limited to: the Ground Lease, the AVPA, and the City / YYC Land Use Agreement.

To manage physical planning, there are a number of long-standing processes in place, each updated regularly: tenant development policy & procedure, ATB technical standards, due diligence process, Construction Installation Permit (CIP) system, development permit tracking database (off-airport development reviews), utility locates and open excavations permit and tracking systems, drawing management system (TDC record plans). Any due diligence processes prepared are approved by all YYC Vice-Presidents, not just the VP Planning and Engineering.

Calgary International (YYC)

- **Airport Master Plan.** YYC Master Plan was last updated in 2004 and received written endorsement by key air carriers. The current Master Plan round will be concluded in 2014. The Master Plan is communicated through various means including hard copy, internet (YYC.com), project FTP sites, media, written correspondence to the public, and verbal communication (e.g., Open House);

- **Airport Land Use Plan.** YYC’s Land Use Plan is the basis for all development on the airport campus. It designates major categories of permitted development. It is updated periodically to reflect changing development requirements. A graphical representation of YYC’s Land Use Plan is found in the 2009-2013 Strategic Operating Plan and is available to the public on YYC’s website;

- **Airport 10-Year Development Plan.** Each October, YYC updates its development plan, and submits it to the Airline Consultative Committee for written endorsement; and

- **Airport Vicinity Protection Area (AVPA).** The YYC Airport Vicinity Protection Area (AVPA) is a provincial regulation that restricts incompatible development (primarily residential) in areas most impacted by aircraft operations. The protection zone includes provision for the fourth runway. A graphical representation of the AVPA is found in the 2009-2013 Strategic Operating Plan and is available to the public on YYC’s website.

Calgary Springbank (YBW)

A formal Master Plan was completed in 2009. A graphical representation of YBW’s Land Use Plan is found in the 2009-2013 Strategic Operating Plan and is available to the public on YYC’s website.

The current (2009-2013) Strategic Operating Plan for Springbank Airport anticipates upgrades to the existing airfield infrastructure, provision for a future parallel runway, and ongoing development of aviation-related businesses.

Key Accomplishments during Review Period

- Terminal Reserve Mini Master Plan (2008);
- Springbank Master Plan (2009);
• AVPA Regulation revision with Province / MD and City (freezing NEF contours in perpetuity);
• 2014 Calgary International Airport Master Plan project start up;
• Concourse B/C Domestic Conversion Planning Study;
• Centralized De-icing Facility Site selection and requirements study;
• Coordination with IFP and RDP teams;
• Airport Trail Functional Planning study (2011);
• GA De-icing and run-up facility assessment (2011);
• Commercial Vehicle Study;
• McCall North Land Use Strategy;
• Airspace Management Redesign participation with NavCanada;
• Due diligence on Land Tenant Fit outs: Deerfoot South (UPS / FedEx); Barlow North (Dollar Thrifty / Acclaim Hotel / Hopewell), Deerfoot North (YYC Cargo facility, Sunwest, Million Air, NW Geomatics), McCall Central Outline Plan, East Airfield Concept Plan, Deerfoot South Phase 2 Concept Planning, AMC Master Plan and expansion, lotting plan); and
• Terminal Building Fitouts (240+ CIPs in 2011 alone, liquor store, Pattison Advertising, Bubbles, Molson’s, etc.).

Capital and Financial Planning

Capital and financial planning is governed by a number of policies including but not limited to: the Authorities Framework, Budget Centre Management (BCM) policies, contracting policies and procedures, and various Codes and Regulations.

YYC takes a risk management approach to its facility development and capital projects are demand driven. With regard to the ADP, the two main projects are not directly linked, and each represents an independent investment decision.

YYC develops an annual Capital Plan in line with the Authorities Framework that is approved by the Board. Capital expenditures are monitored through several internally developed systems including CTReg (Contracts Register), CPERS, and CIPS.

YYC also develops and monitors construction operations plans, particularly during this period of active construction.

Management Reports

Comprehensive monthly management reports of approximately 150 pages in length, that include the following information are prepared and sent to the Board for their information:

• Part 1 – Narrative Updates from the President and each functional area (corporate communications, planning and engineering, commercial development, operations);
• Part 2 – Financial and Legal including statements (historical and forward), ratios, report on major contracts, status of legal actions, etc.;
• Part 3 – Airport Development Program reports for both the RDP and IFP, including management report, financial summary (budget vs actual), milestones, labour and safety reports, and risk and trend monitor; and
Part 4 – Statistical Report predominantly reporting on passenger, aircraft, and cargo traffic as well as staffing/employment figures, safety and security incidents, noise reports, etc.

The format and content of the management reports was expanded during the Review Period. Distribution to Board members is done electronically during months where there is no meeting scheduled.

CONCLUSION: GOVERNANCE, PLANNING AND PERFORMANCE

Based on the information available to the Consultant during the Review as well as interviews with management and stakeholders, SLI finds that YYC has in place sound governance, planning and assessment systems to develop and implement the strategic direction for YYC.

YYC’s strategic direction is well communicated internally and externally, and the planning and monitoring frameworks in place to manage implementation are sound. YYC conforms to the governance model laid down in the RAAA legislation and regulation, and considers issues through the lens of its mandate and corporate objectives. The Board and its Committees are properly constituted. Reporting and performance management is extensive, both internally and externally, and appears to consistently exceed minimum requirements.
5.0 AIRPORT MANAGEMENT ASSESSMENT

ORGANIZATIONAL STRUCTURE

YYC’s organization is currently structured functionally into the following five areas, each led by a Vice-President or Senior Director:

- **Operations**, including terminal operations, facility maintenance, airside services, environmental services, and IT and telecommunications;
- **Planning and Engineering**, including air terminal development, planning services, airfield development, and facility restoration;
- **Airport Marketing and Business Development**, including commercial and retail development, land and transportation development, corporate communications and marketing, air service development and industry relations, and cargo and logistics development;
- **Finance**, including accounting services, and procurement and contracts; and
- **Human Resources**, including Safety Management Systems.

The structure of YYC has been streamlined somewhat since the last Review Period to reduce the number of direct reports to the President and CEO.
STAFFING

Staffing Levels

There are currently 184 YYC employees; 164 of whom are permanent staff. Over the Review Period, the total staff complement increased by 14% as shown below; the permanent staff complement increased 10%. YYC has indicated that the majority of this growth is in support of the ADP.

<table>
<thead>
<tr>
<th>Year</th>
<th>Permanent – Union</th>
<th>Permanent Seasonal – Union</th>
<th>Permanent Excluded</th>
<th>Total Permanent</th>
<th>% Change</th>
<th>Term Contracts</th>
<th>TOTAL ALL</th>
<th>%Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>100</td>
<td>6</td>
<td>43</td>
<td>149</td>
<td></td>
<td>12</td>
<td>161</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>110</td>
<td>5</td>
<td>42</td>
<td>157</td>
<td>+5.4%</td>
<td>8</td>
<td>165</td>
<td>+2.5%</td>
</tr>
<tr>
<td>2009</td>
<td>117</td>
<td>5</td>
<td>34</td>
<td>156</td>
<td>-0.6%</td>
<td>12</td>
<td>168</td>
<td>+1.8%</td>
</tr>
<tr>
<td>2010</td>
<td>118</td>
<td>3</td>
<td>45</td>
<td>166</td>
<td>+6.4%</td>
<td>20</td>
<td>186</td>
<td>+10.8%</td>
</tr>
<tr>
<td>2011</td>
<td>113</td>
<td>6</td>
<td>45</td>
<td>164</td>
<td>-1.2%</td>
<td>20</td>
<td>184</td>
<td>-1.1%</td>
</tr>
</tbody>
</table>

Source: YYC HR

The table below shows the demographic profile of YYC staff during the Review Period.

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Length of Service</th>
<th>Average Age</th>
<th>Gender: Male</th>
<th>Gender: Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>10.14</td>
<td>45.8</td>
<td>68%</td>
<td>32%</td>
</tr>
<tr>
<td>2008</td>
<td>10.00</td>
<td>47.4</td>
<td>65%</td>
<td>35%</td>
</tr>
<tr>
<td>2009</td>
<td>10.57</td>
<td>47.1</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>2010</td>
<td>10.34</td>
<td>47.48</td>
<td>65%</td>
<td>35%</td>
</tr>
<tr>
<td>2011</td>
<td>10.50</td>
<td>48.14</td>
<td>66%</td>
<td>34%</td>
</tr>
</tbody>
</table>

Source: YYC, HR Department

The table below shows the turnover during the Review Period. The highest rate was experienced in 2007, consistent with the height of the economic boom in Calgary and in Alberta. The voluntary turnover rate in 2011 was on target with the external benchmark and was significantly lower in 2010.

<table>
<thead>
<tr>
<th>Year</th>
<th>Resignations</th>
<th>Retirements</th>
<th>Total Voluntary Turnover Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>11.41%</td>
<td>0.67%</td>
<td>12.08%</td>
</tr>
<tr>
<td>2008</td>
<td>2.55%</td>
<td>3.18%</td>
<td>5.73%</td>
</tr>
<tr>
<td>2009</td>
<td>0.64%</td>
<td>1.28%</td>
<td>1.92%</td>
</tr>
<tr>
<td>2010</td>
<td>3.01%</td>
<td>1.81%</td>
<td>4.82%</td>
</tr>
<tr>
<td>2011</td>
<td>6.17%</td>
<td>0.62%</td>
<td>6.79%</td>
</tr>
</tbody>
</table>

Source: YYC HR

External benchmark: actual voluntary turnover rate as per Towers Watson General Industry Study for Calgary: 6.8% in 2011 and 8.0% in 2010
YYC has a comprehensive summer student program whereby students are placed in most departments of the organization. YYC makes every attempt to ensure that all summer students receive meaningful and relevant work experience. Each year, YYC applies for funding from the Canada Summer Jobs program. As shown below, funding is received in most years.

<table>
<thead>
<tr>
<th>Year</th>
<th>Summer Students</th>
<th>Co-Op Students</th>
<th>Funding Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>58</td>
<td>2</td>
<td>$22,823</td>
</tr>
<tr>
<td>2008</td>
<td>39</td>
<td>7</td>
<td>-</td>
</tr>
<tr>
<td>2009</td>
<td>37</td>
<td>6</td>
<td>$30,871</td>
</tr>
<tr>
<td>2010</td>
<td>35</td>
<td>8</td>
<td>$36,315</td>
</tr>
<tr>
<td>2011</td>
<td>37</td>
<td>8</td>
<td>$30,608</td>
</tr>
</tbody>
</table>

Source: YYC HR

**Recruitment**

In 2007, YYC implemented a new, rigorous recruitment process, to ensure that new employees are not only skilled and experienced, but are a good “fit” with the organization. This process includes: posting the jobs on multiple career sites; short listing based on CV, phone interview, and the online Profile Performance System tool; a face to face interview with a 3-member panel with behavioural/technical/situational questions taken from the e-Interview Guide developed in 2010, and a post-interview exercise; a second interview including a realistic exercise or simulation, and a VP “gut check”; and finally candidate verification including criminal records check, reference check, drug/alcohol test, medicals etc. Minor modifications to the process have been made during the Review Period to update its effectiveness.

During the latter part of the Review Period, YYC began researching and using social media tools such as Twitter and LinkedIn as recruitment channels. Due to privacy concerns, YYC does not monitor Facebook pages of its employees or candidates. In 2011, YYC began working on an external applicant tracking tool allowing candidates to apply for jobs through a portal on the website, and allowing filtering based on bonafide occupational requirements; this will be implemented in 2012.

In 2009, YYC launched a Careers page on its external www.yyc.com website. Internal and external candidates can check the website for job posting and will soon have the ability to apply online. Both internal and external candidates go through the same recruitment process, simultaneously. There is no preference given to internal candidates; YYC hires the best person for the job.

As part of complying with the Employment Equity Act, YYC targets a different designated group each year. For example in 2010 it was visible monitorys; in 2011 it was persons with disabilities; and in 2012 it will be women. YYC has an Employment Equity committee chaired by a YYC HR staff member.

**Volunteers**

There are over 280 White Hat volunteers working at YYC between the hours of 5 am and 10/11 pm, 365 days a year, welcoming passengers to Calgary and providing them with front line information about the airport and the City. Each year these volunteers work on average 370,000 hours, have approximately 750,000 traveller interactions, perform over 200 White Hat ceremonies, and escort over 200 VIPs. In 2011, the White Hat volunteers celebrated their twentieth anniversary.
LEARNING AND DEVELOPMENT

Onboarding

YYC has a comprehensive employee orientation program which includes the Passport to Success program which was launched in 2011. On the first day of employment, all employees receive a two-hour orientation with HR and Safety, which includes an orientation video that was re-developed in 2009 with a focus on physical orientation. Subsequently, all new employees complete the Passport to Success program in their first year of employment. This includes: Branding Bootcamp delivered by the Executive team in a classroom setting; the Passport Program which includes a 3 hour visit to each department (1 department / month); and the YYC Story video that can be watched at the employee’s convenience from their desktop. The program has received excellent feedback to-date.

Corporate Training Strategy

In 2007, based on employee and supervisor feedback, YYC developed a corporate training strategy that identifies mandatory training at defined levels within the organization. Internal courses are linked back to YYC’s core values, and target the individual contributor, the front line supervisor, middle management, and the Executive team.

In 2009, YYC launched the E-Learning Centre, an online tool for self-directed training on topics such as the Alcohol & Drug policy, Violence Prevention in the Workplace, Creating a Respectful Workplace, and Code of Business Conduct.

Employee Off-Site Retreats

Every three years, 100% of YYC’s employees are invited offsite for a two-day retreat that focuses on professional development, networking, and fun. During the Review Period, K7 – Unleash the Energy was held in 2009.

Leadership Development

Since 2008, YYC’s Executive Team began meeting quarterly to discuss issues such as succession planning, trust, and conflict.

In 2011, YYC launched the Taking Flight program, focusing on leadership development for the middle and senior management. The program includes classroom learning, access to a personal coach, self-directed learning, supervisory feedback, and peer learning groups.

LABOUR RELATIONS AND COLLECTIVE BARGAINING

YYC has a unionized work environment, with approximately 75% of the labour force being unionized. In 2007, YYC successfully negotiated a new five year collective agreement with the Public Service Alliance of Canada (PSAC) for unionized staff. This agreement was negotiated in two days, which speaks highly of the positive relationship between management and the union. YYC claims the record for four-five year agreements over twenty years; “unmatched in the industry”. YYC’s HR team conducts its own labour negotiations, supported by external labour counsel as required. Management meets on a quarterly basis with the union to discuss and resolve any issues before they become serious. The collective agreement drives compensation for unionized staff, and includes base salary, premiums and allowances and overtime rules.
PERFORMANCE MANAGEMENT

All new employees receive reviews from their supervisors at the three and six month intervals, confirming whether they passed the probationary period.

All employees have at minimum, an annual two-way performance discussion with their supervisor; the goal is to have a quarterly discussion. In 2011, YYC developed a simplified process for unionized staff, which will be launched in 2012. For excluded staff, there is a quarterly and annual goal review. During the Review Period, one grievance has been filed each year except in 2010 when there were none. None of these grievances resulted in arbitration, and all have been closed.

EMPLOYEE ENGAGEMENT, COMMUNICATION AND RECOGNITION

Employee Survey

In 2007, YYC conducted its first Employee Engagement Survey, and achieved a 55% response rate. The outcomes of this survey were the employment branding initiative, and development of a recognition program. These surveys will be conducted every 3-4 years.

In 2009, YYC conducted its second survey, achieving an 87% response rate. The results identified four areas of focus including: performance feedback; leadership (more face time with the Executive team); work/life balance; and communications. Focus groups were created with employee volunteers, and each led by a Vice-President, to develop strategies within the four areas of focus. The outcomes include: the YYC lounge; a new Flexible Work Policy; health and wellness seminars (to come in 2012); simplified review process (to come in 2012); the establishment of a leadership development program; workshops on how to give and receive effective feedback; and enhancements to YYC Hub.

Employee Communications

From the 2007 Employee Engagement Survey, it was determined that YYC needed to articulate its corporate identity in a clear and compelling way, and to create a common “rallying point” for all persons employed at the airports. In 2008, YYC launched its new external brand with the promise “Experience the Energy”, five pillars of excellence, and six core values (see section previous chapter).

In 2007, YYC established Pathways, an annual event for all employees that takes place over a five-day period (usually in early December) so that all employee groups can be accommodated. This event includes an Executive update as well as many other topics of interest.

YYC also holds a monthly Connections town hall meeting open to all employees, that includes a welcome and update from the President, an introduction of any new YYC Crew staff, recognition of service milestones, and a presentation for one of the Departments (done on a rotational basis).

In 2010, YYC also developed an internal employment brand aligned with the external brand, to articulate the unique culture at YYC. “The energy starts here. It starts with you.”

YYC also provides information to its employees via YYC Hub, YYC’s intranet site which is available to YYC employees only. During the Review Period, YYC has completely overhauled its intranet site, making it more interactive for employees. YYC Hub includes access to forms, job postings, maps and drawings, policies and procedures, hot news, a discussion board, and links to other sites. YYC has also created a webpage www.teamyyc.ca to share information to all 24,000 persons employed on Airport Property.
Employee Recognition

In 2009, YYC established YYC Miles as its employee recognition program, integrated with the service award program. This is a peer to peer program whereby each employee has a set number of points (miles) that they can award to another employee without having to seek management approval. Employees can use their accumulated points (miles) to purchase a variety of items found in an online catalogue.

Employees are also recognized publicly through a variety of ways including the monthly Connections meetings, and Team YYC Appreciation Days (formalized program introduced in 2011).

OTHER HUMAN RESOURCES ACHIEVEMENTS

- In 2007, YYC implemented a new ‘off the shelf’ HR payroll / information system (HRIS) that was then customized with the collective agreement rules to eliminate “subjective interpretation”. The software features an employee self-service module. The HRIS system was upgraded in 2011;
- YYC was recognized as one of Alberta’s Top 40 Employers in 2009 (for 2008), as one of Alberta’s Top 50 in 2011 (for 2010), and one of Alberta’s Top 55 in 2012 (for 2011);
- In 2010 when HR and Safety merged, the new group developed its own Mission & Vision Statement: “Inspiring Today, to invest in our future”;
- YYC is required to comply with a number of laws and regulations and has developed a number of in-house policies in support of legislation. During the Review Period, YYC has updated several HR policies including: Succession Planning Policy; Drug and Alcohol Policy; Safety Sensitive Positions Policy; Video Surveillance Policy; and Flexible Work Policy. In 2008 YYC introduced a Violence Prevention in the Workplace Policy in response to changes in the Canada Labour Code;
- Every five years, YYC conducts a competitive process for its group benefits carrier. Alberta Blue Cross was the benefits carrier from 2004 to 2011 at which point YYC changed to SunLife which offers the benefits of e-claims, critical illness insurance, and competitive rates;
- YYC’s pension plan was updated in 2010 to allow for three groups of employees: those hired prior to July 1, 1992; those hired after July 1, 1992; and excluded staff hired after January 1, 2010. The pension actuary conducts training for YYC employees every three years: Group Retirement Services also conducts training every three years on the self-directed aspect of the defined contribution part of the plan. In 2010, a retirement forecasting tool was developed in-house for employees. Each year, employees receive a “Total Rewards” statement customized for each individual;
- The small internal HR team has shown itself well able to work with a number of service providers, e.g. pension administration, corporate physicians, candidate verifications, employment law, etc. The ability to call upon this contingency workforce enables HR to operate a lean core organization which is reflective of the wider YYC culture; and
- Annual flu clinics for employees and their families; annual audiometric testing; bi-annual medicals for employees in safety sensitive positions.

CONCLUSION: MANAGEMENT EFFECTIVENESS

From a range of indicators it is the Consultant’s opinion that while YYC runs a ‘lean’ organization, it is organized and effectively manages its human resources. From interaction with YYC staff, there is a strong sense of pride in what has been achieved during the Review Period and they have shown themselves to be knowledgeable, committed and enthusiastic in taking ownership of the many challenges and opportunities encountered. YYC has made significant upgrades to its HR practices and internal branding. It is creative and has made efficient use of new technologies to enhance management of the organization during the Review Period.
6.0 DEVELOPMENT AND OPERATIONS ASSESSMENT

AIRPORT MARKETING AND AIR SERVICE DEVELOPMENT

Passenger Air Service

With over 12.8 million passengers and non-stop service to 38 international markets (2011), YYC is the fourth largest airport in Canada, and one of Canada’s major gateways. YYC staff participate in visits to airline headquarters, tradeshows, and local station meetings in an effort to maintain and develop passenger and air cargo service offerings.

Examples of significant passenger air service events that occurred during the Review Period include:

2011

- Air Canada and WestJet increased frequency to 10 additional destinations; and
- WestJet introduced service to Orange County, and Montego Bay.

2010

- Launch of Air Canada’s service to Tokyo, and to Hawaii;
- WestJet added service to Windsor, ON;
- Korean Air returned with a summer program to Seoul, South Korea;
- WestJet and Air Canada both added frequencies to other Canadian destinations; and
- American Eagle commenced service to Chicago.

2009

- New Air Canada service to Whitehorse, London, Portland and San Diego;
- Air Canada launched new seasonal service between Calgary and Hawaii;
- Air Canada’s new non-stop service to Tokyo (the carrier’s first route to Asia in over a decade);
- New WestJet service to San Francisco and San Diego;
- New KLM service to Amsterdam;
- Mexicana consolidated its Alberta service in Calgary, with five flights a week; and
- Korean Airlines announced intent for summer service to Seoul.

2008

- Air Canada established new service to Chicago and Newark;
- WestJet established new service to Grande Prairie, St. John’s, Kitchener/Waterloo, Newark, Cancun and Puerto Vallarta;
- Lufthansa established new service to Frankfurt;
- Mexicana established new service to Mexico City;
• WestJet and Air Canada increased frequencies to 12 cities;
• WestJet improved from seasonal to year-round service to Kamloops and Halifax; and
• KLM announced intent to commence Amsterdam-Calgary service in 2009.

2007

• Lufthansa announced a 2008 start of daily non-stop service between Calgary and Frankfurt;
• Mexicana announced a 2008 start of year-round, four times weekly, non-stop service between Calgary and Mexico City; and
• Air Canada launched new service to Prince George, and Seattle.

Air Cargo

Over the past decade, YYC has developed three cargo plans: Business Development and Attraction (2002-2006); Business Retention and Expansion (2006-2010); and the YYC Logistics Plan (2006-2015). All new cargo and logistics development is complementary to current and planned activities. During the Review Period, there was significant growth in livestock charters (horses and swine, particularly to the Asian market), and YYC invested significantly in land and infrastructure development in support of growing cargo operations.

Global air cargo has been a challenging business environment during the review period. Examples of significant YYC air cargo events that occurred during this time include:

• In 2011, YYC received an Air Cargo World Award in Excellence based on performance, value, facilities and operations;
• Asiana Cargo stopped its scheduled services during the downturn; and
• Significant airside infrastructure, and land and commercial development related to air cargo and consistent with the Logistics Plan (new horse barn, new Tramwell Crow facilities, new UPS air cargo facility etc.). Additional details are contained in the next section.

AIRPORT COMMERCIAL AND LAND DEVELOPMENT

YYC strives to ensure that there is appropriate availability of facilities in the ATB to ensure their optimal use, while maximizing all existing and new potential revenue streams from YYC’s related leasing activities. YYC’s Commercial and Retail Development staff manages: exclusive use space agreements with the carriers; government agency leasebacks; the YYC concessions program; allocation of ATB and apron space (for equipment); manages Spaceport; the various Attractions Alberta spaces, and the Airport Corporate Centre (8 storey office tower).

During the Review Period, the commercial strategy was to (and continues to be): maximize all revenue streams; reduce pressure on landing fee increases; and prepare for the 2015 financial reality post IFP.

Terminal Concessions & Advertising

At the end of 2011, there were some 135 retail, and food & beverage (F&B) outlets at YYC. This has grown from the 115 outlets in 2006, even in a capacity constrained terminal. Retail and F&B concessions are densely concentrated in the terminal – YYC has optimized its existing space. YYC staff meet bi-monthly with their retail and F&B tenants.

For the past twenty years, YYC has also promoted tourism in Calgary and Alberta through unique exhibits in highly visible locations in the terminal such as on the baggage carousels. YYC provides space to federal and provincial
tourism partners for a nominal fee, on a five year program. The fourth generation of this program was renewed in 2011.

Performance is measured in a variety of ways, including but not limited to: gross revenue in a particular area of the terminal; gross sales per enplaned passenger; concessions space as a % of total ATB space; and rent to YYC. During the Review Period, revenue attributable to concessions post-security has increased, which is to be expected given increased passenger dwell times in these areas.

Benchmark statistics are prepared annually by Airport Revenue News. With $12.97 in sales per enplaned passenger (including duty free), YYC ranked 7th in 2011 among international airports in North America, and 2nd among the top 50 reporting airports in North America with $11.94 in gross sales per enplaned passenger (excluding duty free).

Upcoming priorities include: rolling out a loading bridge advertising program, facilitating / sourcing an airport gaming opportunity (pending provincial legislation), completing new hotel development and lease agreements, and finalizing plans for the IFP, and the existing terminal post-IFP opening.

Examples of significant air cargo events that occurred during the Review Period include:

**2011**

- “Shop YYC” incl. Bags given out to shoppers; promoting unique shopping experience at YYC;
- Negotiated new digital exterior billboards;
- Added 4 new food and beverage facilities post-security;
- Facilitated replacement of food and beverage / duty free in conjunction with Concourse B/C redevelopment; and
- Completed IFP nodal retail development plan.

**2010**

- Replaced pharmacy and medical clinic operators (one of few airports in Canada that has this service);
- Renewed Attractions Alberta carousels 8-10 display program;
- Finalized consultation process for new airline lease agreements; and
- Added four new high quality billboards (outdoor).

**2009**

- Developed new common use Transborder Lounge (Rocky Mountain Lounge);
- Facilitated Concourse B/C redevelopment initiatives e.g., changed traffic flows, moved some retail to accommodate changing screening requirements;
- Franklin Shoe Shine and Cut N Jet re-introduced in Banff Hall;
- Flames Fan Attic relocated to Banff Hall;
- Dynamic FX opened in Banff Hall;
- Café Supreme renovated facilities in Concourse D;
- Sweet Factory, Life is Good, and SkyWay Liquor Store opened in Concourse D;
- Duty free shop in Concourse C was renovated;
• Jugo Juice opened in Concourse A;
• New Spin Times exhibit in SpacePort;
• Bentley added another location in Kanasaskis Hall; and
• New indoor and outdoor advertising.

2008

• Introduced YYC-TV advertising system;
• Implemented new / updated retail directory signage;
• Conducted bi-annual sidewalk sales & annual Christmas promotion (2007-2011); and
• Replaced / added 16 concession concepts.

2007

• Introduced “Bullet” advertising component including demo products;
• Redeployed decommissioned smoking rooms;
• Developed new Transborder duty free shop (Nuance);
• Renegotiated major revenue contracts to realize maximum revenue potential (e.g., extensions in exchange for an increase in %); and
• Facilitated new airline offices development on Mezzanine level.

Land Leases and Land Development

YYC manages and develops approximately 3,400 acres of airside and non-airside property providing a base of operations for approximately 130 tenants with over 170 lease agreements. At YYC, there are 95 active leases in total (40 land, 52 land and building, 3 agricultural). There is over 900 acres under lease for commercial development, over 5 million square feet of on-airport commercial space, generating approximately $13 million in land lease revenue each year. At YYC, there is commercial development in six trade parks: Barlow North, McCall North, McCall South, McKnight, Deerfoot South, and Deerfoot North.

Included in YYC’s role is the coordination of the planning and servicing of developable land, coordination of the leasing and development of tenant projects, development of business development and customer retention strategies, and management of acquisition and disposition transactions.

Land leases are subject to conditions in the Transport Canada Ground Lease, as well as the City of Calgary Agreement on Land Use, Development Guidelines and Acreage Assessments (1993), the AVPA, and Airport Zoning Regulations.

When considering leasing out land to new tenants, YYC has a four step process that includes: preliminary meetings; a Letter of Intent, due diligence, and execution of an agreement.

YYC has made efficient use of older facilities following tenant moves to new facilities at the airport, as IFP staging and construction areas, and new service areas (e.g., employee parking). Work completed during the Review Period for 2012 implementation includes development activities focused on the master planned Deerfoot North, where the 196 acres recently purchased will be fully serviced by the Spring; all roads and utilities are now in. Planned future development includes a new hotel, a 39,000 ft2 building (office and hangar space) for North West
Geomatics, a 33,000 ft² high end FBO facility for MillionAir, office and hangar space on a 15 acre site for Sunwest Aviation, and a 100,000 ft² facility for YYC Air Cargo.

**2011**

- Negotiated in-ground fuelling system expansion to Apron IX development (cargo apron).

**2010**

- Completed existing hotel renegotiation and initiated IFP hotel HOA discussions;
- Industrial land servicing;
- Connection of 36 Street NE to 48 Avenue;
- UPS opened a major 145,000 sq. Ft. Distribution facility in Deerfoot South Trade Park; and
- Commencement of new facility for Central Aviation in conjunction with another series of hangars ranging from 2,000 – 4,000 ft² at Springbank.

**2009**

- Finalized RFQ solicitation document for new IFP hotel development / canvassed involvement from key industry candidates;
- Air Marine Cargo expanded their facility;
- Completion of major renovation to Calgary Esso Avitat;
- Servicing work at Deerfoot North including installation of storm sewers, stormwater detention point, sanitary sewers and water mains; and
- Issued 184 construction permits to airport tenants valued at $31 million.

**2008**

- UPS announced development of a 150,000 sq. ft. air/ground distribution facility at YYC;
- Two additional warehouse buildings “B” (95,000 sq. ft.) and “C” (91,500 sq. ft.) completed in Barlow North as part of a multi-phase warehouse project from Hopewell Development Corporation;
- Dollar Thrifty completed construction of a new 14,000 sq. ft. car rental facility in Barlow North, including a vehicle fuelling area and car wash and detailing area;
- Announcement of the new 150 room Acclaim Hotel on 4 acres of land in Barlow North;
- WestJet occupancy of their new 300,000 sq. ft. consolidated office complex;
- Completion of Esso’s FBO $6 million extensive renovations to the departure lounges, common areas, offices and hangar facility in McCall South;
- Beginning of construction of UPS’ 150,000 sq. ft. facility in Deerfoot South Trade Park;
- Completion of Trammel Crow’s Phase 2 of their five building “Logistics” development I Deerfoot South, and completion of construction of two additional warehouse buildings totalling 200,000 sq. ft;
- Construction of new “Gateway Sign” for Deerfoot South Trade park; and
- Silverwing Golf Course on 300 acres (27 holes and small club house) began operations in the Spring.
2007

- Acquired an additional 112 acre parcel immediately to the west of the 150 acre parcel acquired 2 years previous. Land to be used for environmental offset for the 4th runway, and additional piece for Deerfoot North development, future transit hub, and industrial development to the west;
- Completed land assembly and concept planning for Deerfoot North Tradepark;
- UPS signed an agreement to begin construction of a major air/ground facility next to FedEx in Deerfoot South;
- Trammell Crow Buildings ‘A’, ‘B’ and ‘C’, over 80,000 sq. ft. each in Deerfoot South Trade Park;
- Verus Parnters Building Two at over 100,000 sq. ft. in Deerfoot South Trade Park;
- New 25,000 sq. ft. Shaw Communications hangar in the McKnight Trade Park;
- New 32,000 sq. ft. Corporate Express hangar and office building in McKnight Trade Park;
- New 120,000 sq. ft. Hopewell Building A, the first of a multi-phase 22 acre development project in Barlow North Trade Park;
- New Enterprise Car Rental and Avis Car Rental facilities operational, 16,000 sq. ft. each;
- Additional 32,000 sq. ft. in Northgate / North Cariboo charter operations, including hangar, office space and small departure lounge (+ new North Cariboo Air parking);
- Land preparation for new 300,000 sq. ft. headquarters for WestJet;
- Land at Springbank was tendered and awarded for a new FBO and further hangar development as well as major helicopter maintenance base; and
- New Alberta Forest Protection Base was opened at Springbank.

Parking and Ground Transportation

YYC manages a parking inventory of close to 10,000 stalls (7,500 public; 2,400 employee). It also manages licensing and facilities for taxi, sedan and limousine service as well as commercial vehicle operators (shuttle buses, hotel buses, tour buses), signage (curbside departures / arrivals), leases and licenses of ground transportation counter facilities at the arrivals level, CCOC contracted services for curbside management including the bus bays, traffic control and the cell phone lot. There are currently approximately 1,400 commercial pickups per day; three onsite dedicated scheduled service providers to Banff, Lake Louise, etc.; two remote parking operators; 105 licensed commercial vehicle operators; 329 pay-as-you-go commercial vehicle operators; 15 licensed hotel shuttle providers; 5 airline crew pickup providers; 1 downtown shuttle provider (new); 1 public transit provider.

The largest ground transportation initiative during the Review Period was moving from seven taxi and four sedan providers in an open taxi / sedan system, to the award of an exclusive contract to Associated Taxi (single provider) for taxi pickups at the airport. This new closed contract has resulted in service quality improvements (all Associated Taxi drivers have taken YYC’s customer service training).

Examples of significant parking and ground transportation events that occurred during the Review Period include:

2011

- Created a “special needs” parking area for employees returning to work following injury.
2010

- Opened a new 1,420 stall employee lot, as the old lot is now used for the IFP;
- Reduced weekly parking rates in both parkades and the economy lots;
- Pushed credit card payments resulting in a reduction of parkade cashier labour by half (approximately $500K / year);
- Created access control (working off ‘red’ pass) to all employee lots;
- Implemented an employee Safe Walk Program (CCOC escort);
- Installed emergency phones / lighting in all employee lots (2008-2010);
- Introduction of a new 1,235 stall Economy ‘Park Closer’ surface lot offering passengers additional parking choice. The launch was supported by a marketing campaign that included mailouts, billboards, and radio advertisements; and
- New contracts for taxi and sedan services awarded and have resulted in newer vehicles and improved levels of customer services; has also increased availability of taxis in downtown Calgary to the benefits of residents and visitors.

2009

- New 1,932 stall parkade (P2) with plug-ins;
- Award of airport shuttle service to Allied Limousine; and
- Installation of 24 pay-on-foot (express-pay) stations throughout the terminal and in elevator lobbies of parkades.

2008

- implemented a new Automated Vehicle Identification (AVI) system to identify, track and collect data on all commercial vehicle movements for billing purpose;
- Opened new free cell phone waiting lot;
- Activation of courtesy employee shuttle during extreme cold temperatures (ongoing since 2008; 7 days during winter 2011).

AERODROME OPERATIONS

The Authority operates YYC and YBW in a manner that is in accordance with the standards and practices required by Transport Canada as the Regulator, and thereby maintain its Aerodrome Operating Certificates. The Aerodrome Operations Manuals for YYC and YBW were last updated November 2011 and December 2011 respectively.

Airfield and Terminal Operations

YYC is classified by IATA as a Level 2 airport due to current congestion. YYC has a number of programs in place to manage airfield and terminal operations, including: pavement maintenance; airfield restoration; snow and ice removal; landscaping (grass maintenance, trees & shrubs); site self-inspection (daily); gates and fences; drainage and irrigation; litter and FOD – focus weekly on Fridays; airside signage; airfield paint and markings.
YYC’s focus is on managing capacity issues prior to the opening of the new runway in 2014 and the new IFP in 2015. In addition to the significant amount of construction activity on the airfield during the Review Period, there has also been significant activity within the terminal building. For example, in the past year, YYC processed over 12,500 work orders related to baggage and bridges, janitorial, elevators/escalators, electrical, HVAC, plumbing and structural systems.

YYC has implemented a number of initiatives during the Review Period to improve the efficiency of operations both on the airfield and in the terminal. Examples include:

- Implemented common-use principle for loading bridges; changed 9 bridges in 2011 (all older ones on Concourse A + 2 new ones);
- Added and moved check-in counters (mostly for international & TB);
- Added more overnight aircraft parking;
- Moved de-icing of cargo aircraft to Apron VII thereby reducing aircraft congestion;
- Developed a ‘mini’ central de-icing facility on Apron II;
- Implemented Centralized Snow Desk;
- Reallocated manpower to support Apron I snow removal activities;
- Developed and implemented new pushback procedures;
- Realigned markings on vehicle corridors;
- Updated all markings on Apron 1 and 2 for safe movement of aircraft and vehicles;
- Regular meetings: hold seasonal (winter and summer) meetings with carriers, CBP etc.; chair monthly Facility Scheduling Committee (gate allocation); weekly meetings with airside group, NAV Canada and planning, emergency and CCOC personnel; chair and/or participate in the Terminal Operations Committee (TOC), Airline Operating Committee (AOC), Facilities Scheduling Committee, Pre-clearance Committee etc.;
- Daily management & implementation of facility assignment plans;
- Ongoing updates to systems such as gate management & planning, FIDS/BIDS, CAIRS, X-Matters; use of hotspot space at bottom of FIDS screen to push out visual paging notices to passengers;
- Significant NOTAMS during Review Period due to on-going airfield improvements associated with ADP;
- Issuance of a formalized process for co-mingling;
- Restructured organizational structure of electrical group to provide service to both groundside and airside;
- Using Concourse A as a test for the water closets being considered for the IFP;
- Health & wellness improved with introduction of better cleaning products (e.g., microfiber mops);
- Technology used to enhance and improve customer service and efficiencies (building cleaning); improved partnerships with contractors;
- Review schedules to determine capacity issues in customs halls (due to facility limitations) – now give info to US-CBP and CBSA;
- Managing labour disruptions and rallies by carrier staff;
- Dramatically improved the reliability of Electrical Service to the Air Terminal Building (used to be above ground; buried cabling in 2011);
• Established an integrated maintenance service contract;
• IT asset usage and security policy, tenant guidelines re. Voice and data installation standards;
• In 2007 and again in 2008 hosted members of the Royal Air Force based in Calgary for two weeks as they provided support to training exercises at the Suffield Military Base; and
• Ongoing work on operational and activation plans for IFP/RDP.

Additional examples of improvements can be found elsewhere in this report, including the sections on assets, and customer service.

Looking forward, YYC will be creating a Low Visibility Operations Plan and Surface Movement Guidance Control (SMGSC) as the airport moves forward with a CAT III runway.

YYC hosts the annual Summer-Winter Integrated Field Technologies (SWIFT) Conference attended by over 400-500 delegates from the around the world, and close to 100 vendors, providing information on operational improvements, new technologies as well an opportunity for information sharing.

EMERGENCY PREPAREDNESS AND RESPONSE SERVICE

The City of Calgary provides emergency response services at YYC. Through a tri-partite agreement between YYC, the Calgary Fire Department (CFD) and Rockyview County, the CFD provides fire and emergency services to Springbank airport and the surrounding community. Other notable points include:

• Negotiated a new Calgary Fire Department Contract;
• Alberta Health have maintained an on-site presence at YYC for a number of years, but in 2011 dedicated a resource to increase the level of service and minimize response times to on-site medical emergencies; and
• In 2011, received a plaque from the US Consul General recognizing YYC’s contributions during the attacks of 9/11.

Emergency Response Planning

In accordance with CARS, YYC has in place an Emergency Response Plan (ERP) that outlines the roles and responsibilities of all persons and organizations involved in emergency management response. YYC completely re-wrote its ERP during the Review Period and issued it in December 2011. YYC has also recently developed a pandemic plan.

In an effort to improve communications and coordination, the Manager, Emergency Preparedness now works out of both the terminal and the Fire Hall, and meets monthly with the Deputy Chief of Operations of the Calgary Fire Service.

Following an incident, there are internal debriefings / lessons learned as well as external debriefings from each agency involved. Documentation regarding the debriefings is kept on file by YYC, and are reviewed by TC.

In addition to the development of a new EMP, key accomplishments during the Review Period include:

• EMS fixed-wing medical response team now based in airport terminal;
• Successful negotiation of a full-time dedicated medic on-site 12 hrs/day to improve EMS service;
• In process of integrating to a new mass notification system; and
• Participated for the first time in 2011, in the City’s “Disaster Alley” at the fire training academy.

**Airport Emergency Operations Centre (EOC) and On-Scene Controller**

YYC operates under the principles of the Incident Command System (ICS) for the EOC, field and site responders. The ICS is compatible with industry standard within Alberta, and is adaptable, modular and scalable, and flexible. It also provides a common lexicon for all personnel involved in emergency management. YYC’s ICS was enhanced during the complete re-write of the EMP. Updated training is planned for YYC staff in 2012.

The AEOC is the central command and control facility, and is available 24/7 to support site response personnel and facilities. It provides a central location where overall jurisdictional direction, control, inter-agency coordination and resource management can occur to support site response. YYC’s Manager, Emergency Preparedness is generally the EOC Director, if activated; and YYC’s role is to support the scene (vs. commanding the scene).

Full or partial activation of the Emergency Response Plan does not always require the activation of the AEOC. YYC has three levels of AEOC activation (standby, partial, full), and activation depends on the scale, scope and stage of an event.

YYC has back-up facilities (e.g., the AMC, Snow Desk, or the City’s mobile command post), should the AEOC not be available.

**Exercises and Drills**

In 2008, YYC initiated an Exercise Planning Committee with membership from YYC, tenants and emergency responders. This committee meets three times a year to plan exercises and drills.

Table-top exercises occur regularly (three times a year) and include attendees (approx. 40) representing multiple on and off-airport agencies.

During the Review Period, two full-scale emergency response exercises took place; one at YYC and one at YBW:

• “Operation Soteria” in 2010 - a full-scale emergency response exercise involving 14 companies and agencies including WestJet as the key airline participant; and

• A full-scale live emergency exercise at Springbank Airport. Participating agencies included Rocky View County Emergency Services, NAV Canada, the Calgary Flying Club, the TSB, STARS Air Ambulance and others.

Other significant events during the Review Period include:

• 2011 – emergency response staff conducted their recurrent training with the assistance of the mobile training unit, which utilizes propane rather than diesel as the combustible material in order to minimize the impact on the environment;

• 2008 – WestJet donated one of their old B737 aircraft to be used for exercises at the Fire Training Mock-up site;

• 2008 - the Emergency Response Plan was tested with the enroute diversion of an aircraft that experienced severe wake turbulence;

• 2007 – co-hosted, along with WestJet, a special crisis communication presentation by GTAA staff regarding the Air France accident in Toronto; and

SAFETY AND SECURITY

The Corporate Safety Department is now part of the HR Department, and focuses on workplace, public, construction, contractor, and AVOP safety. The Operations Department manages the Safety Management System and Emergency Preparedness. Over the past five years, the Corporate Safety Department has shifted its role from that of ‘doer’ to that of advisor.

Following the requirement to develop a Transport Canada regulated airside Safety Management System (SMS), YYC chose to take a ‘corporate’ approach by also including workplace health and safety, passenger safety, construction safety, apron safety, Airside Vehicle Operator Permits, employee training, emergency preparedness, legislative compliance and other related activities. The management oversight framework for safety includes a Corporate Safety Steering Committee, an all-encompassing Safety Policy, a Non-Punitive Reporting Policy, and Hazard Reporting.

Workplace and Public Safety

YYC meets all federally regulated requirements with respect to Joint Workplace Health & Safety Committee meetings, reports and cycle of workplace inspections.

In addition to the Safety Policies, YYC maintains the following documents in accordance with its Workplace Safety Program: Safe Work procedures, incident reports, OSH committee minutes, workplace inspection reports, and material data safety sheets.

There are several safety committees at the airport, including:

- Corporate Safety Committee with membership from the Executive Team, corporate safety, airside safety, and emergency preparedness; and

- Occupational Safety & Health (OSH) Committee with membership from management, unionized staff, excluded staff, and the Corporate Safety department. This committee focuses on sharing information, rules of procedure, conducting inspections, and reporting to HRSDC.

YYC tracks the number of lost time injuries in terms of frequency and recovery days. During the Review Period, there were two cases of back injury in 2008 which drove the number of recovery days significantly up, and in 2010 there was a fall from a flat deck trailer, resulting in a significant number of recovery days. YYC’s average lost time injuries during the Review Period was almost half the provincial average; while the average recovery days was marginally higher.

<table>
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<th>LOST TIME INJURIES</th>
<th>2007</th>
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<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>Average</th>
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<tr>
<td>Frequency (per 100 people working for a year)</td>
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<td>1.9</td>
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<tr>
<td>Recovery Days</td>
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<td>26.5</td>
<td>0.0</td>
<td>80.2</td>
<td>14.3</td>
<td>24.6</td>
<td>23.4</td>
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Source: YYC Corporate Safety

Workplace safety training is provided by a variety of means including on-the job, classroom, and through YYC School (e-learning).

Since 2009, YYC has engaged a third party to conduct a safety audit. This is a cost-effective means to receive recommendations for improvement, safety communications, and to get a rebate on WCB fees following successful completion of each audit.
YYC attempts to control and reduce the incidence of injuries and property damage to the travelling public and to investigate and advise on cases where YYC may be liable for damages. All public incidents with potential liability are investigated. YYC’s approach is to track, apologize, negotiate, and mitigate future incidents through corrective actions and service improvements.

Examples of public safety initiatives during the Review Period include:

- Erected solar powered mobile flashing stop signs (a YYC Crew initiative) at a public intersection where there had been several public vehicle accidents;
- Reduced the overhead height in the short term parking entrance to be consistent with lower clearance areas elsewhere in the garage;
- Initiated cost recovery where non-YYC personnel or the public have damaged YYC property, as proven by video;
- Fall protection review completed (YYC and contractors) and installation of additional fall protection equipment throughout the terminal;
- Received a Safety Certificate of Recognition (COR) from the Alberta Government (score of 97% in 2011, 95% in 2010, and 87% in 2009). First airport in Canada to undergo such an external audit;
- Met certification requirements and received the Work Safe Alberta Best Safety Performer designation for 2nd consecutive year (2008);
- YYC received its new Certificate as partner in health and safety;
- Held meetings with Public Health Agency of Canada to review national pandemic planning status, the Federal Quarantine Act, and appropriate educational and awareness efforts;
- Installed hand sanitizers throughout terminal public and workplace locations; and
- Presented with the Alberta Partnership in Health & Safety “Best Safety Performance Award” as part of the Work Safe Alberta recognition program.

**Airside Safety**

Safety Management Systems (SMS) applies to both YYC and YBW. YYC has met all deadlines as set out by Transport Canada for its airside SMS introduced in 2008; has received approval of all four phases of its SMS Manual; has passed Transport Canada’s acceptance validation exercises; and is currently implementing Phase 4, quality assurance. In February 2012, YYC hosted a team of 13 inspectors from across Canada. The primary purpose was to validate YYC’s SMS, but also to use the assessment process as an opportunity to improve regional consistency among the various TC regions.

There are a number of tools and systems currently in place to manage and track incidents, accidents and hazards (e.g., CAIRS used by the Duty Managers), as well as corrective action plans and audit reports; however YYC is currently preparing tender documents for a comprehensive electronic safety reporting system that would integrate both corporate health & safety reporting and airside safety reporting, management investigation, corrective actions, auditing, and records management. Monthly reports are sent to the Corporate Safety Committee.

Key airside safety related accomplishments during the Review Period include:

- Conducted a hazard analysis of introduction of the Boeing 747-8F in late 2011 – first new large aircraft to YYC. Provided preferred taxi routes, apron parking positions, manoeuvring protections for safe operation, and identified areas for minor infrastructure changes to improve safety margins pending Apron IX completion;
• Development and distribution of procedures for smooth closure, inspection and re-opening of movement surfaces;
• Ongoing development of training program for Airside Security Escorts and Contractors;
• Construction-focused checklists for Airfield Inspection staff;
• Completed regulatory compliance audit in summer 2011 (external auditor used YYC QA Program to conduct audit activities; requirement for initial audit under SMS fulfilled);
• Reviewed and restructured airside equipment operator’s training program including update of training materials and work procedures, implementation of recurrent training and check-ride intervals for heavy equipment, and updated record keeping system for safety-sensitive employees; and
• Acquired and installed a new ‘Vaisala’ lightning detection system.

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<tr>
<th></th>
<th>2007</th>
<th>2008</th>
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Source: December 2011 Management Report

YYC has Safety Compliance Officers, whose role is to educate, test, and enforce (tickets AND good behaviour). The ‘Good Behaviour’ reward program was implemented during the Review Period, whereby employees who exhibit safe practices are rewarded with a $3 coffee card.

YYC also engages in construction safety and contractor safety, particularly on the airfield. Some of the challenges encountered during this particularly busy time of airport development include the separation of construction sites from operational sites, work in operational facilities, and communication. YYC has met these challenges by implementing a number of measures, including: designating only one Prime Contractor at a time, conducting contractor safety briefings, providing training as part of the RAIC badging process, and moving temporary fences to separate worksites.

With regard to safety on the IFP project, YYC has implemented two significant initiatives:

• Construction manager (CM) given formal status of Prime Contractor, and maintains a full time staff of at least two safety inspections at any time, plus a full time nurse on site. Monthly safety exercises carried out; safety reviewed weekly and daily at toolbox meetings by the site superintendents with sub-trades. Weekly and monthly safety reports issued by the CM to YYC. Currently have 400,000 man hours with no lost time accidents; and

• All workers complete a safety orientation and maintain specific minimum training (e.g., WHMIS, confined space) prior to entering the site.

**Security**

YYC’s Manager Security works closely with Duty Managers, onsite and external incident responders, onsite TC security inspectors, and tenants. Security in the terminal and on the property is maintained through a number of systems including: AACS, duress alarms, CCTV and DVRS (not part of corporate IT systems), locking devices (incl. remote door controls and keys, perimeter fencing, gates, pass control, biometrics, access control procedures, data backup etc.).

YYC has a 24/7 police and security dispatch. The Calgary Police Service provides patrols on foot, bike and vehicle and is responsible for responding to pre-board screening alarms, transborder security, suspicious bags, emergency
response, and criminal response. The Corps of Commissionaires provides security escorts, fingerprinting, pass control, non-passenger screening, and manages the Security Operations Centre. YYC also has the Calgary Airport Watch, a volunteer program supported by the RCMP that provides a pseudo perimeter fence monitoring operation. Security training is provided to employees and first responders; the program was initiated in 2008.

In addition to the CAC-ACI Security Committee, YYC raises security issues at two tenant based committees, as well as at the monthly Enforcement Committee.

During the Review Period, the major security focus has been on responding to proposed new aviation security regulations, and to ensure security is maintained during a time of increased contractors on the site due to the ADP. Key security accomplishments during the Review Period include:

- Continuous upgrades to CCTV system including recording retention capabilities;
- New threat-risk assessment (TRA) procedure for security incidents at screening points; updated to include more incidents as part of security management system (SeMS) development in 2011;
- Developed SeMS in 2011 in advance of the new CASRs, that includes roles & responsibilities, risk based security management, threat-risk assessment and vulnerability assessment processes, template for primary security line partners, security awareness program;
- Participation in a CAC/ACI-NA Security Committee currently sharing information about the SeMS / ASP, as well as developing a national e-learning security awareness course;
- Risk assessment is a primary component of the new ASP; it allows YYC to respond in a way that is consistent with the threat rather than a "one-size-fits-all" approach;
- Defining door standards for new IFP;
- Future initiatives include 3 of 5 automated security access points in ATB in 2012 to reduce CCOC labour new technology solutions for ADP; full IP CCTV migration (digital vs analog); looking at centralized operations centre; and
- Live security exercise at YYC in 2011 that included members of the CPS, WestJet and YYC.

For the IFP, YYC has implemented the following security practices:

- All workers/visitors must have visible photo badge while on site;
- All traffic in/out of the single point of entry/exit gate recorded by CCTV;
- Swipe in/out so know who’s on site at any given time; and
- Fully fenced around IFP.

**ENVIRONMENTAL MANAGEMENT AND ENERGY EFFICIENCY**

YYC takes its environmental management responsibilities seriously. It has in place a comprehensive Environmental Management System (EMS) that includes: environmental policy, planning (risk identification, legal review), implementation (development of programs, plans and procedures), measurement and monitoring, and management review (audit every 5 years – last one in 2007, annual TC review as part of lease monitoring, and tenant audits). Oversight is provided by the Calgary Airport Tenant Environmental Committee (CATEC) that meets semi-annually.

YYC has a number of comprehensive environmental programs, briefly summarized below:

- An Environmental Assessment Program that evaluates all airport construction projects (including tenant projects);
• A **Noise Management Program** aimed at balancing the Calgary Region’s need for safe, efficient and convenient air service with enjoyable city living. The noise management program includes an airport noise concern hotline, the airline flight tracking environmental management system (AFTEMS) to investigate noise concerns, noise monitoring management terminals (NMT), the Airport Community Noise Consultative Committee (ACNCC), the Airport Vicinity Protection Area (AVPA), and noise abatement procedures. Semi-annual and annual aircraft operations and reporting is available on the public website;

• A **Water Quality Program** focused on protecting surface and ground water and ensuring that sensitive aquatic habitats are not compromised. This is done through maintenance of a glycol mitigation plan, water quality monitoring (sampling at 6 outflows off-property), North Pond Operations Plan (key area around ATB to contain contamination), CDF design (in process);

• A **Hazardous Materials Program** that ensures all related material is handled in a safe and environmentally conscious manner. The program includes education and awareness, spills / release reporting; hazardous materials storage; storage tank compliance and inventory (have a storage compound), weekly site inspections; and tenant visits / audits;

• A **Wildlife Management Program** to reduce the risks associated with birds and mammals;

• An **Air Quality Program** that aims to educate and reduce emissions of pollutants. YYC participates in the national pollutant release inventory, participates in the Calgary Regional Airshed Zone (CRAZ), and utilizes a TC developed tool for tracking greenhouse gases and reduction strategies. As part of the air quality program, YC is phasing out the use of liquid fuel for fire training;

• A **Recycling Program** with the objective of maximizing the amount of YYC and tenant garbage and construction waste recycling; and

• An **Energy Management program** to reduce or maintain energy costs and increase levels of service. Strategies employed include: retrofit light fixtures to energy efficient equivalent; variable speed drives; time & temperature controls; power logic metering system; motion/occupancy sensors installed for lighting; energy management lighting control system; dimming systems in HID lighting. YYC is considered an industry leader in energy use reduction strategies.

YYC produces an annual work plan and report, including annual objectives and goals. YYC's environmental management program includes annual tenant audits (done on a 3-4 year rotational basis, focusing on high risk tenants), annual TC lease review; monthly Board / eternal environmental review committee reports; and external audits.

Key environmental and sustainability accomplishments during the Review Period include:

• Conduct of an external sustainability assessment in 2009 that concluded “YYC has robust programs that advance each of the three pillars of sustainability”;

• Developed a new Standard Instrument Departure procedure for night-time cargo aircraft activity in order to reduce noise over residential areas;

• Reconfigured the airfield lighting system to control all south end airfield lighting as a large single unit - NAV Canada can switch off lighting when not required and resulted in $3K savings over a 6 month period;

• Recycled approximately 300 mt of commodities;

• Solid waste removal of approximately 2,163 mt / yr;
• Changed cleaning products and processes to be more environmentally friendly; and

• Incorporation of a significant number of green technologies, products and strategies into the IFP – targeting LEED Gold.

**CUSTOMER SERVICE / PASSENGER EXPERIENCE**

Areas of focus: passenger circulation, passenger information (e.g., signage), passenger accessibility, passenger comfort, handling passenger property, special events and corporate photography.

YYC believes customer service is important, and has developed a customer service training program available to all Team YYC personnel (i.e., all employed on airport property):

• **Connections that Make a Difference** is a one-day session offered free of charge to every person employed at the airport, focusing on customer care, the passenger experience, and how little things can make a big difference. All YYC employees take this course. Since the program’s introduction in 2008, over 87 classes have been held, and 1,254 people have taken this skill-enhancement program; and

• **Driven to Make a Difference** is an ACI award winning program developed for Associated Cab drivers. Since the program’s introduction in 2011, seventeen sessions have been provided, training over 1,000 drivers.

Since 2007, YYC has participated in ACI’s Airport Service Quality Service survey. The results for each quarter during the Review Period are shown in the graph below. YYC sets a target of 4.0, which it has achieved consistently with the exception of the first, Q1 of 2007.

In 2011, YYC was recognized by ACI as a ‘Top 5’ Airport in North America for Customer Service.

Examples of customer service improvements during the Review Period include:

• Introduced Alberta’s first free Wi-Fi service in 2008; system enhanced during Review Period;

• New ‘soft seating’ program, and additional seating installed;

• Washrooms renovated;
- New Attractions Alberta displays installed on baggage carousels;
- New medical clinic opened;
- New portals created to facilitate the passage of the Nexus program card holders through pre-board security screening;
- New customer service training program created for taxi and sedan drivers;
- Introduced “minutes to first bag” visual paging system at bag carousels;
- Worked with CATSA to identify and ensure the appropriate number of screeners (e.g., in 2009, increased number of screeners by 30%);
- Implemented significant passenger process improvements, CBP, CBSA, pre-board screening, passenger check-in etc. (including new Nexus and priority line in Concourse A, additional kiosks in Concourse A, YYC staff assistance in USCBP queues;
- Supported self-tag bag operation for carriers;
- Information booth staffed by Tourism Calgary;
- Porter contract – YYC can ask the baggage porters to help out with passenger experience during peak periods;
- Cart retrieval contract;
- Language translations on cell phones (within two minutes, passengers can get connected to over 175 translation services);
- Play areas / children’s services; and
- BUTT Out program – YYC moved the ATB to a non-smoking environment in April 2007.

**CONCLUSION: OPERATIONAL EFFICIENCY AND EFFECTIVENESS**

By all indications, YYC is running an efficient and effective operation, and has implemented appropriate management tools and processes to monitor, remediate and continuously improve. The airport has visibility in the industry and helps build the Calgary “brand” through its business and travel partnerships. YYC continues to develop the lands and capabilities of the facilities in accordance with its stated corporate objectives. The airport property appears to be run in a safe and secure manner, and YYC’s tenants are engaged in maintaining that situation, particularly during a time of significant construction activity and capacity constraints. Emergency preparedness and exercises help keep everyone focused on their responsibilities should an incident/accident occur. Evidence was presented that significant levels and variety of training were undertaken. YYC has an EMS in place and takes its environmental stewardship responsibilities seriously and is an industry leader in this area. YYC’s achievements in the customer and community service area are numerous and recognized as among the best by a number of external agencies.
7.0 ASSET ASSESSMENT

GENERAL DESCRIPTION

Transport Canada in its lease monitoring reports during the Review Period, consistently concluded that

“... the Airport is being managed, operated and developed by the Authority as a Major International Airport and a First Class Facility in a professional and reputable manner. The Authority is acting as a prudent tenant by carrying out its responsibility for maintaining the Demised Premises and planning and implementing a major capital program for the improvement and upgrade of services and facilities.”

YYC owns and maintains the terminal, airfield, parking facilities, 45 other buildings & facilities including the field electric centre (FEC), baggage search facility and a services building, mechanical systems (escalators, elevators, HVAC systems, baggage handling system, water and sewer, passenger loading bridges), vehicles and equipment.

YYC has a comprehensive maintenance and restoration program. Outside of the ADP, YYC typically invests $2 million annually on restoration service improvements and smaller expansion in the terminal and airfield, including: tenant areas; land servicing; equipment replacement (e.g., bridges).

Between 1992 and 2011, YYC invested over $1.5 billion in the Airport (restoration represents approximately 26% or $370M, and expansion approximately 74% or $1.1B).

(Source: YYC)

Renovation requirements are determined through a life cycle management process and physical asset inspections. Capital requirements are generally determined on an annual basis in conjunction with YYC’s business plan.

A number of management practices and controls are in place that have led to an exemplary record of delivering restoration and expansion on time and on budget, without any arbitration or court settlements, including:

- Total performance certificate sign-off: every project has a sign-off by the client (internal or external);
- Bi-weekly project review meetings to discuss: budgets, contingencies, contractual commitments, quality etc. on restoration projects;
- Monthly capital meetings;

Airport Engineering Project History 2007-2011

(421 Projects $197.1 M)

2007 2008 2009 2010 2011
$42.70 $42.30 $47.20 $32.10 $32.80
• 30-60-90% design sign off;
• P&E staff meetings;
• Quarterly meetings with ATD (design) group;
• Quarterly meetings with Terminal Operations and Airside Operations;
• Project manager updates at Connections meetings;
• Lessons learned sessions;
• Peer review validations;
• Facility Operational Readiness Plan;
• 15 year Capital Plan updated each year (in 5-year cycles);
• Quality Control done by contractor (in accordance with Canadian Standards Division);
• YYC review of external testing reports prepared for/by Consultant; and
• YYC does spot checks.

AIR TERMINAL BUILDING

The following accomplishments in the Terminal area were realized during the Review Period:

• Car parking expansion;
• Loading bridge additions and replacements;
• Pre-board screening area improvements;
• Departures roadway canopy restoration;
• Airside pavement restoration;
• Terminal electrical and mechanical restoration;
• Expansion and improvement to Canada Customs area;
• Removal of wall that blocked meeter and greeter’s views of emerging international passengers;
• Significant reconfiguration of passenger check-in area in Concourse D for WestJet;
• Baggage handling system upgrade;
• New transborder baggage handling building and equipment operational;
• Modification of contracts to address operational and legislative changes;
• New escalator / elevator contract (10 year contract) priced with IFP resulted in better pricing;
• Upgrade to air handling units;
• Completed a major expansion to Concourse A Pre-board screening area;
• Ten ATB entrance vestibules upgraded with new flooring;
• Gate 1-10 (Jazz) area counters modernized and re-configured;
• 1,000 new luggage carts acquired as part of ongoing replenishment and growth plan;
• New FIDS installed throughout the ATB in 2007; and
• Concourse D check-in counter reconfiguration in 2007 to accommodate WestJet’s evolving business model.

AIRPORT DEVELOPMENT PROGRAM (ADP)

The $2.047 billion Airport Development Project (ADP) is the largest expansion project in YYC’s history. The ADP will provide much needed airport capacity, vital to growth and development. Two major projects as part of the ADP dominate YYC’s infrastructure investment program and overall corporate focus: Parallel Runway System (RDP); and International Facilities Terminal & Apron (IFP) projects.

Commenting on the ADP, YYC states:

“The ADP will contribute 10.5 million hours of employment in the Calgary economy, provide essential capacity for growth, and significantly enhance the existing $6 billion value-added GDP contribution the Calgary International Airport makes to the local economy.”

Both projects are on-time and on budget. At the end of 2011, over 600,000 person hours of employment had taken place since the commencement of the ADP, without any major safety incidents.

A number of controls and systems are in place to manage this significant project, including:

• Financial planning, modelling;
• Board oversight – ADP Oversight Committee (meets monthly) and Executive Steering Committee (meets twice per month);
• Authorities Framework Document;
• Project Charter / Project Definition Document (PDD) / Project Implementation Plan (PIP);
• Project Risk Register (IFP/RDP) – updated monthly and shared with Oversight Committee and Steering Committee;
• Proven sequential delivery technique developed over the years;
• Public communication plan / strategy;
• IFP fully integrated with RDP (same operational readiness director on both projects);
• Weekly IFP/RDP management meeting ;
• Common program management firm ;
• Integrated construction management;
• Logistics team for Prime Contractor site status control and sharing ;
• Weekly CM logistics meeting - Consultant meetings (weekly) – design, consultant coordination, construction managers, change order status, financial coordination, etc.;
• Shared resources and transfer of work packages;
• Risk register monitored, reviewed and updated monthly as part of Board Report by the Program Manager (AECOM); reviewed & discussed in detail at monthly ADP Oversight Committee;

3 Source: YYC 2010 Annual Report
- Monthly report from Program Manager to YYC that includes financial reports (budgets, forecast, work to date, invoiced to date etc.), status of contracts, and schedule (summary of activities and next month look ahead). Quarterly report from Program Manager to Executive team (April, August, December) with information on the financial and schedule status and risk;

- Change order management. Program Manager maintains a log as well as current status, value, tracking against budgets and forecasts;

- Program Manager established and maintains the overall Critical Path and incorporates schedules provided by Prime Consultant and Construction Manager (currently over 50,000 lines in MS project). The IFP Project Delivery Team monitors, reviews and evaluated actual progress against the Critical Path Schedule on a monthly basis and issues a report to senior management. This is a good due diligence practice as the CM was the one to build the schedule so shouldn’t be the one confirming the schedule;

- Program Manager maintains a Quality Assurance and Quality Control program; independent third party consultants used for technical material testing and inspections. The PM, Prime Consultant, and YYC all conduct quality control through observation and investigation on a daily basis. The CM maintains a full QC site representative and follows a strict QC manual that has been reviewed by YYC;

- Meeting matrix for RDP;

- Public communication through ADP display area (near WestJet baggage claim area), print & video, YYC website; quarterly stakeholder reports; Annual General Meeting display and presentation; and

- Stakeholder meetings: ACC-TSC and AOC/TOC (monthly) (airline technical/operational reps); internal, local, airline & terminal operators.

In 2010, YYC engaged Deloitte to conduct an independent “Project Controls & Risk Management” Review at end of design, prior to construction, as good due diligence practice. YYC received a lot of “doing this well” comments; all recommendations have been implemented by YYC and project teams.

**International Facilities Project (IFP) - Terminal & Apron**

The IFP will expand and enhance YYC as Alberta’s premier international gateway. This $1.427 billion facility will be in service in October 2015, and will be a multi-sector terminal, primarily for international and transborder operations, but will also have limited domestic operations.

The IFP is planned to be a ‘Green’ building, and YYC is targeting LEED Gold certification. Sustainable features include: 600 geothermal wells and 660 km of in-floor radiant heating tubes; cogeneration that will save 4,900 tonnes of CO2/year; the ability to harvest and recycle 10 million litres of rainwater each year; a high performance building envelope including high performance curtain wall, and double facades with operable louvers; displacement ventilation; de-centralized mechanical and electrical system; low-flow fixtures, and LED lighting.

During construction, YYC is targeting 75% diversion of construction waste from landfills, and the recycling of materials where possible.

Major IFP accomplishments during the Review Period include:

- Project Definition Document (PDD) – issued and approved October 2009;
- Project Implementation Plan (PIP) – issued and approved June 2010;
- ADP Program Review and Recommendation – Board approval to proceed – October 2010;
- IFP Construction Start – April 19, 2011;
• Major Procurement Achievements – passenger boarding bridges; baggage handling system; escalators; elevators; and moving walks;

• Major Tender Packages – TP1 excavation and foundations (awarded under budget); TP2 structure and curtain wall (awarded under budget); TP3 interior fit-out and mechanical & electrical currently out for tender; and

• Currently working in all 8 areas of construction (incl. Hotel), with approximately 38% of the major construction contract values being awarded.

Runway Development Project (RDP)
The $620 million RDP investment consists of a new runway, aircraft parking apron, taxiways, a central de-icing facility and other related infrastructure. The new parallel will be YYC’s fourth runway and will be constructed between the Air Terminal Building and 36 Street NE. Construction on the runway began on April 4, 2011 and is scheduled to be in service by May 2014. The new runway will be:

• 4,267 m (14,000 ft long x 200 ft wide);
• Parallel to existing runway (16R/34L);
• Capable of landing the world’s largest aircraft (Code ‘F’ (Group 6) A380, B747-800);
• Cat III(a) operating category with ILS centreline LED lighting;
• Noise contour and electronic zoning protection in place; and
• Development controls: YYC zoning regulations and AVPA as if runway was already in place since 1977.

The RDP is a complete airfield system which will require: 7.5 million m³ of earth moved and redistributed, 500,000 m³ gravel, 260,000 m³ concrete, and over 5,000 runway and taxiway lights.

YYC consulted with the construction industry during the planning and design phases.

Key Accomplishments during Review Period:

• Demand / capacity update (2006 / 2008);
• Wetlands strategy (2006/07);
• Engineering & Construction Feasibility Study (2006/07);
• Selection of Program Management Team (2008);
• Preliminary design and baseline environmental study activities in support of EA commenced (2008);
• Parallel Canadian Environmental Assessment Act (CEAA) (2009/2011) – a voluntary process resulting in an award winning study;
• Enabling Projects (geotechnical investigations, haul roads, tree relocation, utility relocations, closure of Barlow Trail between 48 Avenue and Airport Road, closure of McCall Way / Air Service place between 78 Avenue and Airport Road, extension of McCall Way at south end etc.) (2008-2011);
• Following lengthy negotiations with the City, an agreement was concluded allowing the City to proceed with construction of the eastward extension of Airport Trail and the Airport Trail tunnel. Construction activities for the runway and the tunnel are being closely monitored by the City and YYC;
• Negotiation of an agreement with Nav Canada for the construction of a new control tower (tallest free standing tower in Canada) positioned in the centre of the airfield. The tower is currently under construction and will be operational in 2012;
• Major construction start. After a late start due to wet conditions early in the 2011 construction season, earth movement was increased to a 24/7 operation, and by the end of the year, over 60% of the 7.5 million m³ of earth had been moved; and

• Also by the end of 2011, 10% of the duct bank installation was completed, design for the new de-icing facility was underway, and approximately 81% of the major construction contract values had been awarded.

OTHER AIRSIDE / GROUNDSIDE

In addition to the significant ADP, YYC has managed a number of airside and groundside projects during the Review Period. For example, they issued 241 permits in 2011 alone. Positive traffic growth has come with the challenge of shortened maintenance windows while trying to maintain high quality service levels. YYC applies a Team concept to balance personnel resources with workload – what is the most cost-effective way of providing level of service. YYC also strives to utilize new but proven technology and methods. YYC makes investment decisions based on a variety of factors including level of service, financial and sustainability.

The following additional airside and groundside projects / accomplishments were realized during the Review Period:

• Departures roadway canopy restoration;
• ATB floor joint / tile replacement (~ 300K / yr);
• ATB overhead door restoration;
• ATB wayfinding signage upgrades (ongoing);
• Ground transportation counter upgrade;
• Installation of fall protection devices (ongoing);
• Springbank office & garage expansion;
• Planned replacement of fire mock-up site;
• Pre-board screening improvements;
• Apron 9 expansion;
• Fuel hydrant replacement;
• Miscellaneous restoration projects including: bridge repairs, replacement and maintenance, apron slab repairs, fuel and hydrant installation and repairs, review &/or develop various operations plans;
• Relocated / new groundside facilities;
• Expansion of Airside Maintenance Centre (AMC) to meet the needs of the ADP (going fwd);
• Coordinating with NAV Canada on a new ground based multilateration vs. airport surface detection equipment (ASDE);
• Many terminal electrical projects including: automatic entrance doors restoration; fire alarm system upgraded to SIMPLEX; turbine generator control system upgraded; SCADA Automated Emergency Power Control System upgraded; all Exit signs updated to international standard; energy use reduction measures implemented; surge suppression installed on all emergency power systems; continued program to restore UPS systems and batteries; complete restoration of all 600 V distribution panel; powerlogic electrical utility monitoring system upgraded;
• Many airside electrical projects including: guard lights installed at all taxiway / runway intersections; LED edge lights installed full length of Taxiway C; new ODALS approach on Runway 10; VASIS on Runway 07-25
replaced with PAPI; edge light circuits on Runway 10-28 now interleaved and upgraded to 150 watt fixtures; several re-cabling projects completed; original generation of fibre optic signs all restored; test of DC edge lighting on Taxiway F1; FEC upgraded with 3 spare CCRs; rebuilt / upgraded field electrical centre (good until 20A);

- Construction and paving of new Taxiway Yankee to improve north-south movement;
- Installation of a new ILS on Runway 10 in cooperation with Nav Canada;
- Construction of an additional Code E egress on Apron II;
- New high speed exit F1;
- Upgrade to Taxiway A3;
- Large apron slab replacement;
- Airside pavement restoration and capacity enhancements;
- Upgrade to runway 10 approach lighting;
- $20.3 million invested at Springbank Airport during the Review period, including pavement restoration and an expansion of the maintenance building;
- Sanitary sewer restoration, runway guard lights and land development at Springbank;
- Expansion of Vammas Garage (3 additional bays added including a heavy equipment wash bay, a heavy maintenance bay, and a heavy service bay);
- New ILS at Springbank;
- Significant drainage improvements at Springbank;
- $6 million in pavement restoration completed;
- Extensive airfield improvements including C2 rapid exit Taxiway, Taxiway M extension, security fence and wind cone replacement, expansion of Apron 1, expansion of Apron 7, and Taxiway W relocation;
- Runway 10/28 guard lights and edge lighting upgrades; runway 16/34 edge lighting upgrades; runway 07/25 new aid replacement and asphalt replacement;
- Fibreoptic signage replacement;
- New power supply to Fire Training Mock-Up site installed;
- Expansion of Apron VII to accommodate aircraft parking for Deerfoot South TradePark tenants;
- Terminal parking expansion (surface parking and parkade) and associated roadwork improvements;
- ATB water main replacement;
- Airfield and groundside pavement restoration; and
- Resurfaced runway 07-25 at Springbank.
VEHICLES AND EQUIPMENT

YYC manages approximately $25 million in equipment including ARFF equipment. YYC uses MAXIMO to schedule and track maintenance activities which are prioritized based on life safety; and uses Excel to track equipment utilization. YYC reviews its maintenance plan annually and adjusts as required.

YYC is responsible for preventative maintenance, emergency breakdown repair, welding & fabrication, modifications, non-emergency repair, annual overhauls. The restoration program includes heavy and light fleets and is based on a 15 year replacement program.

The following vehicle / equipment projects were realized during the Review Period:

- Additional Vammas Plow / Sweeper; driven by capacity; increased efficiency and reduced runway downtime;
- Purchased Hagie liquid de-icer / runway light plow (cross functional for weed spraying in summer);
- Testing and commissioning of new baggage system;
- Preparation for additional service contracts (SOWs) and preventive maintenance schedules;
- EDS/BHS funding agreements with CATSA;
- New Bobcat skid steer loader to replace the existing 25 year old one, providing crew with more functionality and ability to perform some tasks previously contracted out;
- Acquisition of a Hagie ground support tractor to be used as a multi-purpose sprayer (de-icing fluid sprayer in the winter, and agricultural spray in the summer), and light plow in the winter; and
- Acquisition of a new Striker (known as RED 2), equipped with a FLIR camera for Fire Hall 13.

YYC also manages approximately $3.5 million in inventory (now have an on-line “catalogue” of assets with pictures) including its acquisition and disposal. YYC forecasts needs to minimize inventory.

CONCLUSION: ASSET ASSESSMENT

YYC is managing an enormous amount of concurrent redevelopment and restoration activities with a lean organization. YYC appears to have the right people doing the right jobs, and appropriate management systems and controls in place to deliver these projects while continuing to deliver a high level of service. From a review of the documentation and a physical review of the site, it is the Consultant’s opinion that the assets are well managed and developed in a professional and proactive manner. YYC should be commended for its management of airport infrastructure during this time of redevelopment from both an asset and safety risk management perspective.
8.0 FINANCIAL ASSESSMENT

OVERVIEW

As part of this engagement, the Consultant reviewed financial budgets, audited financial statements, and rating agency reports.

YYC operates as a non-share capital corporation and as such, reinvests all net income in the capital renovation and expansion requirements of the airports for which it is responsible. YYC is also authorized to borrow to invest in infrastructure expansion.

YYC separates, and manages its revenues and expenses into two main categories: Operations Sector, and Expansion Sector, and has 64 budget centres:

- The Operations Sector comprises revenues and expenses associated with day to day operations of the airports, including minor capital; and
- The Expansion Sector comprises revenues and expense associated with major capital improvements, including the AIF on the revenue side, and debt financing on the expenditure side.

The Finance Department manages the financial activities of YYC, including corporate reporting, as well as the insurance program (airport operator’s liability and 15 other policies), the pension program, and claims management and administration (an average of 156 reported incidents / year).

During the Review Period, YYC implemented a change in accounting standards from GAAP to Accounting Standards for Private Enterprises (ASPE).

REVENUES

Overall revenues increased from $222.9 million in 2007 to $290.1 million in 2011. This represents total growth of 30% during the Review Period, or at an average annual rate of 6.8%.

Total revenues increased from $18.23 per passenger in 2007 ($36.45 per enplaned passenger) to $22.71 in 2011 ($45.43 per enplaned passenger) for a total increase of 25% or an average of 5.7% per year.

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<th>2007</th>
<th>2008</th>
<th>2009</th>
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<tr>
<td>Total Revenue per Passenger</td>
<td>$18.23</td>
<td>$19.70</td>
<td>$20.44</td>
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<tr>
<td>Total Revenue per Enplaned Passenger</td>
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<td>$39.40</td>
<td>$40.88</td>
<td>$42.32</td>
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</tr>
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Source: Annual Reports

YYC’s revenue in its “not-for-profit” model is required to cover its operating costs, minor capital and debt service. On a per passenger basis, YYC’s revenue is lower than the average among the top eight Canadian airports, which ranged from $22.14 in 2007 to $24.22 in 2010, representing an overall growth of 9.4% or an average annual growth of 3.1% during these four years for which data is available.

As shown in the graph below, the distribution among aeronautical revenue (excl. AIF), commercial revenue, and AIF revenue as a percentage of total revenue was relatively stable during the Review Period, at approximately 28%-36%-36%. This is comparable to the top eight Canadian airports, based on passengers, which had an overall average percent AIF revenue between 28-32% during the Review Period.
**Operations Sector** Revenue has grown from $146.7 million in 2007 to $182.4 million in 2011 representing total growth during the Review Period of 24% or an average annual growth rate of 5.6%. In each of the five years during the Review Period, commercial revenue exceeded aeronautical revenue (excl. AIF) which is in line with YYC’s commitment to commercial development, and a reduced reliance on aeronautical fees as a revenue source.

**Expansion Sector** Revenue (AIF) has grown from $76.2 million in 2007 to $107.7 in 2011 representing total growth during the Review Period of 41% or an average annual growth rate of 9%.

**Aeronautical Revenues**

Aeronautical revenues include the AIF which is accounted for in the ‘expansion sector’; and ‘operational sector’ revenues which comprise landing fees, terminal fees, US preclearance fees, common use passenger equipment, and other aeronautical fees, e.g. fuelling surcharges.

The tariff on aviation fees is reviewed annually, including a comparison to peer airports, and is approved by the Board.

Total aeronautical revenues (including the AIF) increased from $144.5 million in 2007 to $184.3 million in 2011, representing total growth during the Review Period of 28% or at an average annual growth rate of 6.3%.

**Operations Sector**

Operational aeronautical revenue (excl. AIF) has increased from $68.2 million in 2007 to $76.6 million in 2011, representing total growth of 12% during the Review Period, or an average annual rate of 2.9%.

Throughout the Review Period, terminal fee revenues represent almost half (48-50%) of the Operational Aeronautical Revenue; landing fees 38-39% and other aeronautical revenues the remaining 12-15%.
Operational aeronautical revenue per passenger (excl. AIF)\(^4\) has increased steadily from $5.58 in 2007 to $6.00 in 2011 representing total growth of 7.5% during the Review Period, or at an average rate of 1.8% per year.

YYC’s operational aeronautical revenue per passenger (excl. AIF) is lower than the average among the top eight Canadian airports based on passengers. Their average is $8.38 in 2007 and $8.59 in 2010 representing an overall growth of 2.6% or an average annual growth rate of 0.6% during this four year period.

YYC monitors actual results compared to budget. In each year during the Review Period, YYC achieved operational aeronautical sector revenues in excess of their budget, indicating a conservative approach to budgeting. This variance between actual vs budget ranged from a high of 11.2% in 2007 to a low of 0.6% in 2008.

**Expansion Sector**

As discussed previously, AIF Revenue has grown from $76.2 million in 2007 to $107.7 in 2011 representing total growth during the Review Period of 41% or an average annual growth rate of 9%.

**Commercial (Non-Aeronautical) Revenues**

Commercial revenues include car parking, car rentals, other concessions (food & beverage, retail), land rentals, space rentals, ground transportation, and “other”.

Commercial revenue has increased from $78.4 million in 2007 to $105.8 million in 2011, representing total growth of 35% during the Review Period, or an average annual rate of 7.8%.

Commercial revenue per passenger has increased steadily from $6.41 in 2007 to $8.28 in 2011 representing total growth of 29% during the Review Period, or at an average rate of 6.6% per year. This compares to the top 8 Canadian airports based on passengers with an overall average of $7.48 in 2007 to $7.92 in 2010 representing overall growth of 2.6% or an average of 1.4% during this period.

\(^4\) Data source: annual reports
YYC monitors actual results compared to budget. In each year during the Review Period, YYC achieved commercial revenues in excess of their budget, indicating a conservative approach to budgeting. This variance between actual vs budget ranged from a high of 26.8% in 2007 to a low of 3.3% in 2008.

**Fee Comparison**

As shown in the fee comparison graph below based on YYC data, YYC has stated it had the lowest aviation fees among the largest airports in Canada. YYC claims to have maintained this low cost position for over 20 years, which is commendable considering the mix of airports being compared includes airports of various sizes (more or less passenger traffic than YYC), and at various stages of airport development.

![Fee Comparison Graph](image)

**Airport Improvement Fee (AIF)**

In common with other Canadian airports, YYC collects an Airport Improvement Fee (AIF) from all passengers departing YYC except those connecting through YYC or children under the age of two. AIF revenue is used to fund the costs of new airport infrastructure as well as major improvements to existing facilities.

The AIF is collected by carriers pursuant to an agreement among various airports in Canada, the Air Transport Association of Canada (ATAC), and carriers serving the airport that are signatories to the agreement. As the AIF is initially charged on the passenger’s ticket, the YYC pays a 5% fee to the carriers for the collection and remittance of AIF revenues. In 2007, YYC charged $15 to passengers departing to select destinations in Alberta, and $20 to all other destinations. In 2008, the AIF was increased to $20 per departing passenger (all destinations), and the AIF increased by $1 in each of the years 2009 and 2010, and then by $3 to $25 in 2011. AIF’s among peer airports are currently set at either $20 or $25.

---

5 YYC includes major aeronautical fees (terminal fees, landing fees, turnaround fees, FIDS fees, and policing and security fees) in its comparative analysis, and uses an aircraft weighting method reflective of the aircraft mix at the airport, as well as sector weighting.
In 2010, YYC successfully implemented an AIF equivalent fee for passengers being processed outside the Main Air Terminal Complex. Signatory carriers are charged based on actual data reported to YYC, and non-signatory carriers are charged based on total passenger seats.

**OPERATING EXPENSES**

Operating expenses include salaries and benefits, goods and services, property taxes, and federal rent. They also include operating capital.

Total operating expenses (excl. interest and amortization) have increased from $102.3 million in 2007 to $110.2 million in 2011, representing total growth of 8% during the Review Period, or at an average annual rate of 1.9%.

![Operating Expense Distribution](image)

Throughout the Review Period, good and services expenses were the largest expenditure category at approximately half of total operating expenses (excl. interest and amortization), followed by rent at approximately one quarter. Salary expenditures are slightly less than 20% of total operating expenditures, followed by property taxes at approximately 5%.

Operating expenses (excl. interest and amortization) per passenger has varied between a low of $7.71 in 2009 to a high of $8.63 in 2011.

YYC monitors actual results compared to budget. In each year during the Review Period, YYC recorded operating expenditures less than budget, indicating strong control over expenditures. This variance has ranges from a high of 7.5% under budget to a low of 2.1%.

As shown in the operating costs per passenger comparison graph below, YYC had the lowest operating costs per passenger among the largest airports in Canada. YYC claims to have maintained this low cost position for over 20 years, i.e., industry leader; in line with their vision. SLI confirms that as of Dec. 2011 and based on public data, YYC had the lowest operating costs among peer airports.
**Ground Lease Rent**

During the Review Period, YYC remitted $113.6 million in rent payments to the Federal Government (average of $22.7 million a year).

The rent formula was renegotiated in 2006 whereby beginning in 2010, rent would be paid on a percentage of gross revenue. It is anticipated that this new rent formula will result in $15-$20 billion in savings to YYC over the term of the lease.

**PROFITABILITY**

YYC is responsible for financing its capital investment, and net income is re-invested in airport infrastructure. Earnings before interest, taxes, depreciation and amortization (EBITDA) is an appropriate indicator of YYC’s ability to service its debt. As shown in the graph below, EBITDA has ranged from a low of $120.6 million in 2007 to a high of $179.9 million in 2011.
EBITDA as a percentage of revenue has grown from 54% in 2007 to 62% in 2011.

![EBITDA as a Percentage of Gross Revenue](source: annual reports)

**CAPITAL PROGRAM**

YYC develops an annual capital program, and monitors it monthly to actual expenditures compared to budget. The capital program is separated into the operations sector and the facility expansion (AIF) sector.

The capital program has increased from $78.7 million in 2007 to $253.3 in 2011. Expansion capital related to the ADP has represented the most significant portion of the capital program since 2009.

![Capital Program](source: year-in review reports)

The overall capital program has been under budget in each of the years during the Review Period. This variance has ranged from a low of 24% under budget in 2010 to a high of 42% under budget in 2008. YYC typically budgets quite conservatively and builds in contingencies into its pre-tender estimates, thus explaining why budgets are typically higher than actual. The higher than usual variance in 2008 was due to several projects (e.g., Concourse C baggage systems, capitalization of acreage assessments, and Concourse A bridge replacements) being delayed due to factors such as weather, additional or change in scope, etc., largely outside of YYC’s control.
DEBT AND LIQUIDITY

YYC has several debt instruments available to finance specific operational projects as well as the ADP:

- YYC has a $25 million operating line of credit bearing interest at the bank’s prime lending rate plus applicable pricing margin. Letters of credit drawn on the operating facility for specific operational expenses and capital projects ranged from a low of $5.4 million at the end of 2007, to a high of $7.8 million at the end of 2011;

- YYC’s Credit Agreement with the Alberta Capital Finance Authority (ACFA) was amended in March 2009 and has a maximum credit commitment of $2.2 billion to finance the construction and acquisition of capital assets. In 2011, YYC successfully negotiated the removal of hedge restrictions. Borrowings under the credit agreement are secured by a fixed and floating charge debenture including assignment of leases and rents. The ACFA debentures issued and outstanding after December 31, 2003 require semi-annual interest payments. Throughout the period when any debentures are outstanding, YYC is required to maintain an interest coverage ratio of not less than 1.25 to 1, and net cash flow greater than zero as determined at the end of any fiscal quarter on a rolling four fiscal quarter basis. In each of the years during the Review Period, YYC was in compliance with all required debt covenants; and

- YYC also uses forward starting interest rate swap contracts to manage interest rate risk on its anticipated future long-term borrowings associated with the major expansion of airport infrastructure. This is referred to as the “Hedge Program”, and its purpose is to fix the effective rate of interest at approximately 5% on anticipated borrowings (2011). The swap contracts are placed with the TD Bank based on the anticipated borrowings made by debenture under the Credit Agreement with the ACFA. The seventeen Swap Contracts entered into in January 2010 were placed at various fixed interest rates ranging from 4.85% to 5.3% on the notional debt principal amounts ranging from $13 million to $137 million. The first hedge contract settled in March 2011, and the remaining 16 settle in each consecutive subsequent quarter through March 2015.

As at December 31, 2011, YYC’s long-term debt stood at $833 million.

In March 2012, Moody’s Investor Service indicated a “... low default dependence with low probability of extraordinary support from the Government of Canada ... also reflects the Airport’s track record of long-term growth resulting from its role as the largest airport in the energy rich and growing province of Alberta, and as the western hub for WestJet.” Moody’s also indicated that “... in order to accommodate the anticipated growth and the evolving needs of its customers, YYC has embarked on two major capital projects which will result in weakening credit metrics until the middle of the decade. Finally, outstanding interest rate swaps will represent a source of potential liquidity strain and additional debt.”

Moody’s continued to rate YYC as “Stable A1”; a rating it has maintained since 2001.

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<td>Debt Service Coverage Ratio</td>
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Source: Moody’s Investor Service, 13 March 2012
KEY ACCOMPLISHMENTS

- Insurance: in association with six Tier 1 airports, completed first 5 year subscriber period of Canadian Airport Reciprocal Insurance Exchange (CAIRE) with minimal claims; minimized external payments under insurable incidents (average $21K/yr);
- TC Ground Lease: Developed in 2009 TC Rent Policy model used by YYC and other airports to calculate rent (YYC developed and shared with other airports);
- Business Plan: Met or exceeded revenue projections each period; met or under budget on expense items each period;
- Other:
  - Coordinated WestJet AIF audit;
  - Successfully implemented AIF equivalent fee;
  - Coordinated and implemented Pension Manager Review and change;
  - Focused review on best practices in respect to contract law, and insurance and risk management, given many large contracts associated with IFP;
  - New collective agreements; and
  - Re-write of the requisition and procurement system, and the aeronautical billing system (takes inputs from various sources).

CONCLUSIONS: FINANCIAL ASSESSMENT

From a review of both external and internal documents generated by the Authority, as well as third party reports including the audited financial statements, the Consultant is of the opinion that YYC’s financial performance is consistent with its leadership role among major Canadian airports. YYC places strong value on being a low-cost airport, and has achieved many successes in this area.

The factors pointing to a high level of financial efficiency achieved by YYC include:

- Unqualified audit opinions provided by YYC’s auditors as part of the published Annual Consolidated Financial Statements, without any audit issues, during each of the years covered by the Review Period;
- Positive overall trends in revenues and expenses while maintaining costs low;
- Despite the decrease in passenger traffic between 2008 and 2009, YYC’s revenues increased;
- YYC’s revenue distribution between aeronautical and non-aeronautical sources is good and on-par with peer airports;
- Direct operating expenses per passenger are the lowest among peer airport;
- Achieved an EBITDA consistently higher than target; and
- Moody’s positive ratings, consistently Stable A1 during the Review Period, despite the economic downturn and active airport redevelopment program, are a good indication of financial stability and sound fiscal management.
9.0 CONCLUSIONS

The Consultant’s overall conclusions concerning the performance of YYC during the Review Period are as follows:

- YYC is the fourth busiest airport in Canada, with passenger traffic having crossed the 12 million mark in 2007.
- YYC weathered the global economic recession with traffic growing at an average of 1.1% per annum, reaching a total of 12.8 million in 2011.
- Even though aircraft movements declined at an average annual rate of 1.2% during the period, management had to take executive action to limit some types of operation during the weekday peak hour period because of airfield capacity issues.
- YYC is one of the fastest growing cargo airports in the country. While cargo traffic at airports in Canada and around the world declined significantly due to the global recession, cargo throughput at YYC declined less than elsewhere, at an average annual rate of 3.6%, and cargo growth continues to be a focus at YYC.
- YYC has established clear roles for both Calgary International and Springbank Airports. The facilities and services have been continuously improved and are appropriate and customer focused.
- YYC has responded appropriately to changes in its external environment – be they of a regulatory, environmental, social, technological or business nature.
- Despite growth in passenger traffic, capacity constraints and much construction, the level of service provided by YYC, as reflected in the comments of stakeholders, remains high.
- YYC has been innovative in developing methods to enhance customer service in the capacity constrained terminal which is in process of being expanded.
- The annual Transport Canada Lease monitoring reports indicate that YYC continues to meet the terms of its undertaking.
- YYC has taken a leadership role in responding to changing regulatory environment, specifically safety and security, by developing management programs in advance of formal legislative requirements.
- YYC takes its fiscal, environmental and social responsibilities seriously, has embarked on a sustainability initiative, and is committed to being a good neighbour and contributor to the regional and provincial economy.
- YYC meets the Federal Public Accountability Principles framework.
- YYC has a comprehensive strategic and business planning process which accords with industry best practice: the Board of Directors believes it has the necessary information to make informed long-term business decisions.
- YYC has demonstrated commitment to its strategic objectives and is focused on efficiently meeting them.
- YYC states its goals clearly, measures performance against them, and reports regularly on its achievements.
• YYC has in place federally mandated Master Plans and Land Use Plans which provide the framework for development at the airports based on forecasted aviation activity.

• YYC has a comprehensive Environmental Management Program and the Consultant found evidence of appropriate environmental concern and concomitant stewardship.

• YYC has been proactive and open in communicating with the community at large and with key external stakeholders, particularly regarding the substantial ADP.

• YYC seeks input from the community through several forums and standing committees, which meet regularly to discuss issues and concerns, with a broad range of interests being represented.

• Stakeholders interviewed understand the exceptional contribution that YYC makes to the regional economy and management’s role in realizing the significant achievements during the Review Period.

• YYC receives structured feedback on its performance through a variety of tools, consultative processes and benchmarks against other airports.

• YYC has made best use of new communications mechanisms including social media to reach the community and passengers.

• YYC conforms to the governance model laid down in the RAAA legislation and regulation, and considers issues through the lens of its mandate and corporate objectives.

• The YYC Board and its Committees are properly constituted, and evidence was found that Directors comply with the conflict of interest policy.

• While YYC is a ‘lean’ organization, it is organized and manages its human resources effectively.

• There is a strong sense of pride among YYC staff and among the community at large concerning “their” airport.

• YYC has made significant upgrades to its HR practices and branding during the Review Period.

• YYC has successfully captured new air service, maintained existing routes for the most part and created commercial and land development opportunities in existing and new facilities despite the economic slowdown during the Review Period.

• YYC operates the airports in a manner that is in accordance with the standards and practices required by Transport Canada, and maintains its Operating Certificates.

• YYC is running an efficient and effective operation and has implemented appropriate management tools and processes to monitor and continuously improve.

• From a review of the materials available to the Consultant, YYC is seen to run a safe, secure and efficient facility.

• YYC has maintained its capital assets through an ongoing program of maintenance, rehabilitation and replacement as required, in a way that maintains and enhances the “first-class” condition of those assets.

• YYC has consistently brought in its capital projects on time and on budget.
• YYC appears to have prudently managed its financial assets both in terms of trends and standing among peer airports. YYC continues to meet its financial coverages required by the ACFA.

• Overall, YYC’s stewardship of the leased lands was well demonstrated during the review and in all respects it meets its obligations for the management, operation and development of the federal property.

**KEY EVENTS OCCURRING DURING THE REVIEW PERIOD: 2007 - 2011**

The Authority has proactively managed its assets to meet the challenges created by the management, operation and development of YYC. Significant events noted to have occurred during the Review Period include:

**2007**

• 112 acres purchased to complete Deerfoot North;
• Authority awarded BOMA ‘Go Green’ certification;
• Authority awarded ‘White Hat of the Year’ award;
• New five-year Union Collective Agreement signed; and
• Authority received ‘Best Safety Performance’ award from the Province of Alberta.

**2008**

• New YYC brand launched along with the new Strategic Plan;
• Authority named one of Alberta’s ‘Top 40’ employers;
• YBW receives new certified Instrument Landing System (ILS);
• Bell Helicopter opens new supply centre at YYC;
• ‘Free’ Wi-Fi and cell phone lot introduced;
• New WestJet corporate HQ completed; and
• New ‘Silverwing’ golf course opens on airport land.

**2009**

• New Master Plan for YBW completed;
• New KLM service to Amsterdam (triple win, new European hub, new carrier, new city);
• New transborder business lounge opens;
• COPA national convention held at YBW;
• Airline Consultative Committee approve both IFP and RDP projects (separately);
• Agreement reached with NAV Canada on a new control tower;
• Authority receives Alberta ‘Certificate of Recognition’ after comprehensive third party safety audit;
• New ‘P2’ public parkade completed;
• New transborder baggage facility opened to address immediate capacity issues; and
• K-7 staff retreat.
2010

- RDP environmental assessment successful completed;
- Airport Development Project (ADP) receives final launch approval from Board of Directors;
- New Air Canada – Toyko service launched;
- New Taxi & Sedan livery contracts signed;
- UPS opened new 150,000 sq. ft. air/ground facility;
- Master terminal maintenance contract developed and complete;
- ‘Operation Soteria’ full scale emergency exercise completed;
- New Calgary Fire Department contract signed; and
- Interim expansion to Canada Customs Hall completed to address immediate capacity issues.

2011

- Eight months of intense negotiations result in sub-lease to City of Calgary for construction and operation of a 6-lane, 620 m tunnel under the new airfield;
- New employee orientation program launched;
- Another ‘Top 50’ employer award;
- Canada Lease option exercised (new expiry 2072);
- Major review of Airfield facilities completed;
- Initial development of a Security Management System (SeMS) in advance of the new Canadian Aviation Security Regulations;
- Concept development for a future Centralized Operations Centre;
- Both RDP and IFP proceed ‘on-schedule’ and ‘on-budget’:
  - Re-design of CBSA facilities at their request (and cost);
  - Successful closure of Barlow Trail;
  - Integrated City tunnel project into the RDP; and
- Major works on existing airfield including new Runway 10 ILS and new Taxiway Yankee.
## APPENDIX A – LIST OF STAKEHOLDERS CONTACTS

The following stakeholders were contacted for their input to this Review. Not all stakeholders were available for interview.

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th>PERSON CONTACTED</th>
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<tbody>
<tr>
<td>Calgary Airport Authority – Board of Directors</td>
<td>• Douglas Mitchell, Chairman of the Board</td>
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<td></td>
<td>• Donald Ingram, Chair – Audit &amp; Finance Committee</td>
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<td>• Quincy Smith, Chair – Governance &amp; Compensation Committee</td>
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<td></td>
<td>• Kim Sturgess, Chair – Infrastructure &amp; Environment Committee</td>
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<td></td>
<td>• David Swanson, Chair – Airport Development Program Oversight Committee</td>
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<td></td>
<td>• Garth Atkinson, President and CEO</td>
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<td></td>
<td>• Bob Schmidt, Sr. VP Planning &amp; Engineering</td>
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<td></td>
<td>• Bernie Humphries, VP Operations</td>
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<td></td>
<td>• Frank Jakowski, VP Finance &amp; CFO</td>
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<td></td>
<td>• Stephan Poirier, VP &amp; Chief Commercial Officer</td>
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<td></td>
<td>• Cynthia Tremblay, Senior Director HR</td>
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<td></td>
<td>• Alan Lawn, Director Operations</td>
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<td>• Blaine Adams, Director Facility Maintenance</td>
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<td></td>
<td>• Doug Francoeur, Director Airside Services</td>
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<td>• Terry Thompson, Director Environmental Services</td>
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<td>• Paul Lawrence, Director IT &amp; Telecommunications</td>
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<td></td>
<td>• Leo Bieche, Director Activation Planning</td>
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<td></td>
<td>• Cameron Nicolson, Director Safety Management Systems</td>
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<td>• Bruce McFarlane, Director Air Terminal Development</td>
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<td>• Doug Reid, Director Planning Services</td>
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<td>• Joe MacNeil, Director RDP</td>
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<td>• M. Mejia, Director Facility Restoration</td>
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<td></td>
<td>• Robin Eng, Director Accounting Services</td>
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<td></td>
<td>• Gerry Fredette, Director Procurement and Contracts</td>
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<td></td>
<td>• Don Kolsun, Director Commercial and Retail Development</td>
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<td></td>
<td>• Brian Partington, Director Land &amp; Transportation Development</td>
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<td>• Jody Mosely, Director Corporate Communication and Marketing</td>
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<td></td>
<td>• Tom Kirk, Director Cargo &amp; Logistics Development</td>
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<td>• Rod Sim, Station Manager Air Canada</td>
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<td>• Trevor Thredgold, Station Manager WestJet</td>
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<td>• Richard Rendek, President &amp; CEO Nuance Duty Free</td>
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<td>• Gerry Savaria, President &amp; CEO LS Travel Retail North America</td>
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<td>• Gerry Inglis, President &amp; CEO Chilí’s</td>
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<td>• Steven Bradford, President Bandera</td>
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<td>• Dean Buckland, President Executive Flight Centre</td>
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<tr>
<td>Key Tenants</td>
<td>• Linda Thiesen, Sr. Analyst, Lease Management and Monitoring, Transport Canada</td>
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<tr>
<td></td>
<td>• Gord Lowe, Ward 2 Alderman, City of Calgary</td>
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<td></td>
<td>• Glenn McNamara, Chair of Chamber Long Range Planning Committee, Calgary Chamber of Commerce</td>
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<td></td>
<td>• Rolly Ashdown, Reeve, Councillor Division 4, Rocky View County</td>
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<td>• Dean Fleming, President Calgary Airport Business Association</td>
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<td>• Bruce Okabe, CEO Travel Alberta</td>
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<td>• Bruce Graham, President &amp; CEO Calgary Economic Development</td>
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<td></td>
<td>• Troy Holinski, President Alberta Capital Finance Authority (ACFA)</td>
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# APPENDIX B – LIST OF DOCUMENTS REVIEWED

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<tr>
<th>AREA</th>
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<td>Legislation and Constating Documents</td>
<td>• Regional Airports Authorities Act Chapter R-9</td>
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<td>• Articles of Incorporation of the Calgary Airport Authority</td>
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<td>• The Calgary Airport Authority By-Laws (office consolidation dated June 1, 2008)</td>
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<td>• TC Lease Monitoring Reports (2008 – 2011)</td>
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<td>Other Governance</td>
<td>• Authorities Framework (2012)</td>
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<td>• Board Minute Books (sample from March 30, 2011)</td>
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<td>• Signed Board member Conflict of Interest Disclosure (sample from January 2011)</td>
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<td>• Board Handbook</td>
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<td>• Code of Business Conduct and Conflict of Interest Policy – Airport Staff</td>
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<td>• List of Authority policies (60+)</td>
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<td>Corporate Plans</td>
<td>• Strategic Operating Plan 2009-2013 (published November 2008)</td>
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<td>• Business Plan (2011, 2012)</td>
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<td>• ADP Program Update</td>
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<td>Operational</td>
<td>• Year in Review (internal) (2007-2011)</td>
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<td>• Monthly Management Report (December 2011)</td>
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<td>• Airport Authority Presentations</td>
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<td>• Corporate Overview (G. Atkinson)</td>
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<td>• Environment (T. Thompson)</td>
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<td>• Springbank Airport (L. Stock)</td>
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<td>Financial</td>
<td>• Annual Reports (2007-2011)</td>
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<td>• Moody’s Rating Agency report (March 13, 2012)</td>
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<td>• Tariff of Aviation Fees (2012)</td>
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<td>Miscellaneous</td>
<td>• YYC Sustainability Assessment, Executive Summary (2008)</td>
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<td>• 2010 Economic Impact of YYC and YBW (RP Erickson)</td>
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<td>• 2002-2006 Five Year Performance Review (2007) (Jacobs Consultancy)</td>
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<td>• Annual General Meeting Presentations (2008-2011)</td>
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