

Cornwall Regional Airport

Development Opportunity Assessment June 2017

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Private and Confidential

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Dear Sirs,

Subject: 287174-001 – Development Opportunity Assessment

We are pleased to present our report in connection with the abovementioned matter. We trust that our findings about your current situation, the recommendations we put forth and the potential solutions suggested will help you achieve your objectives.

We wish to acknowledge the excellent cooperation and extensive transparency shown by all of the individuals we met in the course of conducting this assignment.

Thank you for your confidence in our firm. We are available to provide additional assistance or support you in pursuing your goals.

Should you require any additional information, please feel free to contact Louise Leclerc at 514-390-4165 or Nicolas Plante at 514-954-4633.

Yours truly,

Paymond Chiht Grat Thonton & Co L.L.P. Nicolar Plante, MGP, PMP

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Section 1 Executive Summary

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Executive Summary

For several years, the Cornwall Regional Airport (CRA) Commission has considered investing in the growth of the Airport, mainly with a runway extension. However, in order to justify further investments in the Airport's infrastructures, it is imperative to determine if the necessary conditions, both in terms of market opportunities and the organization, are present.

A review of general aviation roles and markets has identified limits as well as opportunities for the future development of CRA:

- CRA plays an essential role in ensuring critical services such as medivac (ORGNE) and security support (OPP and RCMP). This is seen as one of the main arguments for continuing supporting the Airport with public funding. The new jet fuel system should enable the servicing of helicopters used in search & rescue and other police operations;
- The recreational and corporate flyer markets have seen an overall decline in the last 20 years and are predicted to remain depressed in the coming years. As with any declining or stagnating market, CRA will be faced with an increasingly competitive environment in which small airports with a mostly recreational function will vie for a decreasing number of clients. Three municipal airports (Carp, Smiths Falls, Brockville) within less than a two-hour drive can accommodate recreational and corporate flyers and all have a more aggressive marketing strategy;
- Commercial flight instruction could present potential for airport growth. In the next 20 years, it is predicted that 617,000 new commercial pilots will be needed to fly the world fleet. Because of the quality of training and a lower price than Europe, Canada is attractive, especially to Chinese flight student. Presently, two flight schools offering commercial training are present at CRA but further development of this market segment should be investigated;
- Attracting MROs (Maintenance, Repair & Overhaul) could be feasible if CRA puts in place the conditions needed to attract the small jets market. This, added to the Airport's location and lower rental costs, could attract small, niche companies. The right factors, such as the availability of serviced lots, would have to be put in place. Also, extending the runway length to 5,000 feet would offer more possibilities in terms of aircraft access;
- The NAV Centre, located in Cornwall, and Carleton University are partnering to establish a Centre of Excellence for Aeronautics and Aerospace to foster and grow those sectors in Ontario and elsewhere in Canada. The Centre could attract businesses in the aerospace and aeronautical sectors. CRA could potentially be used as a testing site for their prototypes;
- The United Counties of Stormont, Dundas and Glengarry is an important agricultural hub in Southern Ontario. This could provide an opportunity to attract establishments that provide support activities for growing crops (e.g. aerial application of fertilizers, fungicides and pesticides over large areas);
- CRA is regularly used for the aerial inspection of pipelines/power lines. Companies in these industries use fixed-wing aircrafts, helicopters and unmanned aerial vehicles such as drones and the presence of both AvGas and jet fuel at Cornwall Regional Airport addresses all fuel needs;
- Other economic activities, such as business executive flight services, manufacturing and distribution, express delivery services and air cargo present little market potential for CRA;
- Exploring less traditionally airport-related activities that would not be constrained by CRA's limited infrastructures (namely, its short runway length), could broaden the Airport's economic base and increase non-aeronautical revenues.

Executive Summary

Analysis of the Airport's present situation demonstrates that the basic elements of good governance and operational performance are for the most part absent. This puts the Airport, the Commission and the Airport's owners (City of Cornwall and Township of South-Glengarry) at risk. Also, because of the Airport's weak governance and operational structure, the basic success factors needed to fully optimize its potential and take advantage of opportunities cannot be put in place. A major overhaul is needed to:

- Improve the effectiveness of the planning process;
- Ensure that the governance arrangements are continually evaluated;
- Clarify the Board members' mandates and responsibilities;
- Guarantee the highest ethical standards namely, in terms of conflicts of interest;
- Be accountable, both to internal and external stakeholders;
- Effectively manage risks;
- Manage information; and,
- Optimize the Airport's resources.

MAIN RECOMMENDATIONS

- Confirm the airport as an essential public service infrastructure for the City of Cornwall and United Counties of Stormont, Dundas and Glengarry (SDG);
- Abolish the present Airport Commission and create a new multi-municipality owned and operated Regional Airport, jointly owned by Cornwall and SDG municipalities;
- Entrust the operation of the Airport to Cornwall's Economic Development Department;
- Put in place an advisory committee;
- Put in place best practices in terms of governance, namely,
 - Produce a strategic plan with a clear vision of the Airport's future;
 - Put in place internal and external accountability frameworks and controls;
 - Determine performance indicators and establish a monitoring system;
 - Establish other policies by which the airport operates (safety policy, environmental protection policy, leasing policy, etc.).
- Build a new, more robust business model supported by a proactive and entrepreneurial management.

Section 2 Introduction

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Study Objectives

For several years, the Cornwall Regional Airport Commission has considered investing in the growth of the Airport, mainly with a runway extension. Since 1984, the Commission has therefore prepared several development plans which describe the possible investments in infrastructure. However, in order to justify further investments in the Airport's infrastructure, we have to determine if the necessary conditions, both in terms of the organization and market opportunities, are present.

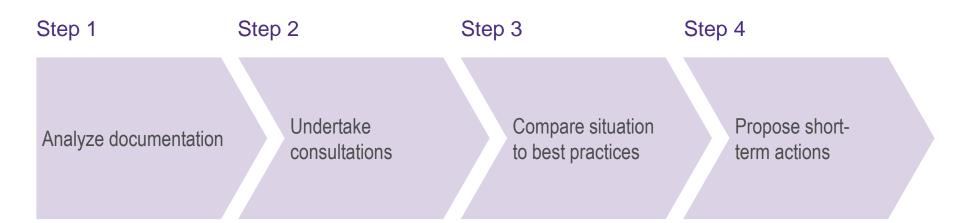
The objective of this report is to assess the following and propose short-term actions to consolidate the Airport's role within the region:

- Market trends and opportunities;
- The Commission's governance model and management practices;
- The Airport's financial and operational situation.

Study Limitations

Although effort was made to obtain information from a variety of sources, both documentary and through interviews, study results are limited by the contacted resources willingness and availability to participate. In some cases, it was not possible to gain access to either the information or the person having the required knowledge.

Methodology



1. Analyze documentation

The documentation received from the Commission and both municipalities concerning the Airport provided us with an overall understanding of the current operations.

Also, several regional airports were benchmarked to provide comparative data (see Appendix A).

2. Undertake consultations

In order to validate and supplement the information obtained through the analysis of the available documentation, the Airport's main stakeholders were interviewed (see Appendix B), as well as some potential customers (see Appendix C) and Managers from comparable regional airports.

3. Compare situation to best practices

Airport governance best practices and key financial and operational conditions for success were documented. They were then compared with the Airport's present situation and the gaps identified and analyzed.

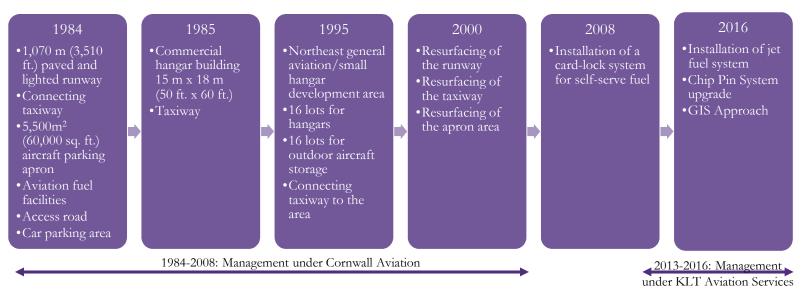
4. Propose short-term actions

In light of the results obtained from the previous steps, short-term priorities are proposed to support the implementation of the conditions necessary to increase the Commission's and the Airport's performance.

History

The Cornwall Regional Airport opened in 1973 as the Cornwall/Summerstown Airport. At that time, it was owned and operated by Cornwall Aviation. It had a 2,865 ft. turf runway, an apron area and hangar/office building. The services offered were flight training, aircraft charter services and aviation fuel sale. In 1984, the City of Cornwall and the Township of South Glengarry purchased the Airport and created the Cornwall Regional Airport Commission. Its role was to manage the airport. The purchase of the Airport included the runway, taxiway, apron area and adjoining property with title to land held by the Township. The management of the Airport was given to Cornwall Aviation which kept ownership of the hangar and office building. In the same year, the first Airport Development Plan was prepared indicating an estimated cost of \$2M to be mostly funded by the federal government for construction of a 1,070 m (3,510 ft.) paved and lighted runway, a connecting taxiway, a 5,500 m² (60,000 sq. ft.) aircraft parking apron, aviation fuel facilities, an access road and a car parking area.

Summary of Airport Developments



In 1990, the Airport Master Plan was developed and envisioned an airport capable of servicing local industry and commerce by making the necessary investments in order to allow corporate jets to use the Airport. Federal government funding was offered to a few municipal airports in the area. The Development Plan had to be implemented quickly to benefit from available funding. However, the Cornwall Airport Development Plan was approved and implemented in 2013, which resulted in receiving only a small portion of the federal funding.

The second development plan was prepared in March 2008. Also in 2008, the Cornwall Aviation management contract expired and a decision was made not to renew it. From 2008 until 2013, a few Airport Managers were hired, but none met the Commission's standards. In 2013, KLT Aviation Services, which already held the maintenance contracts for snow removing and grass cutting, offered to manage the Airport and has continued to do so to this day.

Section 3 Context

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General Situation

Cornwall Regional Airport (the "Airport") is located in the Township of South Glengarry and services the United Counties of Stormont-Dundas-Glengarry (SDG) and the City of Cornwall. Equipped with a 3,500-ft. runway, a small terminal, hangars and parking sites, the airport is predominantly used for recreational purposes (leisure flyers and small craft flight training). Although the Airport also has some non-recreational activities such as search and rescue and police operations, and medical emergency transport, these activities remain marginal and provide no economic spillover. The Airport is under the governance of the Cornwall Regional Airport Commission (the "Commission").

Recently, opportunities have been presented to the Commission, namely the added revenues following the addition of jet fuel distribution equipment and an international flight training project by Ottawa Aviation Services (OAS) in collaboration with Cornwall's NAV Centre.

Presently,¹ municipal subsidies represent 50% of the Airport's budget. While the financing of public infrastructure falls within a municipality's role, the Township and the City question the wisdom of continuing to invest public funds into the Airport considering that, until now, it has not acted as an economic development lever. Also, major governance and management issues have had a negative impact on the credibility and effectiveness of the Commission and have challenged the Airport to an even greater extent.

Air Movements

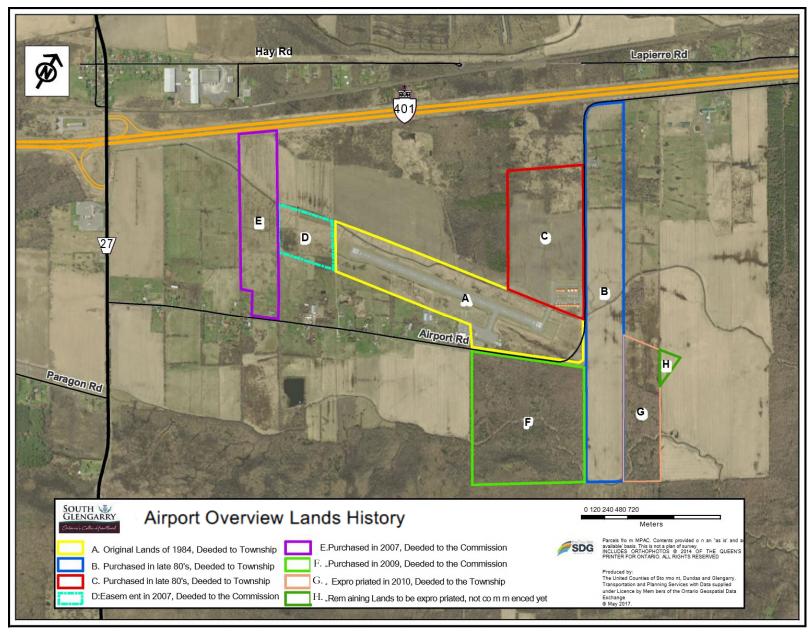
From 2014 to August 2016, the Airport registered a total of 19,833 air movements, as follows:

- 2014: 8,496 air movements,
- 2015: 5,900 air movements,
- 2016 (to August): 5,437 air movements.

Present Land Use

The ownership of the land used by Cornwall Regional Airport is divided between the Airport Commission and the Township of South Glengarry, as illustrated by the aerial view on the following page. It is to be noted that Cornwall Aviation retains ownership of the land used for their activities.

¹ Municipal subsidies indicated in the Airport's 2017 budget. Fuel revenues adjusted to net value to have similar presentation as previous financial statements.



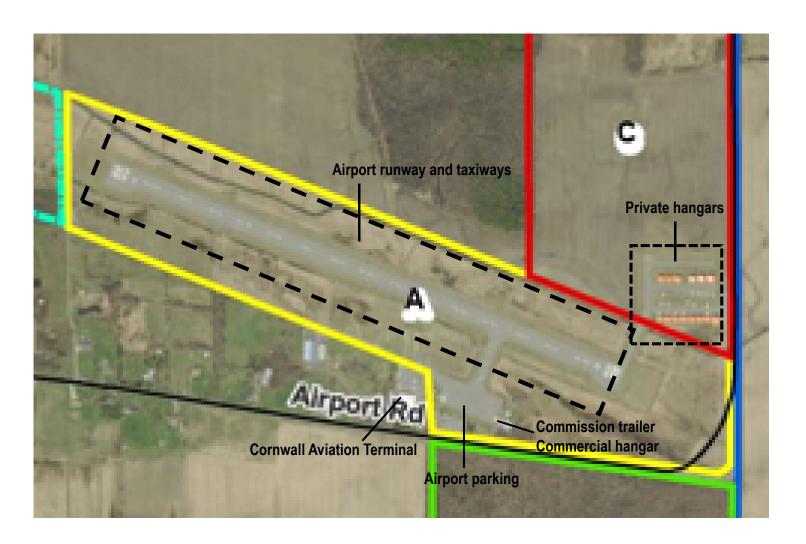
Airport Infrastructure

The following chart lists the Airport's infrastructures and provides information on their overall condition. It also identifies constraints that limits the Airport's present development. The following page presents a close-up aerial view of the Airport's infrastructures.

Infrastructures	Condition	Operational Constraints
Runway (3,510 feet) Good. Paved several years ago and maintained reg		The runway length is minimal and can only accept single engine piston airplanes and very light jets (see Appendix D).
AV fuel system	Fair/good. Recent tech problems resolved, pump may be at end of life.	
Jet fuel system	Excellent. Brand new installation.	
Commercial hangar (1)	Very good. Well maintained and in good repair, no washrooms.	Lack of available leasable commercial hangar space.
Taxiways	Good. Paved several years ago, some maintenance issues.	Minimal taxiways.
Lights/avionics	Good. Maintained regularly.	
Commission trailer	Very good. Well maintained and in good repair.	
Tie down areas (16)		Lack of available tie down areas.
Parking lot	Good. Paved several years ago and maintained regularly	
Fencing	Good. Well maintained and in good repair.	
Public services	Electricity. Communication (voice and data). No water, sewage or gas.	Lack of land capable of being developed for economic purposes (no water or sewage).

Cornwall Regional Airport also does not have proper airport amenities such as a terminal and public washrooms. These are presently supplied by Cornwall Aviation.

Airport Infrastructure



Section 4 Market Trends and Opportunities

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General Aviation Airport Markets

General Aviation (GA) is one of two categories of civil aviation. It refers to all flights other than military and scheduled airlines and regular cargo flights, both private and commercial. The majority of the world's air traffic falls within this category, and most of the world's airports serve general aviation exclusively. There are over 1,000 general aviation airports in Canada, including Cornwall Regional Airport.

General Aviation airports serve a multitude of community needs and support a variety of aviation-related markets which are presented in the table below. This section of the report examines the trends and opportunities for each market and identifies those that hold the most potential for Cornwall Regional Airport.

General Aviation Airports Roles and Markets¹

Airport Roles	Markets	
Emergency Preparedness and Response	Aeromedical flightsLaw enforcement/National security/Border SecurityEmergency response	 Aerial fire fighting response Emergency diversionary airport Disaster relief and search and rescue (SAR)
Critical Community Access (not pertinent to Airport's situation)	Remote population/island accessAir taxi/charter services	Essential scheduled air service cargo
Other Aviation Specific Functions	CorporateFlight instructionPersonal flyerCharter passenger service	 Maintenance, Repair and Overhaul (MRO) Aircraft storage Aerospace engineering/research
Commercial, Industrial and Economic Activities	 Agricultural support Aerial surveying Utilities/pipeline control and inspection Oil and mineral exploration/survey (not pertinent to the District economic base) 	 Business executive flight service Manufacturing and distribution Express delivery services Air cargo
Destination and Special Events	Tourism and access to special events	Special aeronautical (skydiving/airshows)

¹ Federal Aviation Administration, General Aviation Airports: a National Asset – A fresh Look at the Many roles General Aviation Airports Play in the National Air Transportation System, May 2012.

EMERGENCY PREPAREDNESS AND RESPONSE

Since they are less expensive and more accessible than primary airports, GA airports play an essential role in ensuring critical services such as medivac, security support and combatting forest fires. These community-support activities are often one of the main arguments that support publicly funding a commercially non-profitable airport infrastructure. Cornwall Regional Airport is used by four organizations providing emergency services:

• **ORNGE** provides air ambulance and medical transport to people in Ontario who are critically ill or injured and cannot endure the stress or duration of ground transport or a commercial flight. Although ORNGE does not have a base in Cornwall, Cornwall Regional Airport provides a landing site that can service a large portion of Southern Ontario. From 2012 to 2016, ORNGE's air ambulance landed 44 times at the Airport, as detailed below.

ORGNE Landings/Aircraft Type	2012	2013	2014	2015	2016
Total landings	4	8	15	6	11

- The Ontario Provincial Police (OPP) uses the Airport as an AvGas fuelling station for their fixed-wing airplane when aerial surveillance activities are held in the region.² The recent addition of a jet fuel service will enable the servicing of their helicopters, used in search and rescue and other police operations. Information obtained from the OPP ³ confirms their interest in buying jet fuel from Cornwall Regional Airport;
- The Royal Canadian Mounted Police (RCMP) has a large base in Cornwall. RCMP efforts in Cornwall focus on federal statute enforcement, customs and excise, anti-smuggling initiatives, gathering of intelligence, investigation and dismantling of organized crime, and border security. The detachment serves the citizens of the United Counties of Stormont, Dundas and Glengarry and the United Counties of Prescott and Russell. The RCMP's Air Services provides direct operational support in technical and specialized areas of airborne law enforcement, enabling front-line members to preserve the peace, uphold the law and prevent and investigate crime. Cornwall Regional Airport is used as an AvGas station for their single-engine aircraft;
- On two occasions, Cornwall Regional Airport participated in emergency evacuations following major floods in Kashechewan. Operations were coordinated by the **Ontario Ministry of Natural Resources**. The first, in 2014, involved 250 evacuees and different aircraft types (Beech King to DHC8). The second, in 2015, involved approximately 80 evacuees using two DHC8 aircraft. The Airport's role was to receive the passengers, supply washroom facilities and transfer baggage and people to buses.

Main Opportunities

- Promote the Airport's emergency preparedness and response role to heighten public endorsement of municipal funding;
- Promote the new jet fuel system to the emergency service providers;
- Explore the possibility of having an OPP or RCMP Cornwall-based aircraft or helicopter.

¹ ORNGE has air service bases in London, Ottawa, Toronto, Sudbury, Timmins, Moosonee, Thunder Bay, Sioux Lookout and Kenora.

² Landing statistics unavailable for security reasons.

³ Letters of intent sent to Cornwall Regional Airport (January 25, 2007 and February 28, 2014).

CRITICAL COMMUNITY ACCESS

Not relevant to Cornwall's situation.

OTHER AVIATION SPECIFIC FUNCTIONS

This category includes private and corporate aviation markets uses such as the recreational and corporate flyer market, flight instruction, charter passenger service, aircraft/avionics manufacturing and maintenance, aircraft storage and aerospace engineering and research.

1. Recreational and Corporate Flyers

In the last 20 years, small aircraft activity has seen an overall decline in Canada:1

- From 2001 to 2011, movements of piston aircraft in Canada have declined by 40% or 5.1% a year. Since this is the largest segment in GA, its decline has an important impact on GA airports;
- During the same period, private aircraft movements declined by 26% (3% a year) and local movements declined by 39% (4.9% a year).

Jet and turboprop segment has seen an increase although, because of its smaller size, it does not compensate for the decline of the piston segment:

- Jet movements increased by 8% from 2001 to 2011 (0.8% a year);
- Turboprop movements increased by 35% (3% a year).

The corporate segment remains very small. In 2015, Canadian business aircraft numbered approximately 1,900. Of these, only 504 were based in Ontario.

In Ontario, the total number of movements reported between 1997 and 2011 by the 14 airports without towers or FSS declined by 1.3% a year with local movements declining by 4.1% a year but itinerant traffic increasing by 1.7% a year. The overall decline has been more pronounced since 2006.

¹ SNC Lavallin, Business Plan and Master Plan – Muskoka Airport, 2013. **Note: no up-to-date data available for Canada.**

² InterVistas, Economic Impact of Business Aviation in Canada, 2015 Update.

The probability that the recreational and corporate market will continue to be depressed in the coming years is supported by the low demand for new GA aircraft as well as the forecasted number of active GA airplanes in the U.S.:

- The number of GA airplanes manufactured has been relatively stable since 2009 when shipments saw a sharp decrease from 2008 (-48%);
- It is forecasted that the global number of active GA aircraft will decrease by 3.5% between 2016 and 2025, with business jets being the only segment with a predicted increase.

U.S.-Manufactured GA Airplane Shipments by Type¹

	•	-	
Year	Total GA aircraft	Total Piston	Total Turbine
2005	2,857	2,095	762
2006	3,147	2,287	860
2007	3,279	2,174	1,105
2008	3,079	1,791	1,288
2009	1,585	802	783
2010	1,334	746	588
2011	1,465	706	759
2012	1,518	708	810
2013	1,615	754	861
2014	1,631	788	843
2015	1,592	783	809
2016	1,525	718	807

Active U.S. GA Airplane by Type and Forecast²

Year	Total GA aircraft	Total Piston	Total Turboprop	Total Business Jet
2015	164,293	141,141	9,712	13,440
Forecast				
2016	159,135	137,080	9,420	12,635
2020	156,165	133,295	9,190	13,680
2025	153,445	128,505	9,600	15,340
2016-2025	-3.5%	-0.9%/year	-0.1%/year	1.3%/year

¹² General Aviation Manufacturers Association, 2016 General Aviation Statistical Databook and 2017 Industry Outlook.

The difficulties faced by the recreational flyer market are also made evident by the stagnating Cornwall Flying Club membership, with only two new members during the last five years. Information gathered through interviews with Cornwall businesses also points to a low market potential for corporate flyer activity. None of the businesses contacted indicated having a need for corporate landing or parking services.

As with any declining or stagnating market, Cornwall Regional Airport will be faced with an increasingly competitive environment in which small airports with a mostly recreational function will vie for a decreasing number of clients. Three municipal airports (Carp, Smiths Falls, Brockville) within less than a two-hour drive can accommodate recreational and corporate flyers and all have a more aggressive marketing strategy (Internet site, services such as a terminal, classrooms, library, museum, etc.). Depending on their point of origin, flyers have the choice between Cornwall and one or several of the other airports. The recent addition of jet fuel should improve Cornwall Regional Airport's competitive position since it is offered at two of the other airports (not available at Smiths Falls). In the coming years, the main challenge will be to maximize the revenue potential of this market while maintaining a strong competitive edge.

Interviews conducted with stakeholders identified the following issues affecting the recreational and corporate market:

- There are few opportunities for tenants and airport users to participate in the Airport's development;
- Cornwall Regional Airport has few distinguishing features or pull factors when compared to its competition;
- There is very little promotion of the Airport: no Web site, an essential promotion tool;
- Airport is not customer service oriented (no consultation or customer satisfaction survey, for example).

Main Opportunities

- Maximize the recreational and corporate market potential by gaining a better competitive position through:
 - an aggressive marketing strategy that will position the Airport in its different markets and promotes services and economic opportunities. An effective Internet site is identified as a short-term priority;
 - the presence of basic services for the comfort of pilots and passengers (lounge with coffee, meeting room, Wi-Fi, etc.);
 - a customer-oriented approach that is supported by the governance and management models;
 - evaluating the possibility of reintroducing a fuel loyalty program (offered at Smiths Falls).

2. Flight Instruction

This industry provides aviation and flight training, including vocational training and recreational training. The flight instruction industry includes two markets with very different growth potentials, recreational flight instruction and commercial flight instruction.

The <u>recreational flight instruction</u> market is impacted by several factors, including:

- The global stagnation of the recreational flyer market described in the previous section;
- The fact that the recreational side of flying remains mostly undiscovered by the general population;
- The image that flying a plane is difficult and only accessible to rich people: Flying small planes isn't as hard as it looks, but it's getting harder to convince people it's worth the time and money to learn how, raising questions about whether there will be enough pilots to support the businesses that have grown up around America's small airports.¹

Cornwall Aviation, located at the airport, offers flight training for recreational flyers.

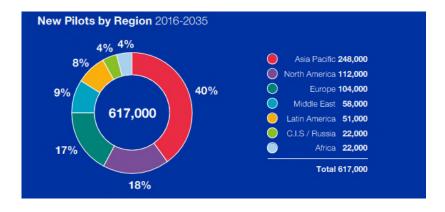


Main Opportunities

- Recreational flight instruction offers little potential for growth;
- Adding Ultralight flying and helicopter flying training were identified by stakeholders as having potential;
- Link the Airport's Internet site (to be developed) with Cornwall Aviation's site to cross-promote.

 $^{^{1}\,}http://www.marketwatch.com/story/recreational-flying-grounded-pilot-numbers-dwindle.$

The global <u>commercial flight instruction segment</u> has a brighter outlook. In the next 20 years, it is predicted that 617,000 new commercial pilots will be needed to fly the world fleet.¹ Because of the quality of training and a lower price than Europe, Canada is attractive, especially to Chinese flight students who must leave China to learn to become commercial pilots (industry is controlled by the military).



Two flight schools presently operate from Cornwall Regional Airport:

- Cornwall Aviation offers commercial flight training;
- Ottawa Aviation Services (OAS) offers a training program for helicopter pilots, in partnership with National Helicopters Inc. To this end, OAS has signed a multi-year lease with Cornwall Regional Airport for the use of the main hangar and space for aircraft outdoor parking. This training program falls within the larger NAV CENTRE Centre of Excellence for Aeronautics and Aerospace project in which OAS seeks to address the large global market for fixed wing and helicopter pilot training, including the rapidly growing market in China (see Appendix E).

Main Opportunities

Attract other flight schools.

¹ http://www.boeing.com/resources/boeingdotcom/commercial/services/assets/brochure/pilottechnicianoutlook.pdf

3. Charter Passenger Service

Companies in this industry provide air transport services on an irregular or unscheduled basis for passengers. Industry operators allow people to fly where they want (in terms of destinations and airports) and when they want, as opposed to commercial airlines that operate on a fixed schedule of destinations and times. This industry also includes scenic tours and sightseeing services.

Interviews with parent companies of Cornwall businesses indicate that their senior Managers' visits are infrequent and that they opt for scheduled flights to Montréal or Ottawa and drive to Cornwall from there.

In the past, chartered flights between Cornwall and Toronto have been attempted but were not cost-efficient.

Also, the runway length (3,510 feet) is not adequate for small corporate jets that need a minimum of 4,330 feet to land and take off.

Main Opportunities

• Presently, no identified opportunity. Maintain vigilance for future market possibilities.

4. Maintenance, Repair and Overhaul (MRO)

Companies in this industry provide support services to air transportation operators, such as aircraft inspection and testing; ferrying aircraft between departure gates and taxiways; aircraft maintenance and repair; and aircraft and parts overhaul.

Over the past five years, the Aircraft Maintenance, Repair and Overhaul (MRO) industry has slowly climbed out of the recession and reached new heights. Improving economic conditions led to a pickup in air travel. As a result, airlines increased their use of their aircraft fleets. The resulting rise in aircraft wear and tear and mandatory checkups have led to increased demand for industry services. In the five years to 2021, continued economic growth is anticipated leading to increased air travel and aircraft usage. Moreover, lower oil prices might keep older aircraft flying for longer, thus increasing the need for MRO.

Barriers to entry in the Aircraft MRO industry are moderate because the entire air transportation sector is highly regulated, and licensing and reporting requirements are high. Any company that wants to enter the industry needs to comply with the myriad of regulations while securing equipment and labour at the same time. Also, skilled labour can be tough to find in tight labour markets. Once a company enters the industry, it faces high levels of competition that make survival difficult.

Because of these industry dynamics, mid-size and large MRO companies look for airports with high traffic to generate sales, which is not the case at Cornwall Regional Airport. Also, commercial aircraft cannot use the current runway.

However, the installation of the jet fuel system could make the airport more attractive to small jets, diversifying the potential client base. This, added to the Airport's location and lower rental costs, could provide opportunities to attract small MROs. The right conditions, such as the availability of serviced lots, would have to be put in place. Also, extending the runway length to 5,000 feet would offer more possibilities in terms of aircraft access.

Main Opportunities

• Explore the possibility of attracting small, niche MRO businesses.

5. Aircraft Storage

Sixteen private hangars are presently located on the airport grounds. Tenants build their own hangar following strict guidelines (materials, colour) and lease the land from the Commission for a 20-25-year term. Leasing land instead of selling is advantageous since control over land gives the Airport the capacity to plan long-term and respond rapidly to user needs.

Presently, Cornwall and the United Counties of Stormont, Dundas and Glengarry (SDG) residents own 50% of the private hangars located at the Airport and rent 56% of the tie down areas.

Private Hangars Ownership

Place of Residence	Number	% of Total
Cornwall	3	19%
United Counties of SDG	5	31%
Island of Montréal	4	25%
Vaudreuil-Dorion	1	6%
Hudson	3	19%

Tie Down Rentals

Place of Residence	Number	% of Total
Cornwall	5	31%
United Counties of SDG	4	25%
Island of Montréal	6	38%
Rouyn-Noranda	1	6%

There has not been a significant increase of members in Cornwall's Flying Club in the past years (two in the past five years) and the need for new private hangars has not been identified as an issue by stakeholders.

Main Opportunities

- Advertise the availability of land for private hangar construction (Internet, Flyers Clubs, etc.).
- Maintain a competitive pricing of private hangar land leases.

6. Aerospace Engineering and Research

The NAV Centre, located in Cornwall, and Carleton University are partnering to establish a Centre of Excellence for Aeronautics and Aerospace to foster and grow those sectors in Ontario and elsewhere in Canada. The Centre will provide professional training and accreditation to domestic and international students. The project aims at leveraging the synergy between the two partners:

- Located in Cornwall, the NAV Centre is the largest facility of its kind in Eastern Ontario, offering world-class education facilities and technology, air traffic control simulation capabilities, accommodation and recreational facilities;
- Carleton University offers undergraduate and graduate programs in aerospace engineering. Carleton Aerospace is one of the largest and most comprehensive academic aerospace research programs in Canada with a wide range of unique, state-of-the-art research facilities.

The Centre of Excellence project could attract businesses in the aerospace and aeronautical sectors. Cornwall Regional Airport could potentially be used as a testing site for their prototypes.

Main Opportunity

• Testing facility supporting the Centre of Excellence for Aeronautics and Aerospace.

COMMERCIAL, INDUSTRIAL AND ECONOMIC ACTIVITIES

Agricultural Support

Establishments in this industry provide support activities for growing crops (e.g. aerial application of fertilizers, fungicides and pesticides over large areas). When applying such services to large areas, other systems are costlier and slower.

The United Counties of Stormont, Dundas and Glengarry is an important agricultural hub in Southern Ontario with 357,758 acres of land in crops (44% of total land acreage).¹

Aerial Surveying – Utilities/Pipeline Control and Inspection

Aerial photography is used in cartography (particularly in photogrammetric surveys, which are often the basis for topographic maps), land-use planning, archaeology, movie production, environmental studies, surveillance, commercial advertising, conveyancing, and artistic projects.

Energy companies (gas, electricity, pipelines) own and operate pipelines/power lines and aerial inspection is the fastest and most thorough way to document conditions on the ground. Companies in these industries use fixed-wing aircraft, helicopters and unmanned aerial vehicles such as drones. The presence of both AvGas and jet fuel at Cornwall Regional Airport addresses all fuel needs.

Presently, Cornwall Aviation provides weekly aerial patrols for Enbridge and Trans-Northern Pipelines. Also, since the jet fuel system has become operational, TransCanada Pipelines stops in once or twice a week for fuel on their patrol.

Main Opportunities

- Evaluate if there is market potential for local companies specialized in aerial application and aerial surveying.
- If the potential exists, develop a strategy to attract one or more businesses in these industries at the Airport.

¹ Building Agri-Food in Stormont, Dundas and Glengarry, 2015.

COMMERCIAL, INDUSTRIAL AND ECONOMIC ACTIVITIES (CONT'D)

Business Executive Flight Service

Interviews with parent companies of Cornwall businesses indicate that their senior Managers' visits are infrequent and that they opt for scheduled flights to Montréal or Ottawa and drive to Cornwall from there. Also, the runway length (3,510 feet) is not adequate for small corporate jets that need a minimum of 4,330 feet to land and take off.

Manufacturing and Distribution

Cornwall's location makes it an ideal site for logistics and distribution companies. The Airport has sufficient land to receive a few industries but the possibilities are limited by the lack of water and sewage services, making it much less attractive than existing City industrial parks. Also, being a small GA airport, Cornwall Regional Airport is not regarded as an asset by companies in this activity sector.

Express Delivery Service

Over the past five years, many developments in the e-commerce and online retailing space have driven growth in the Couriers and Local Delivery Services industry. In the coming years, the industry is expected to build on momentum from the previous five-year period. Consumer spending and corporate profit will help fuel revenue growth going forward. Additionally, the rise of e-commerce and decline of the brick-and-mortar stores will benefit industry operators.

Air Cargo

Cargo is transported in the cargo area of scheduled passenger flights or by large cargo planes. Presently, the Airport does not meet the landing requirements of those large aircraft. Also, interviews with Cornwall distribution centres and manufacturers indicate that transportation by truck and train are still the preferred methods of moving goods. Also, the proximity of Pierre-Elliott-Trudeau and Mirabel airports fulfills air cargo needs when necessary.

Main Opportunity

• Presently, the attraction of economic activities at the Airport is limited by market constraints as well as the limits imposed by the length of the runway. The Airport should be open to future projects but it is recommended that investments such as lengthening the runway be conditional to a signed contract with the proposed tenant and a well-documented business plan. Other regional airports have developed economic activities that are less traditionally airport-related but less constrained by their infrastructure such as solar farms, telecommunication towers and media companies.

DESTINATION AND SPECIAL EVENTS

Tourism and Access to Special Events

GA airports often enable access to areas otherwise difficult to access for recreation such as mountains, islands or remote parks.

During major tourism events, GA airports can be used by charter carriers and private operators to supplement facilities and services at primary airports.

Special Aeronautical (Skydiving/Airshows)

Skydiving schools located at GA airports offer skydiving instruction and the possibility for recreational skydivers to enjoy their sport.

Some organize airshows that can attract large numbers of visitors.

Main Opportunities

• No identified opportunity.

Section 5 Governance Review

01.	Executive Summary
02.	Introduction
03.	Context
04.	Market Trends and Opportunities
05.	Governance Review
06.	Financial and Operational Assessment
07	Short-Term Priorities

Governance Models

Governance, in its fiduciary form, consists of implementing all the means for an organization to achieve the ends for which it has been created in a manner that is transparent, effective and meets the expectations of its stakeholders.

Governance is thus made of accountability rules and operating principles implemented by the board of directors to define the strategic orientations of the organization, ensure supervision by management, assess its economic and social performance and promote the emergence of values of integrity and excellence within the organization.¹

Governance deals with the structures and processes by which an organization is directed, controlled and held to account. It includes a **governance model** which establishes the relationships between stakeholders as well as their responsibilities and powers, and **governance practices** put in place to ensure the proper functioning of the organization, monitor results, support transparency and accountability to stakeholders, and uphold high ethical standards.

In this section of the report, the benefits and challenges of different municipal airport governance models are presented and provide the basis for a discussion about the pertinence of the Airport Commission model presently in use at Cornwall Regional Airport. Also, governance best practices are compared to the actual practices within the Cornwall Regional Airport Commission.

Overview of Municipal Airport Governance Models

In 2011, there were 84 municipal airports in Ontario. Of these, 46 (55%) were operated by the municipality or municipalities that own them, 18 (21%) were operated by an airport commission or airport authority, and 20 (24%) were operated by private entities. More specifically, municipal airports can fall under different governance models, depending on the entities that own and operate them: district owned and operated, single municipality owned and operated, municipality owned and operated by a private contractor, and privately owned and operated. The Airport Authority Model was not documented in this report since it is most applicable to larger airports with an important scheduled flight traffic.

The following table describes each model and presents their main benefits and challenges.

¹ "Governance in Short", https://igopp/en/igopp/governance-in-short/.

Governance Models (cont'd)

District Owned and Operated – Example: Muskoka Airport

Description	Benefits	Challenges
 Is well-adapted when the airport has a strong general aviation focus, is recognized as an economic driver for its region and when several municipalities benefit from its presence. Airport is a service within a District department, generally the department in charge of economic development. The department in charge can receive advice from an Airport Advisory Committee that includes interested community members such as commercial tenants and pilots. The airport budget is prepared by the department in charge and approved by Council on an annual basis. The costs not met by revenues associated with the airport are funded through the District's budget. Staff are District employees and fall within its collective agreements. 	 the airport's development and can ensure the continuance of essential services such as medivac. Operates within the District's governance principles that are determined by law. Facilitates a fit between airport development and the District's economic development orientations. Possible efficiencies in terms of operational costs and oversight. All municipalities that benefit from the airport participate through the District's governance structure. Costs are shared between all municipal 	 (municipalities) that represent the interests of their own communities can make decision-making complex. Final decisions are made by the District Council, where there is no or little aviation expertise. Operation and administration of the airport is an added burden to the District's functions. Airport needs to compete with other department priorities for budget allocations. Property taxes accrue to the municipality within which the airport is located, and not

Single Municipality Owned and Operated – Example: City of Kingston Airport

Description	Benefits	Challenges
 Model similar to the previous District Model with the difference that a single municipality owns and operates the airport. Adapted to a situation where the airport is primarily the economic driver of one municipality. 	 Decision-making can be easier and swifter compared to the District Model where 	one municipality benefit from the presence

Governance Models (cont'd)

Municipality/District Owned, Operated by an Airport Commission - Example: Niagara District Airport

Description	Benefits	Challenges
 The local government owns the land and buildings. A not-for-profit Airport Commission is a partially autonomous body established with its powers set through municipal bylaws. The Commission's Board generally includes elected officials and external individuals with specific skill sets (aviation, finance, legal, etc.). The Commission operates the airport within Council approved budgets. This model is well-adapted to an airport with a strong commercial focus. Funding, if required, comes from the municipality. Staff can be either employed by the municipality or the Commission. 	 municipal/regional plan. Airport has the necessary leeway to be operated as a business. Commission is responsible for the day-to-day management and does not constitute a burden on municipal operations. The Commission has operational independence, which facilitates focus and decision-making. The Commission is better positioned for cost cutting and revenue-generating opportunities. 	 decision-making process, although it is less direct that a district or municipality managed model. Budgets still have to compete with other municipal departments' priorities. Conflicts can arise when the municipality does not approve the operational decisions of the Commission. Municipality is responsible for liabilities for legal and regulatory obligations.

Governance Models (cont'd)

Municipality Owned, Private Operator – Example: Peterborough Municipal Airport

Description	Benefits	Challenges
 The local government owns the land and the buildings but contracts out operations to a private operator. Private operator prepares the annual budget which is then approved by the Council. Owner retains the responsibility for development and funding. Model is most appropriate when the municipality lacks experience in airport management. 	 Enables the operation of the airport when the municipality does not have the necessary expertise. Eliminates day-to-day operational obligations for the municipality. Ensures the maintaining of essential services such as medevac. Municipality retains control of the airport's development. 	 Development of airport opportunities is difficult due to the lack of municipal expertise. Consequently, there is little diversification of the revenue base. Airport funding must compete with other municipal priorities.

Privately Owned and Operated - Example: Sault Ste. Marie Airport

Description	Benefits	Challenges
 The private sector owns and operates the airport. Completely independent from the municipality. Financially self-sufficient. The owner is responsible for any financial shortfall. 	 Budget is not subject to competition with other municipal priorities. Decision-making is quick and operations can rapidly adjust to market changes. The municipality is not accountable. Tax revenues continue to accrue to the municipality. 	 May be operated in a way that does not fully benefit the community, and some essential services could be discontinued if not cost-effective. The municipality has no control over development. The municipality loses all streams of revenue except taxes. If the operator ceases to exist, municipality loses an important infrastructure.

The pertinence of the Cornwall Regional Airport's governance model

The following criteria are used to identify the governance models best suited to Cornwall Regional Airport's situation:

- The Airport services multiple municipalities (seven municipalities in the immediate area plus Prescott-Russell, Akwesasne and Hawkesbury). The governance model should allow for their participation in decision-making and funding;
- Essential emergency services such as medevac and OPP aviation must be maintained;
- The governance model must allow for the optimization of revenue-generating opportunities;
- Local government must retain a level of control on Airport development and operations that ensures that it is aligned with local-regional economic development and land-use planning orientations;
- The model must support a long-term outlook for the development of the Airport;
- A mechanism that ensures the active participation of persons with relevant expertise (aviation, finance, business, legal, etc.) must be an essential component of the governance model.

Two governance models answer all the criteria at varying degrees, including the model presently in use at the Airport:

District Owned and Operated	Municipality/District Owned, Operated by an Airport Commission
District municipalities participate through the District's governance.	■ District municipalities participate through the District's governance if the airport is District owned. If not, a consultation/participation strategy must be put in place.
 District has full authority on services offered by the airport. 	 Municipal bylaws that determine the airport's powers can include an obligation to maintain essential services.
• Model is less conducive to an entrepreneurial way of functioning. This can be partially mitigated with a business-oriented advisory committee.	 Model is adapted to an entrepreneurial way of thinking.
Complete control on development orientations.	 Municipality owns land and directs the airport's development in harmony with municipal/regional plan.
■ Long-term outlook.	■ Long-term outlook.
Experts can participate through an Airport Advisory Committee.	■ Board can include a broad range of expertise.

Assessment of Governance Practices

Assessment of the Airport Commission's governance practices has identified major areas for improvement that have greatly limited the organization's performance.

The table below presents the main best practices that should be in place in such an organization.

Best Practices	Current Areas for Improvement
 Effective planning: a clearly defined long-term vision and goals A clear statement of the organization's purpose (mission) is in place and is used as a basis for planning. A strategic plan is developed with a long-term vision and goals, and short- and mid-term priorities and action plans. 	 Determine the organization's mission and values. Develop a strategic plan with a long-term vision. Align operations with the strategic plan goals. Prior to the budget year (January 1st), review and approve a draft budget before submission to the municipalities.
 A culture committed to good governance: ongoing adjustment of governance arrangements Review and evaluation of governance structures and processes are carried out on an ongoing basis. 	Put in place a governance evaluation process.
 A governing body that supports organizational goals: Board members that are dedicated to the organization's cause and possess the right combination of skills Potential Board members make informed decisions based on an in-depth comprehension of the organization's vision, mission and goals. Board members have clearly defined mandates and responsibilities as well as the skills to lead effectively. 	 Define guidelines that guide the choice of Board members. Better clarify Board members mandates and responsibilities.
 High ethical standards: the organization and its members follow well-established and clearly defined standards of right and wrong. Appropriate structures and processes are in place to ensure the organization is free of influence by prejudice, bias or conflict of interest. A formal code of conduct is adopted by the organization. 	 Establish a Code of Conduct that clearly defines standards for employees and Board members. Identify all potential conflict of interest situations and put in place measures to proactively address them.

Assessment of Governance Practices (cont'd)

Best Practices	Current Areas for Improvement
 Internal accountability: internal controls and accountability are clearly defined and consistent with the organization's objectives. A control framework that specifies control processes and measures is put in place. Staff's roles, responsibilities and accountability are clearly defined. Staff are held accountable to the governing body and the governing body's responsibilities to staff are also defined. 	 Adopt best practices for meeting procedures (agenda, minutes, etc.). Hold regular Commission meetings (as specified by the internal rules and regulations) as well as special meetings to address specific issues when needed. Clarify the organization's objectives so that accountability is linked to specific goals. Clarify the Manager's role, responsibilities and yearly objectives, and measure performance.
 External accountability: external scrutiny is an integral part of public service and meeting this accountability is essential. A clear understanding exists of the organization's accountability to external stakeholders. A strong and robust structure is in place to comply with external accountability. An annual report is published that presents an account of the organization's activities, achievements, financial position and prospects. The confidence of the public and service users is maintained through dialogue and relationship building. The organization has a clear policy on the types of issues on which to consult or inform external stakeholders. 	 Document external stakeholders' expectations (municipalities, users, tenants, businesses, etc.). Develop an external accountability framework. Present goals and results to councils at least once a year. Prepare an annual report and make it available to all stakeholders. Ensure an effective communication between the Commission and the municipalities.
 Risk management: risks are understood and addressed in order to better achieve the organization's objectives and protect public interests. The risk management system is based on a clear understanding of the organization's objectives. Key strategic, operational and financial indicators are identified and assessed, appropriate responses are put in place, and the effectiveness of the chosen responses is evaluated. The effectiveness of the risk management system is reported publicly. Risks to the organization are evaluated before making any major investment or decision. 	 Put in place a risk-management system. Intervene rapidly and effectively when potential risks for the Commission, the Airport or the Airport users are identified.

Assessment of Governance Practices (cont'd)

Best Practices	Current Areas for Improvement
 Performance monitoring: the effectiveness and relevance of the organization is ensured by performance monitoring. Processes are in place to monitor financial and non-financial performance. The quality of service for users is measured and the information is used to review service quality effectively and regularly. 	 Identify financial and non-financial performance indicators in line with organizational goals and regularly monitor.
 Information management: ensuring that the right information gets to the appropriate people in a timely manner. The organization develops a strong and robust record-keeping system. Information and decision support structures are aligned with external and internal accountability as well as major organizational decisions. 	 Centralize and secure all documents pertaining to the airport. Document all decisions made by the Board.
 Resource optimization: using resources in the best interest of the organization and in a sustainable way Policies and processes are in place to ensure that resource potential is maximized and aligned with strategic goals. 	 Develop fee structures that ensure that revenue-generating resources are optimized (land rents, landing fees, etc.).

Section 6 Financial and Operational Assessment

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Cornwall Regional Airport's financial performance

Historical Financial Results

Profit/Loss	\$21 683	-\$5 492	\$5 206	\$35 998 portunity Assessn	13%	18
Total Expenses	\$177 929	\$215 052	\$221 597	\$235 416		10
Airport Expansion Reserve						
HST (Fuel)	\$5 980	\$5 613	\$12 378	\$9 078	3%	15
Communications	\$1 704	\$3 913	\$3 343	\$4 245	2%	36
Taxes	\$2 170	\$1 963	\$3 288	\$2 655	1%	7
Service Charges	\$345	\$814	\$994	\$515	0%	14
Legal/Audit	\$3 308	\$2 882	\$5 469	\$0	0%	-100
Bookkeeping	\$0	\$300	\$0	\$0	0%	
Advertising	\$206	\$0	\$0	\$0	0%	-10
Stationery/Postage	\$44	\$16	\$0	\$0	0%	-10
Fuel Av					0%	
Fuel Jet					0%	
Administration	\$1 444	\$2 381	\$1 985	\$6 074	2%	6
Maintenance	\$20 212	\$54 791	\$28 620	\$45 577	17%	3
Insurance	\$6 075	\$5 105	\$5 105	\$5 105	2%	_
Cornwall Electric	\$6 441	\$6 401	\$6 271	\$8 024	3%	
Radio System	\$12 000	\$13 601	\$13 601	\$13 601	5%	
Manager	\$31 500	\$47 460	\$47 460	\$47 460	17%	1
Contract KLT	\$86 500	\$69 812	\$93 083	\$93 083	34%	
xpenses						
otal Revenues	\$199 612	\$209 560	\$226 803	\$271 415		1
Municipal Funding	\$127 284	\$136 520	\$144 000	\$147 450		
Cornwall	\$117 284	\$126 521	\$134 000	\$125 332	46%	
South Glengarry	\$10 000	\$10 000	\$10 000	\$22 118	8%	3
Generated Revenues	\$72 328	\$73 040	\$82 803	\$123 965		2
Fuel Av	\$18 900	\$24 693	\$37 365	\$39 528	15%	2
Fuel Jet					0%	
Land Leased	\$11 500	\$13 766	\$14 653	\$16 950	6%	1
HST	\$625	\$240	\$0	\$19 998	7%	21
Landing Fees	\$591	\$15	\$294	\$1 537	1%	3
Access Fees	\$3 426	\$3 995	\$4 651	\$4 002	1%	
Commercial Hangar	\$20 402	\$10 735	\$6 995	\$11 876	4%	-1
Hangars	\$12 102	\$15 832	\$16 664	\$21 142	8%	2
Tie Downs	\$4 782	\$3 764	\$2 181	\$8 932	3%	2
Revenues						
	2013	2014	2015	2016	revenue	gro

Key Findings

Revenues

- From 2013 to 2015, Airport expenses increased at a higher rate (25%) than generated revenues (15%) resulting in a 13% increase of municipal funding in 2015. In 2016, the generated revenues increased by 50% while the expenses increased by 6%.
- In 2015, municipal funding constituted 63% of the airport's revenues, a higher proportion than three benchmarked airports:¹
 - Stratford Municipal Airport: 36%,
 - Niagara District Airport: 49%,
 - Carp Airport: 54%

In 2016, municipal funding is at a similar level as that of Carp Airport.

- Fuel sales represented 26% of generated revenues in 2013 and 45% in 2015. This revenue proportion decreased to 32% in 2016.
- Lease and rental fees (tie downs, hangar leases and land lease) sharply declined between 2013 and 2015. Their contribution to total generated revenues fell from 67% to 49%, a loss of revenue of \$8,293. These revenues increased by 45% from 2015 to 2016 and represented 48% of generated revenues.
- The contribution of access and landing fees to generated revenues have remained relatively stable (5.6% in 2013 and 4.6% in 2016). The increase in landing fees in 2016 is due to adding credit cards as a payment method.

Expenses

- Maintenance (KLT contract and maintenance-related costs) accounted for 59% of expenses in 2016. In monetary value, maintenance expenses increased by 14% between 2015 and 2016.
- The three other significant items of expenditure are the costs related to the management contract, radio system contract and fuel HST.

¹ Benchmarked airports for which 2015 financial information was available.

Cornwall Regional Airport's financial performance (cont'd)

2017 Budget

Profit/Loss	-\$267	\$35 998	\$0	0%
Total Expenses	\$210 920	\$235 416	\$230 650	
Airport Expansion Reserve				
HST (Fuel)	\$3 500	\$9 078	\$13 000	69
Communications	\$3 500	\$4 245	\$3 000	19
Taxes	\$2 000	\$2 655	\$2 600	19
Service Charges	\$1 000	\$515	\$1 000	0
Legal/Audit	\$3 500	\$0	\$5 000	2'
Bookkeeping	\$0	\$0	\$0	0'
Advertising	\$200	\$0 \$0	\$200	0,
Stationary/Postage	\$300	\$0	\$0	0'
Fuel Av				0'
Fuel Jet	Ψ2 200	ΨΟ 01 -1	Ψ. 000	0
Administration	\$2 200	\$6 074	\$1 000	0
Maintenance	\$30 000	\$45 577	\$35 000	15
Insurance	\$4 800	\$5 105	\$5 500	2
Cornwall Electric	\$7 000	\$8 024	\$7 000	3
Radio System	\$47 460 \$12 360	\$47 400 \$13 601	\$13 850	6
Manager	\$93 100 \$47 460	\$93 063 \$47 460	\$48 500	21
Expenses Contract KLT	\$93 100	\$93 083	\$95 000	41
	72.0000	Ψ2	\$255 500	
Total Revenues	\$210 653	\$271 415	\$230 650	
Municipal Funding	\$134 133	\$147 450	\$115 950	40
Cornwall	\$10 000	\$125 332	\$105 950	46
South Glengarry	\$10 000	\$1 23 903 \$22 118	\$114 700	4
Fuel Av (Note 1) Generated Revenues	\$25 000 \$76 520	\$123 965	\$114 700	1
Fuel Av (Note 1)	\$25 000	\$39 528	\$15 000 \$15 000	7
Land Leased	\$11 500	\$16 950	\$25 000	11 7
HST	\$1 030	\$19 998	\$10 000	4
Landing Fees	\$500	\$1 537	\$500	0
Access Fees	\$4 000	\$4 002	\$6 000	3
Commercial Hangar	\$15 600	\$11 876	\$21 200	9
Hangars	\$13 390	\$21 142	\$14 000	6
Tie Downs	\$5 500	\$8 932	\$8 000	3
Revenues				
	2016	2016	2017	reveni
	Budget	Actual	Budget	%

Key Findings

Revenues

- There is an additional source of income in 2017 with the newly installed jet fueling system. The fuel sales are estimated to represent 26% of generated revenues. There is an estimated decrease of 62% of the Av fuel sales over the recorded sales in 2016.
- For 2017, municipal funding is estimated to constitute 50% of the Airport's revenues, which would bring them to a lower contribution proportion than the three benchmarked airports.¹
- The access fees will increase with the arrival of OAS. The increase is estimated at \$2,000 which is half the amount paid by Cornwall Aviation, the current tenant.
- Some revenue items presented in the 2017 budget were not revised to the recorded revenues of 2016.

Expenses

- Maintenance fees for 2017 are similar to those of the 2016 budget. The increase of aircraft movements at the Airport generated by OAS will have an impact on the maintenance costs for the Airport. An increase of this expenditure is to be expected. If the maintenance fees grow faster than the generated revenues, the expenses must be compensated with municipal funding.
- The total expenses are budgeted to remain stable.

HST to be revised: \$230,000 fuel purchase * 13% (HST) = \$29,900

Note 1: Fuel revenues adjusted to net value to have similar presentation as previous financial statements.

Cornwall Regional Airport's Tenants

Cornwall Aviation

Cornwall Aviation has been the longest standing tenant at the Airport and the most important until the arrival of OAS. Its core business is flight training, but it also offers aircraft maintenance and charter flights on demand. Cornwall Aviation has their own terminal building and hangar with their own fuelling system located on private property adjacent to the Airport's. Therefore, Cornwall Regional Airport does not derive land lease fees or fuel sales from this business. Cornwall Aviation has a privilege situation because it is a tenant and user of the Airport as well as the management and maintenance team.

Ottawa Aviation Services (OAS)

OAS became a tenant at the Airport in the summer of 2016. It is the second flying school at the Airport with a large potential of growth. OAS expects to attract local and international students. It will offer two types of training, fixed-wing aircraft and rotarywing aircraft. Their project will need a new larger hangar that will be privately built in line with the Airport's model. This new hangar will involve additional land lease revenues for the Airport. One of the programs OAS is developing will necessitate a 5,000-ft. runway because of the type of aircraft the students will need to operate.

Private Hangar Owners

Some private hangar owners have been present since the beginning of the Airport. Others have purchased a hangar from a past owner or rent a hangar. Their land lease includes access to the runway. They are important tenants for a general aviation airport, but the potential increase of revenue generated by the present hangar owners is limited.

Cornwall Flying Club

The Cornwall Flying Club has 34 members,15% of which are owners of a private hangar on site. Three percent (3%) of the members park their aircraft in the tie down areas. The other members either rent airplanes or have their private aircraft based at another airport. Some members attend the activities and meetings as a hobby. The membership fee costs \$20 per person.

Based Aircrafts	9
Aircraft Movements	N/A
Income for CRA	Access fee of \$4,000 per year
Expenses for CRA	Maintenance for use of runway, Radio System to coordinate take-offs and landings, Manager to collect payment, Administration to process payments.

Based Aircrafts	4 (2016); 53 (end 2017); potentially 189 (end 2019)
Aircraft Movements	Estimated at 65,625 (potentially 236,250)
Income for CRA	Access fee of \$2,000 (2017) to \$23,885 (end 2017 for 53 based aircrafts) Commercial hangar lease of \$24,000 per year Fuel sales (av and jet)
Expenses for CRA	Maintenance for use of runway, Radio System to coordinate take-offs and landings, Manager to collect payment, Administration to process payments.

Based Aircrafts	16
Aircraft Movements	N/A
Income for CRA	Fuel sales (av) Land lease (normal or large lot)
Expenses for CRA	Maintenance for use of runway, Radio System to coordinate take-offs and landings, Manager to collect payment, Administration to process payments.

Financial Challenges Facing Small General Aviation Airports

The revenue generated at a small GA airport is often supplemented with governmental aid since they have to contend with issues that can limit their capacity to achieve financial autonomy:

- Insufficient revenues to cover operating expenses;
- Limited sources of funding for capital projects and a lack of access to assistance programs such as ACAP, limited to airports not owned by the federal government and offering year-round, regularly scheduled passenger flights with a minimum of 1,000 passengers a year;
- Costs that are likely to increase because of stricter regulatory obligations for emergency services, security, winter maintenance, etc.;
- Reduced revenues resulting from the consolidation of airlines and increased fees and taxes on aviation.

In a 2006 survey of the financial situation of municipal airports, ¹46% (29) of the 39 participants considered their financial situation not to be self-sustainable, 21% (8) considered themselves self-sustainable and 6% (2) considered themselves viable.

Not self-sustainable: insufficient cash flows to cover operating costs.

Self-sustainable: sufficient revenues to cover operating costs.

Viable: sufficient revenues to cover operating costs and the airport's share of capital costs.

Cornwall Regional Airport falls within the non-sustainable category. However, new jet fuel revenues should markedly improve this situation in 2017, as presented in the chart below.

Cornwall Regional Airport % of Coverage of Operating Costs by Generated Revenues				
2013	2014	2015	2016	2017 Budget
41%	34%	37%	54%	50%

Sypher, Study of Municipal Airports in Ontario, September 2006

Financial Challenges Facing Small General Aviation Airports

Regional and small airports that report an operative financial surplus possess some or all of the following characteristics:¹

Characteristics	Cornwall Regional Airport (CRA)
Significant passenger levels (over 30,000 enplaned and deplaned passengers) or revenue aircraft movements (over 13,000)	No passenger or aircraft movement revenue
Over \$500,000 of generated revenue per year	Revenues of \$123,965 in 2016 (excludes municipal funding)
Runway length of 6,000 feet or more	Runway length: 3,510 feet
Located in a catchment area with a population greater than 15,000 inhabitants	Cornwall/United Counties of Stormont, Dundas and Glengarry: population of 111,942 inhabitants in 2016, excluding Akwesasne
Not sharing a catchment area within a 100 km radius with an airport offering an equivalent level of services (in this situation, there is a high probability that at least one airport will be in a deficit position)	Overlap of catchment area with two airports with equivalent level of services: Brockville Municipal Airport (distance of 118 km) and Smiths Falls-Montague Airport (distance of 146 km)
Located more than 250 km from a NAS ² airport	CRA to Montréal's Pierre-Elliot-Trudeau Airport: 84.4 km CRA to Ottawa International Airport: 114 km

Cornwall Regional Airport meets only one of the conditions that favour financial autonomy. **Consequently, public funding will most likely remain necessary for its continued operation**.

¹ Transport Canada, Regional and Small Airports Study, 2004.

² NAS: National Airport System.

As seen previously, revenue generated at a small GA airport must often be supplemented with public funding. As a consequence, a small GA airport's success cannot only be defined by its level of financial autonomy, although generating revenues remains an important operational objective, but also by the way it takes into account its community's needs.

Studies¹ have identified the financial and operational practices that support a small GA airport's success. The following pages present these practices and evaluate the level at which they are met by the Cornwall Regional Airport.

1. A successful small GA airport generates sufficient revenue to cover operation and capital rehabilitation. This does not imply self-sustainability or viability but indicates that the airport is capable of attracting investments from multiple sources.

Subsidies from the City of Cornwall and the Township of South Glengarry are the only sources of funding other than self-generated revenues. There has been no investments from the private sector other than the construction of private aircraft hangars which have a small positive impact on the Airport's financial situation. No strategy has been put in place to attract investors from the private sector.

2. A successful small GA airport is customer service oriented. It actively works with its key customers and its partners to understand and meet their needs.

There are no procedures in place to track customer needs and satisfaction, such as stakeholder consultations or customer satisfaction surveys. Also, the governance structure does not include potential partners such as the Chamber of Commerce and NAV Centre in the decision-making process, either through their active participation within the Commission or through a structured consultation process.

3. A successful small GA airport is well connected with economic development plans and activities.

Presently, Cornwall Regional Airport is not positioned as a strong economic development driver. It is essentially viewed as an airport serving a limited number of private flyers and is not readily perceived as adding value to business attraction efforts.

The City of Cornwall has included the Airport in its new Economic Development Strategic Plan, but it is not factored into the economic development orientations of SDG Counties.

4. A successful small GA airport has achieved high awareness within the community and actively promotes the value it brings to the community.

Developing public relations is one of the most important aspects of the Airport Manager's job. Promoting it in the community is critical to its success, especially since most small GA airports need public funding to survive. Consequently, public support is essential and is gained by promoting the Airport's contribution and by finding ways to further integrate the Airport within the community.

Presently, although the management contract does stipulate that the Manager must "assist with the development of a marketing strategy to promote commercial development and maintain positive relations with the public, airport users and airport visitors", no marketing strategy has been put in place and no budget has been earmarked for promotion or public relations.

¹ Sypher, Study of Municipal Airports in Ontario, September 2006; SNC Lavallin, Muskoka Airport Business Plan and Master Plan, 2013; COMT, Report of Air Issues Task Force on Small Airport Viability, 2006.

5. A successful small GA airport aims at making the most of its assets.

Making the most of existing assets (both aeronautical and non-aeronautical) implies having a fee structure that maximizes revenues while maintaining the competitive edge needed to attract and retain flyers and on-site businesses.

LEASED LAND

The ability to negotiate reasonable market rents for the Airport's real estate is a significant contributing factor of financial success. In 2016, personal hangars represented 17% of CRA's self-generated revenues and agricultural land 14%.

A recommended best practice is to develop a standard **airport leasing policy** that addresses land lease rates, hangar lease rates, building and facilities lease rates, etc., as well as the process of adjusting lease rates and fees. It is important that rates be established in a transparent manner and that the Airport be able to clearly outline the rationale that justifies applied rates. The application and enforcement of the leases must be consistent. CRA does not possess such a policy.

The rates must help to offset the cost of operating the Airport and not result in loss of revenue. They should take into account all the expenses generated by the tenant (maintenance costs, municipal taxes, hydro, insurance, etc.) as well as the land market value and the rates charged by surrounding airports.

Private Hangar Land Rental

Presently, the model used by the Airport is similar to the one used by other airports. The hangars are built by the private owner of leased lots designated for this purpose.

As seen below, Cornwall Regional Airport's land rental fee for the construction of private hangars is lower than that of other regional airports.

Benchmark - Land Rental Fee for Private Hangar

Airport	Leased Land Fee Structure
Cornwall Regional Airport	\$0.25 per square foot
Peterborough Airport	\$0.2886 per square foot
Niagara District Airport	\$0.306 per square foot
Region of Waterloo International Airport	\$0.29 per square foot
Kincardine Airport	\$0.33 per square foot

5. A successful small GA airport aims at making the most of its assets (cont'd)

Land Leases for Agricultural Purposes

At CRA, a portion of the excess land (100 acres) is leased for agricultural purposes. No request for proposal was issued to ensure that the rent is aligned with market values and the land was simply rented to a farmer who was interested. As a result, there is a high risk of revenue losses.

The land was leased starting in 1995 for a 15-year period for the cost of clearing and drainage. Thereafter, an amount of \$100 per acre was charged until 2016 when the price was raised to \$150. The price has then been raised to \$200 for 2017.

Based on an average of \$235 per acre, local market value for leased agricultural land in 2015,¹ annual market rental costs were estimated using the average annual value growth of agricultural land in Ontario.²

As shown in the table below, renting the agricultural land below market value has incurred an estimated \$47,650 loss of revenue during a 7-year period.

Estimation of Profit/(Loss) - Land Rented for Agricultural Purpose

Year	Average Value Growth/Year	Estimated Average Rental Market Value/Acre	Estimated Rental Value of Rented Land	Rent Charged/Acre	Rental Revenue	Estimated Profit / (Loss)		
2017		\$250	\$25,000	\$250	\$25,000			
2016	6.6%	\$250	\$25,000	\$169.50	\$16,950	(\$8,050)		
2015	12.4%	\$235	\$23,500	\$100	\$10,000	(\$13,500)		
2014	15.9%	\$209	\$20,900	\$100	\$10,000	(\$10,900)		
2013	30.1%	\$180	\$18,000	\$100	\$10,000	(\$8,000)		
2012	14.3%	\$138	\$13,800	\$100	\$10,000	(\$3,800)		
2011	6.8%	\$121	\$12,100	\$100	\$10,000	(\$2,100)		
2010		\$113	\$11,300	\$100	\$10,000	(\$1,300)		
CUMULATI	CUMULATIVE LOSS (not adjusted to current \$ value)							

¹ Information obtained from the Township of South Glengarry: 2016 market rental value of agricultural land = \$225-\$250 an acre.

² https://www.fcc-fac.ca/fr/a-propos-de-FAC/governance/rapports/valeur-des-terres-agricoles.html.

5. A successful small GA airport aims at making the most of its assets (cont'd)

LANDING FEE BENCHMARKING (aircraft less than 5,000 kg)

At all airports except Brockville, small personal aircraft are not charged landing fees, although the maximum aircraft weight to which this applies varies. It might be advantageous for CRA to evaluate the pertinence of a landing fee structure that takes into account the weight and types of aircraft, as well as based vs itinerant flyers. There is also an unresolved issue with collecting landing fees. Since fees are paid inside Cornwall Aviation offices, pilots sometimes drop off clients without leaving the plane and do not pay the fee. A bill is sent to the aircraft's registered owner's address, but often remains unpaid. Some airports charge an annual access fee to businesses that regularly use the airport (example: at Timmins Airport, in 2016, courier services had to pay \$2,500 for airport access). This can be an avenue to explore when tracking and obtaining payment for landing fees is an issue, as it is at CRA.

	Landing Fee Criteria									
Airport	Corporate aircraft	Small aircraft	0- 2,999 kg	3,000-4,999 kg	1,800- 4,999 kg	Turbine / jet 0-6,000 kg	Piston 2,000 kg and less	Piston 2,001- 6,000 kg	Jet / turbine 2,270 kg +	Commercial rotary 2,270 kg +
Cornwall Regional Airport	\$25.00									
Lake Simcoe Regional Airport			No fee	Non-based: \$5.50/kg Based: \$3.60/kg						
Peterborough Airport					\$20.00					
Timmins Victor M. Power Airport						\$6.60/kg (min. \$25.00)	No fee	\$5.00/ kg (min. \$15.00)		
Stratford Municipal Airport	\$50.00									
Kingston Norman Rogers Airport									Min. \$22.47	Min. \$12.59
Niagara District Airport										
Muskoka Airport			Itinerant aircraft: no fee	Based: no fee Non-based: turbo and rotary: \$42.00 Jets: \$90.00						
Brockville Municipal Airport		\$30.00								
Smiths Falls / Montague Airport	No landing f	No landing fees								
Tillsonburg Regional Airport	No landing f	ees								

5. A successful small GA airport aims at making the most of its assets (cont'd)

AIRCRAFT PARKING FEE BENCHMARKING (aircraft less than 5,000 kg)

When compared to parking fees charged by other municipal/regional airports, CRA ranks in the low price range. A slight increase in the fee structure is possible while still remaining competitive.

	Parking Fee Structure							
Airport	Day 2- 5 hrs	Day more than 5 hrs	12 hrs / Overnight	Week	Less than 30 days	Month	Year	
Cornwall Regional Airport			\$7.50			\$68.07	\$641.70	
Lake Simcoe Regional Airport			0-2,999 kg: \$10.00 3,000-4,999kg: \$3.30/1,000 kg			0-2,999 kg: \$80.00 3,000-4,999kg: formula		
Peterborough Airport			Apron 0-2,999 kg: \$10.00 3,000-5,999 kg: \$15.00			Apron 0-2,999 kg: \$100.00 3,000-5,999 kg: \$150.00 Tie down: \$65.00 (\$105.00 with Hydro)		
Timmins Victor M. Power Airport			\$10.00			\$166.11		
Smiths Falls / Montague Airport					No fee	\$60.00		
Stratford Municipal Airport			\$6.00			\$67.00		
Kingston Norman Rogers Airport			\$12.35			\$93.79	0-2,000 kg: \$607.73 2,001-5,000 kg: \$701.31	
Niagara District Airport			Ramp 0-2,999 kg: \$10.00, free with purchase of fuel 3,000 – 4,999 kg: \$3.30/1,000 kg, free with purchase of 120 litres of fuel Tie down 0-2,999 kg: \$15.00 3,000 – 4,999 kg: \$20.00			<u>Tie down</u> 0-2,999 kg: \$90.00 3,000 – 4,999 kg: \$125.00		

5. A successful small GA airport aims at making the most of its assets (cont'd)

AIRCRAFT PARKING FEE BENCHMARKING (aircraft less than 5,000 kg) (cont'd)

	Parking Fee Structure								
Airport	Day 2-5 hrs	12 hrs / Overnight		Week	Less than 30 days	Month	Year		
Muskoka Airport			Jets: min. \$50.00 <u>Tie down</u> On grass: \$8.00 On pavement edge: \$10.00 <u>Apron</u> : \$15.00			Tie down On grass: \$100.00 On pavement edge: \$150.00 Apron: \$250.00	Tie down On grass: \$300.00 On pavement edge: \$500.00		
Brockville Municipal Airport	\$8.00	\$15.00	Tie down: \$15.00	Tie down: \$40.00		Tie down: \$100.00			
Tillsonburg Regional Airport			\$6.00, free with fuel purchase						

5. A successful small GA airport aims at making the most of its assets (cont'd)

FUEL SALE

Fuel sales are the most important source of generated revenue for an airport. The fuelling system is both used by private aircraft owners and by commercial tenants. The fuel surcharge applied to make profit can vary for both types of users because the purchased volume will widely vary. A flight school can purchase up to 500,000 litres of fuel per year compared to a leisure flyer who purchases on average 3,000 litres per year.

ACCESS FEE

This fee is charged to companies using airport grounds and infrastructure. The benchmarked airports did not have this type of income source. Presently, Cornwall Aviation pays \$4,000 per year of access fee to use the runway. This fee could be based on the number of aircraft movements or number of based aircraft. Because it is more difficult to keep track of the aircraft movements, the number of based aircraft is a more reliable indicator of the fee charged to flight schools. By using this model, the access fee would be priced at approximately \$445 per aircraft as Cornwall Aviation has nine (9) based aircraft.

MAINTENANCE/IMPROVEMENT FEE

Maintenance and/or improvement fee is applied in some of the airports analyzed. This fee is usually applied for passenger flights and is based on the number of passengers. Because there is no passenger services at CRA, this fee could be adjusted to represent the Airports situation. In fact, there are two flight training schools. The fee could possibly be based on the number of landings.

Airport	Airport Improvement Fees/Passenger
Peterborough Airport	\$7.00
Kingston Airport	\$16.39
Niagara District Airport	\$20.00
Fredericton International Airport	\$20.00
Red Deer Airport	\$10.00

¹ Based on 100 hrs of flight per year with 30 litres of fuel per hour.

5. A successful small GA airport aims at making the most of its assets (cont'd)

OTHER FEES

Airports charge supplemental fees for a variety of services. Fee determination for these services must take into account all costs (equipment and material, manpower, risk management, site rehabilitation costs, etc.) and include an acceptable profit margin.

- After hours or on-request snow removal
- Apron sweeping and chemical application
- Fuel spills
- Disabled aircraft removal
- Request for on-site standby fire crash response
- Hydro
- After hours runway conditions report
- Equipment rental

6. A successful small GA airport has a strong commercial focus and aims at maximizing non-aeronautical revenues.

Diversifying the revenue base leaves the airport less vulnerable. Non-aeronautical revenues are more stable because they are related to land and space rentals which should continue to rise. Compared with three Ontario municipal airports for which financials were obtained, in 2015 CRA had a lower proportion of self-generated revenues (aeronautical and non-aeronautical) and a lower non-aeronautical revenue ratio than two of the three airports.

However, in 2016, CRA has seen a 9% increase in self-generated revenues and its 2017 budget predicts a decrease of 7%, reducing municipal funding to 50% of its budget.

Р Т	% of Revenues ¹ (2015)					
Revenue Type	Cornwall Regional Airport	Stratford Municipal Airport	Niagara District Airport	Carp Airport		
Municipal Funding	63%	36%	55%	56%		
Aeronautical Revenues ²	20%	56%	6%	8%		
Non-Aeronautical Revenues ³	17%	6%	39%	36%		

Davienus Time	Evolution % of Revenues - Cornwall Regional Airport					
Revenue Type	2013	2014	2015	2016	2017 Budget	
Municipal Funding	64%	65%	63%	54%	50%	
Aeronautical Revenues ²	14%	16%	20%	27%	24%	
Non-Aeronautical Revenues ³	22%	19%	17%	18%	26%	

Generating new revenues through non-aeronautical activities focuses on a great part of the creative use of excess land, one of the main assets of any airport. Examples of non-traditional uses of excess airport land include a solar farm, retail store, small business centres, recreational and sports facilities, using the runway for activities such as motorcycle driving, training and racing, etc. Establishing a commercially based business plan that stems from a firm understanding of community needs and economic opportunities constitutes an essential tool for optimizing airport assets.

¹ Excludes revenue entries that could not be clearly applied to aeronautical or non-aeronautical uses (e.g. taxes, miscellaneous).

² Fuel sales, parking, access fees and landing fees.

³ Rental fees, events

7. A successful small GA airport has a sufficient population and industrial/economic base to support operations.

In 2016, the City of Cornwall and the United Counties of Stormont, Dundas and Glengarry's population totalled 111,942 inhabitants, excluding Akwesasne. The City of Cornwall possesses a well-diversified economic base and is gaining prominence as a centre for transportation and logistics, with major distribution centres for major commercial businesses such as Walmart and Shoppers Drug Mart.

8. A successful small GA airport takes a partnership approach to development.

A commitment to consultation and a partnership approach with key stakeholders is essential for identifying key opportunities, building collaborations and ensuring the pertinence of airport development projects.

Presently, key stakeholders have a limited participation in the Airport's development.

¹ Excludes revenue entries that could not be clearly applied to aeronautical or non aeronautical uses (e.g., taxes, miscellaneous).

² Fuel sales, parking, access fees and landing fees.

³ Rental fees, events

Section 7 Recommendations

07.	Short-Term Priorities
06.	Financial and Operational Assessment
05.	Governance Review
04.	Market Trends and Opportunities
03.	Context
02.	Introduction
01.	Executive Summary

Recommendations – Governance

Analysis of the Airport's present situation, both at the governance and operational levels, demonstrates that the basic success factors needed to fully optimize its potential and take advantage of opportunities are, for the most part, absent. Therefore, a major overhaul of governance practices is a first essential step in its realignment.

Confirm the Airport as an essential public service infrastructure for the City of Cornwall and the United Counties of Stormont, Dundas and Glengarry (SDG).

• Investing the time and the resources needed to put in place the conditions necessary to develop the Airport can only be considered if the Airport's permanence is ensured. The Airport's contribution to community services such as medevac and police surveillance must be recognized by all municipal partners as the base argument for maintaining the infrastructure's operation. The financial burden must be shared between all the municipalities that benefit from the Airport, and not only by the City of Cornwall and the Township of South Glengarry as it has been the case for the last 30 years.

Abolish the present Airport Commission and create a new multi-municipality owned and operated Regional Airport.

- Municipal ownership is well adapted to an airport with a strong general aviation focus, such as CRA, since its potential for financial autonomy is limited. Also, municipal control ensures that critical services such as medevac are maintained.
- Joint ownership by the City of Cornwall and the municipalities of the United Counties of Stormont, Dundas and Glengarry better represents the territory that benefits from the Airport's role in supporting essential community services. Muskoka Airport and Niagara District Airport are examples of regional airports funded by the district municipalities to ensure essential services.
- An Airport Board formed by a predetermined number of elected officials and municipal managers would provide oversight and ensure liaison with the different municipal councils.
- An airport needs control over its land for it to have the capacity to plan long-term development and adapt rapidly to new needs and opportunities. It is recommended that the lots that make up the Airport's grounds be consolidated and ownership transferred to the new entity.
- Funding should be revised to ensure equitable participation between municipalities. The following page presents two models that can be used to determine the apportionment of funding between municipalities.

Current municipality contributions

	2016 Contribution	2016 Contribution
	(\$)	(%)
City of Cornwall	\$125,332.00	85,0%
Township of South Glengarry	\$22,117.50	15,0%

Cornwall & South Glengarry

		% of property value
	% of population	assessment
City of Cornwall	78,0%	66,5%
Township of South Glengarry	22,0%	33,5%

Proposition of apportionment

		% of property value
	% of population	assessment
City of Cornwall	41,6%	30,2%
Township of South Glengarry	11,7%	15,2%
Township of North Dundas	10,1%	13,8%
Township of North Glengarry	9,0%	9,0%
Township of North Stormont	6,1%	7,7%
Municipality of South Dundas	9,7%	12,6%
Township of South Stormont	11,7%	11,6%

Recommendations – Governance (cont'd)

Entrust the operation of the Airport to Cornwall's Economic Development Department

- It is recommended that the Airport Manager be a City of Cornwall employee within the Economic Development Department. The City of Cornwall, being the largest municipality as well as the economic centre for the region, possesses the resources and expertise within its organization to operate and develop the Airport in compliance with the directions given by the Airport Board.
- Other City departments would assist the Manager as needed (for example, Planning, Communications, Human Resources).
- A strong link with SDG's Economic Development Department needs to be established to ensure the pertinence and coherence of the Airport's growth strategies with the region's economic development orientations.

Put in place an advisory committee

- The Advisory committee provides a forum for receiving input and advice from aviation stakeholders and the community on the various issues related to the Airport, such as:
 - The Airport's development, strategic initiatives and operational improvements;
 - Opportunities to increase the Airport's financial self-sustainability;
 - Aviation matters.
- The advisory committee members would be appointed by the City or by the City and other partners;
- The choice of members should take into account the following:
 - Getting the skills required to develop the Airport (for example: aviation, airport management, business, law, accounting, marketing);
 - The representation of key stakeholders such as tenants, NAV CAN and the Flight Club.

Recommendations — Governance (cont'd)

Implement the governance best practices documented in section 5

- Namely:
 - Produce a strategic plan with a clear vision of the Airport's future;
 - Put in place internal and external accountability frameworks and controls;
 - Determine performance indicators and establish a monitoring system;
 - Establish other policies by which the Airport operates (safety policy, environmental protection policy, leasing policy, etc.).

Recommendations – Management and Operations

Build a new, more robust business model supported by a proactive and entrepreneurial management

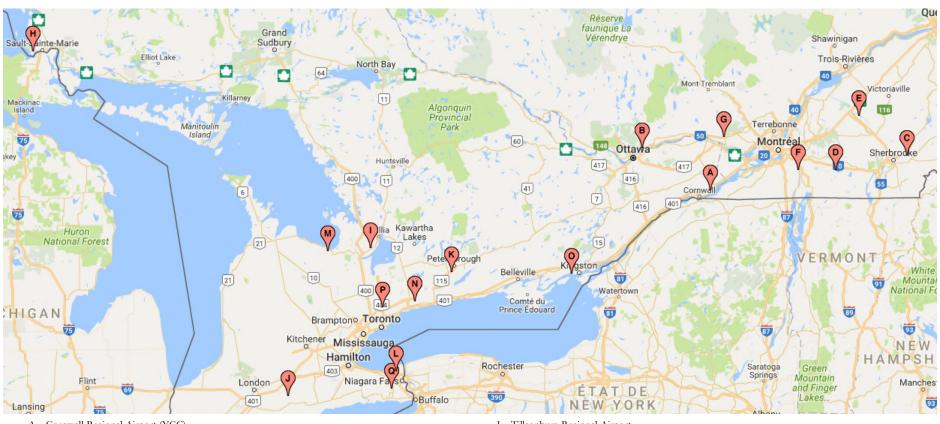
- Shift towards a more commercial business focus with an emphasis on maximizing non-aeronautical revenues:
 - Set market rates for leases and fees;
 - Develop a commercially based business plan;
 - Take an active role in regional economic development (Manager).
- Deploy strong marketing efforts to identify and chase new opportunities:
 - Develop a marketing strategy and effective marketing tools (namely, a well-structured Internet site).
- Establish customer service as a core operational principle:
 - Put in place processes that support effective customer relations (consultation, satisfaction measurement and tracking, etc.).
- Build effective links in the community:
 - Develop a public relations strategy.

Appendices

- A. Airport benchmarking
- B. Stakeholders interviews
- C. Potential customers interviews
- D. Required take-off length per type of aircraft
- E. NAV Centre / OAS Project

A. Benchmark: jet fuel sales

The airports were selected according to their location, their main runway length and their aircraft movement. Considering that the requested information is related to their operations and income, the airports had to be sufficiently distant from Cornwall Regional Airport for the airports to disclose such information.



- A Cornwall Regional Airport (YCC)
- B Gatineau-Ottawa Executive Airport (YND)
- C Sherbrooke Airport (YSC)
- D Roland-Désourdy Airport (ZBM)
- E Drummondville Airport
- F Saint-Jean Airport (YJN)
- G Lachute Airport
- H Sault Ste. Marie Airport (YAM)
- I Lake Simcoe Regional Airport
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- J Tillsonburg Regional Airport
- K Peterborough Airport (YPQ)
- L St. Catharines/Niagara District Airport (YCM)
- M Collingwood Regional Airport
- N Oshawa Executive Airport (YOO)
- O Kingston/Norman Rogers Airport (YGK)
- P Buttonville Municipal Airport (YKZ)
- Q Niagara Central Dorothy Rungeling Airport
- N.B. Havre Saint-Pierre Airport (YGV) is not shown in this map.

A. Benchmark: jet fuel sales

The interview guide was included questions on their volume of fuel sales (100LL and Jet A), their annual aircraft movements, the airport users, public services available onsite and recent development plans.

Airport	Main/longest runway (ft)	Aircraft movements (2015)	Aircraft movements (2010)	Interview conducted / information provided
Drummondville Airport	4,000	13,597	9,576	Interview conducted, information on fuel unavailable
Saint-Jean Airport (YJN)	4,000	→ 36,359	39,890	Contacted but no interview
Lachute Airport	3,989	Approx. 6-7,000	N/A	Interview conducted. Fuel Sales: 10% Jet A, 90% 100LL
Oshawa Executive Airport (YOO)	4,000	↑ 57,103	50,331	Interview conducted, information on fuel unavailable
Buttonville Municipal Airport (YKZ)	3,902	→ 76,750	161,455	Interview conducted, information on fuel unavailable
Kingston/Norman Rogers Airport (YGK)	4,929	→ 28,015	37,876	Interview conducted, information on fuel unavailable
Peterborough Airport (YPQ)	5,000	53,38 0	27,674	Interview conducted, information on fuel unavailable
St. Catharines/Niagara District Airport (YCM)	5,000	N.A	27,239	Contacted but no interview
Collingwood Regional Airport	5,000	10,898	8,996	Interview conducted, information on fuel unavailable
Roland-Désourdy (Bromont) Airport (ZBM)	5,000	15,000	5,607	Interview conducted. Total volume sold: 111,357 L. 41% Jet A, 59% 100LL.
Havre Saint-Pierre Airport (YGV)	4,500	4,907	6,461	Interview conducted. Increase in Jet A sales and decrease in 100LL sales.
Ottawa/Gatineau Executive Airport (YND)	6,000	↓ 42,707	48,972	Interview conducted. Fuel sales: 60% Jet A, 40% 100LL.
Lake Simcoe Regional Airport	6,000	15,593	20,558	Interview conducted. Total volume sold: 1,000,000 L. 90% Jet A, 10% 100LL.
Tillsonburg Regional Airport	5,500	13,814	10,142	Contacted but no interview
Sherbrooke Airport (YSC)	6,000	12,279	9,899	Contacted but no interview

A. Benchmark: competition

Benchmark of the competitors

	Runway	Land		Aircraft movement			
Airports	length	Area	Ownership	(2015)	Fuel (tx incl.)	Services	Infrastructures
Cornwall Regional Airport	3,510 ft.	116.5 ha	2 Municipalities	5,900	100LL, Jet A	Flight training (1), Maintenance (1), Aircraft rental	Private hangars (16), Commercial hangar (1), Tiedowns (12), Trailer as terminal, Runway (1)
Ottawa / Carp Airport	3,936 ft.	80 ha	Private company	N/A	100LL (\$1.67), Jet A (\$1.60)	Flight training (2) , Maintenance, FBO, Helicopter transport services, Plane rides, Museum	Private hangars, Hangaronium, T-Hangar, H- Hangar, Terminal, Runway (2)
Lachute Airport	3,989 ft.	N/A	Municipality / Land to private co.	6,000 - 7,000	100LL (\$1.72), Jet A (\$1.45)	Flight training (4), Maintenance, Restaurant, Aircraft manufacturer (1), FBO (2), Aircraft services (paint, welding, lettering)	Private hangars (22), Hangaronium (7), Tie-downs, Business park (14), Runway (2)
Smiths Falls-Montague (Russ Beach) Airport	3,998 ft.	150 ha	2 Municipalities	± 6,000	100LL (\$1.58)	Flight training (1), Manufacturing and repairs for kitplane, Museum	Private hangars (50), Welcome Centre as terminal, Runway (1)
Brockville - Thousand Islands Regional Tackaberry Airport	4,500 ft.	161 ha	Municipality	15,138	100LL (\$1.60), Jet A (\$1.51)	Flight training (1), Charter flights	Private hangars (5), Commercial hangars (8), Tiedowns (10), Training facility (law enforcement and first responders), Terminal, Runway (2)
Ottawa / Gatineau Airport	6,000 ft.	142 ha	Non-profit corporation	35,981	100LL (\$1.18), Jet A (\$1.64)	Flight training (3), FBO (1), Maintenance (2), Scheduled flights, Restaurant, Museum, Parachutting	Commercial hangars (3), Tie-downs, Terminal, Runway (1)
Montréal / Saint-Hubert Airport	7,801 ft.	515 ha	Non-profit corporation	171,717	100LL (\$1.57), Jet A (\$1.37)	Flight training (6), FBO (4), Charter flights (5), Scheduled flights, Maintenance and repairs, Avionics, Air media (banner), Restaurant (2)	Private hangars, Commercial hangars, Terminal, Runway (3)

A. Benchmark: Airport development initiatives

Kincardine, ON

This airport has a runway 500 ft. longer than that at Cornwall Regional Airport. The users are similar. It is at a far distance from a big city, Toronto, unlike Cornwall which is an hour away from Montréal and Ottawa. They are near the largest nuclear plant in the world which creates many fly-in and out.

Development plan analysis

Pre-development context	Infrastructures: two paved runways (main: 4,085'), four taxiways, tie down s, seven hangars, terminal, only electricity and communications as public service Operations: Registered as a fixed base operator: fuel sales, aircraft parking, storage, onsite customer service. Services: FBO, fuel sale, parking and storage space, flight school, sightseeing tours, charter flights by corporations in the area
Incentives for development initiatives	There has been an increase in investments in the region. There is a need of accessing the area from Toronto. There is local growth in the general aviation sector and tourism is on the rise. Goal: attract business to mitigate the overall cost of airport operating and capital expenditures, while still promoting events that engage with the community.
Proposed development/objectives	 General aviation/Corporate aviation: Construction of T-hangars and traditional hangars Small general aviation MRO facility, prepare lot for future business opportunity Flight training: attract more schools because necessary and essential for supporting the industry Developments: Over the short term, small improvements to the infrastructures. Over the long term, extension of the runway to 4,500 ft. and ideally to 5,000 ft.
Development initiatives results	There were hangars built and financed by private individuals according to building standards determined by the airport. Other developments were not carried out because of financial reasons such as infrastructure improvements. Before investing in the runway extension, they must have a jet needing a longer runway coming at least five time a week to make it worthwhile.
Success factors	To have good relations with key municipal councilors to work as a team.
Revenue model	Fuel sales, landing fees, property leases, tie down rentals
Governance model	Owned by the Municipality of Kincardine. Managed by Evans Aviation (flight school) who reports to CAO of the municipality.

A. Benchmark: Airport development initiatives

Digby, NS

This airport has a similar runway length as Cornwall Regional Airport. It has similar tenants and users. The report was prepared in 2006.

Development plan analysis

Pre-development context	Infrastructure: paved runway (3,950'x75'), ramp and taxiway, turf runway, lighted for night operations, airport administration building, Isles Aero Service hangar, two hangars, municipal animal control facility, non-directional beacon, published GPS approach by NAV Canada, weather station Operations: Certified, attended 24/7, maintained (7:00-19:00), runway inspected three times per day, financial deficit Services: 100LL fuel tank, jet A provided with notice, aviation oil available, maintenance services (Isles Aero Service)			
Incentives for development initiatives	Goal: Turn the airport into a driver of local economic development, achieve financial sustainability and growth.			
Proposed development/objectives	 Regional businesses and organizations requiring timely access to markets Community/regional essential services requiring air transportation Flight training Aero-tourists from the USA and Canada Be made capable of servicing commercial aviation, in particular business aviation: jet fuel refuelling services, waiting lounge with modern amenities, after-hours schedule to make work crews available to clear and check runway, direct line to taxi and car rental agencies, availability of aircraft maintenance for at least minor repairs, office space and hangars, support potential flight training units by keeping flexible operating hours 			
Development initiatives results ¹	After installing jet fuel, the estimated volume of fuel sale doubled. The aircraft movement stop declining and increased by approximately 10%. Maintenance service left the airport due to lack of aircraft movement. Airport has financial loss, but maintains activities to keep possible economic impacts to the community, emergency users and military exercises, although, military exercises are unpredictable and inconsistent. For now the economic outcomes are acceptable, but, once the runway will need resurfacing, it will be insufficient. The decision of maintaining or closing the airport will have to be discussed.			
Success factors	 Effective communication Out of the box thinking Support and knowledgeable airport management Aligning the business strategy with the community 			
Revenue model	Fuel sales, tie down s			
Governance model	Owned and operated by the Municipality of Digby.			

Sources: 1. Interview with Jeff Sunderland, CAO of Digby Municipality; 2. http://www.digbydistrict.ca/83-dma-strategic-business-plan/file.html

A. Benchmark: Airport development initiatives

Peterborough, ON

This airport has a 5,000 ft. runway which is the desired length for Cornwall Regional Airport. The report was prepared in 2009.

Development plan analysis

Pre-development context	Infrastructure: Two runways (main: 5,000 ft.), two taxiways, terminal, commercial hangars, eight private hangars
	Operations: Certified, 24/7 operational. 33 aircraft based at the airport.
	Services: Aircraft maintenance, flight training, aerospace instruction activities, aircraft part sales, light manufacturing, charter flights, fuel services
Incentives for development initiatives	The City is on the threshold of making large capital expenditures at the Airport to facilitate the growth of the anchor tenant and others. There is a present urgency for the City to diversify and enrich its industrial base with the continuing economic and financial crisis. The additional revenues from the proposed improvements would not fully cover the costs of the investments. The community would still benefit from increased employment, business expenditures on goods and services, and other spinoffs.
	- MRO or refurbishing work involving regional jets
	- Runway precludes operations by narrow body jets such as the 737 and A-320
Proposed development/objectives	- Extending the runway to 7,000 ft. (this will allow for the current business at the airport to attract larger aircraft)
	- Constructing a new apron
	- Fully extending the taxiway
Development initiatives results	The Airport Major Infrastructure Project was approved. The federal and provincial governments as well as the City each contributed \$7M. Construction of an aviation industrial park. Expansion of runway 5,000 ft. to 7,000 ft. In 2012, it was the airport with the highest number of aircraft movements (35,197) recorded at 141 airports without air traffic control towers. Aircraft movements: 2008 = 15,285 movements; 2012 = 25,436 movements. Seneca College opened a school at the airport in January 2014 with expected 150 students and 50 faculty at the campus = 25,000 - 30,000 additional movements. Over 30M\$ was invested since 2008.
	- Continuing public support
	- Financial resources
Success factors	- Careful management
	Results in 2012: "These numbers represent a large effort and commitment from all levels of government to foster growth and attract investment to the airport." – stated Trent Gervais, Peterborough Airport Manager.
Revenue model	Landing fees, airport general improvement fees, land leases, short- and long-term parking, tie down s, airport servicing cost
Governance model	Owned and operated by the City of Peterborough.

Sources: 1. http://www.peterboroughairport.com/Assets/Peterborough+Airport/Documents/Airport+Development+Document+Library/2009-02-27+-+Airport+Development+Business+Case.pdf

B. Stakeholder interviews

Content of the interviews

The interviews with municipality and the Commission representatives discussed the history of the Airport, current status and possible opportunities and developments. The interviews with the tenants consisted in questioning the current use of the Airport, potential future needs that could require an investment and different opportunities that seem feasible for this airport. Future partners were also interviewed to determine their needs and understand their projects.

List of Stakeholders

Organization	Person interviewed	Title
Township of South Glengarry	Brian Brown	Chief Administrative Officer
Cornwall Regional Airport Commission	Frank Prevost	Chair
TRU Simulation and Training	John Rattray	Director, North American sales
Cornwall Regional Airport Commission	Bryan Russel	Board Member
Cornwall Economic Development	Bob Peters	Senior Development Officer
Cornwall Aviation and KLT Aviation Services	Stephen Small	General Manager and owner
Township of South Glengarry	Ewen MacDonald	General Manager of Infrastructure Services
City of Cornwall	Stephen Alexander:	Former General Manager of Planning, Parks and Recreation
Cornwall Flying Club	Earle DePass	President, Hangar tenant and user of the Airport
Cornwall Regional Airport Private Hangar Owners Association Ottawa Aviation Services (OAS)	Peter Gervais	President – CRAPHOA, Tenant, Shareholder – OAS
NAV Canada	Garry Brown	Director, International Training Programs and Delivery
Ottawa Aviation Services (OAS)	Cedric Paillard	CEO

C. Potential customer interviews

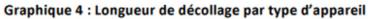
Content of the interviews

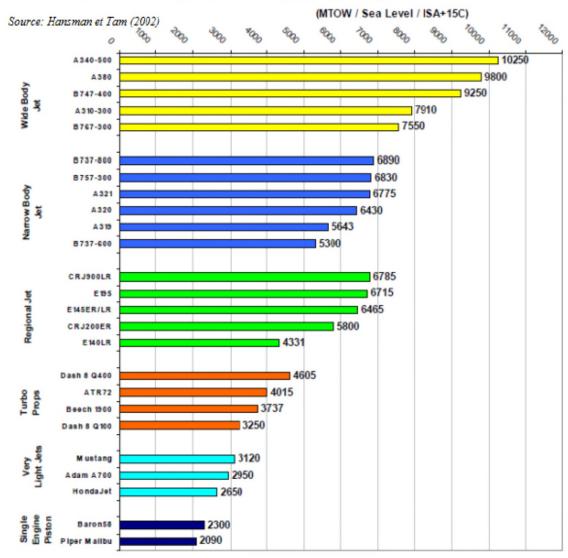
The interviews with the potential customers were designed to identify if they already used the Airport, if they used another airport nearby or if they would need to use an airport in the near future. If the need for an airport was identified, the interviewer enquired about the necessary requirements to evaluate the level of investment involved in the business opportunity.

List of Potential customers

Organisation	Person interviewed	Title	Date of interview	Conclusion
Ontario Provincial Police	N/A	Officer at Orillia headquarters	August 12, 2016	Operations are confidential.
ORNGE	James Denison	Helicopter Flight Manager	Voicemails: August 17, 2016; August 30, 2016	Unable to reach
Walmart Canada	N/A	Human Resource	August 12, 2016	Executive team travel by train or by plan to Montréal. Shipments are mostly by truck or train.
Walmart Logistics	Troy Mascarenhas	VP Logistics and distribution centre	August 26, 2016	Merchandise does not travel by air because too expensive. Senior inspectors come to the building once or twice per year. Commercial flights are preferred.
Matrix Logistics Services (Shoppers Drug Mart Distribution Centre)	N/A	Human Resource	August 30, 2016	Infrequent transport for executive team and merchandise is transported by trucks.
Benson Group	Seanna McCoy	Logistics Manager	Voicemails: August 15, 2016; August 30, 2016	Unable to reach
Olymel	Bernadette Dubeau	Receptionnist	August 30, 2016	Asked for an email with reasons of interview to find adequate resource for interview. Unsuccessful.
UPS	N/A	N/A	August 30, 2016	Unable to find contact for interview.
Purolator	N/A	Media Relations	August 30, 2016	Air shipments are subcontracted to Cargo Jet which is based at Hamilton International Airport. Limited available information on operations.
Pascan Aviation	Mélissa Pouliot	Agente aux développements de la clientèle	August 18, 2016	Sometimes they do overnights at an airport, but they keep their aircraft at St-Hubert Airport, which is their base. They have done charter flights to Cornwall, but this is not a frequent need.

D. Graph: Required take-off length per type of aircraft





E. NAV Centre / OAS project¹

Cornwall is the home of NAV Canada's learning institution, NAV CENTRE. Previously, it was the official establishment where all traffic controllers were trained. Following NAV Canada's privatization, training was decentralized and offered in different regions.

The NAV CENTRE and Carleton University are partnering to establish a Centre of Excellence in Cornwall to foster and grow the aerospace and aeronautics sector in Ontario and elsewhere in Canada. The Centre will provide professional training and accreditation to domestic and international students. NAV CENTRE anticipates that the Centre of Excellence could become one of the largest flight schools in Canada and possibly one of the top 5 in the world.

It aims at leveraging the synergy between the two partners:

- Located in Cornwall, the NAV CENTRE is the largest facility of its kind in Eastern Ontario, offering world-class education facilities and technology, air traffic control simulation capabilities, accommodation and recreational facilities;
- Carleton University offers undergraduate and graduate programs in aerospace engineering. Carleton Aerospace is one of the largest and the most comprehensive academic aerospace research programs in Canada with a wide range of unique, state-of-the-art research facilities.

Ottawa Aviation Services (OAS) has signed an agreement with NAV CENTRE to offer domestic and international students practical training for helicopters as well as Rotary and Fixed Wing aircraft. Currently 35 Chinese students are participating in the helicopter pilot training program and an additional 85 Chinese students are expected join in the next six months. The goal is to grow to 200 students and more.

Presently, the market is favourable.

«As global economies expand and airlines take delivery of tens of thousands of new commercial jetliners over the next 20 years, there is extraordinary demand for people to fly and maintain these airplanes. To meet this tremendous growth, the 2016 Boeing Pilot and Technician Outlook forecasts that between now and 2035, the aviation industry will need to supply more than two million new aviation personnel—617,000 commercial airline pilots, 679,000 maintenance technicians, and 814,000 cabin crew.» (Boeing, Pilot and Technician Outlook)

Also, Canada is attractive for international students. Firstly, the United States is in a position of uncertainty. International students either cannot enter the country or do not want to study in the USA. Other factors of attractiveness are the Canadian dollar, our open society and the different opportunities that are offered.

Access to an airport is essential to the program. Cornwall Regional Airport has an ideal air region for flight schools. There is not too much air traffic for the early stages of training. In later stages, there's the option of going higher for more turbulence and fly near one of three international airports (Montréal, Ottawa and Massena). However, major infrastructure investments will be needed to accommodate the expected demand. Potential clients need reassurance that the airport will be refurbished so as to offer the environment needed for world-class training. A development plan with a committed commencement date is seen as the minimum requirement to further develop potential markets.

For NAV CENTRE, failure to align all the elements needed to materialize the Centre of Excellence project, including the airport's active participation, could result in the closure of its establishment and a job loss for its 500 employees.

¹ All information in this section is based on data obtained from NAV CENTRE and OAS...

E. NAV Centre / OAS project

OAS PROJECT MAIN ASSUMPTIONS

Categories	Assumptions
Airport impact	 A) Number of aircraft = 3 aircraft per 10 students = 0,3 aircraft per student B) Necessary hangar space (sq.ft.) i. Fixed-wing = 3,600 sq.ft per 2 aircraft = 1,800 sq.ft. per aircraft ii. Rotary wing = 2,500 sq.ft. per 2 aircraft = 1,250 sq.ft. per aircraft
NAV Centre Impact	A) Number of rented rooms = 1 room per 2 students = 0,5 room per student
Cornwall Economic Impact	 A) Number of flight instructor = 5 flight instructors per 10 students = 0,5 flight instructors per student B) Number of English teacher = 2 English teacher per 30 students = 0,0667 English teachers per student C) Number of ground school instructor = 1 ground school instructor per 30 students = 0 D) Number of aircraft maintenance engineer (AME) = 1 AME per 5 aircraft = 0,2 AME per aircraft E) Number of apprentices = 1 apprentice per 10 aircraft = 0,1 apprentice per aircraft

 $^{^1\,}http://www.cornwall.ca/en/finance/resources/2017-Update-on-Assessment-Tax-Classes-and-Taxation.pdf$

E. NAV Centre / OAS project

OAS CLIENTELE, FINANCIAL AND ECONOMIC IMPACT FORECASTS – SIGNED CONTRACTS ONLY

The signed contracts for the fixed-wing training program include a Chinese partnership with 60 students per year and two Canadian programs that are offered at Ottawa International Airport at the present time. The rotary wing training program with the Chinese students is ongoing. An additional 60 students are expected in the next six months. In this business model, the access fees and maintenance fees are established as fixed costs at the beginning of the year to allow OAS to price its training program in order to maintain a certain profit margin. Also, it is representative of the use OAS will make of the airport. OAS will become the main user of the airport and therefore should be assuming a large proportion of the airport's operational fees. The increase of the airport's annual charges is directly linked to OAS projects.

Signed contracts

	Year 1	Year 2	Year 3	Year 4	Year 5		
Fixed wing - China (A), Canada (A + B) / F	ixed wing - China (A), Canada (A + B) / Rotary wing - China						
Students per year	175	280	280	280	280		
Airport Impact							
Aircrafts	53	84	84	84	84		
Necessary hangar space (sq.ft.)	78 825	118 200	118 200	118 200	118 200		
NAV Centre Impact							
Rented dorm rooms	88	140	140	140	140		
Cornwall Economic Impact							
Employ ment							
Flight instructor	88	140	140	140	140		
English teacher	12	19	19	19	19		
Program coordinator	6	9	9	9	9		
Ground school instructor	6	9	9	9	9		
AME	11	17	17	17	17		
Apprentices	5	8	8	8	8		

E. NAV Centre / OAS project

OAS CLIENTELE, FINANCIAL AND ECONOMIC IMPACT FORECASTS – SIGNED CONTRACTS AND CONTRACTS IN NEGOTIATION

This scenario includes the signed contracts mentioned previously. It also includes other contracts with the Chinese and European markets for the fixed-wing training program as well as the Canadian and Peruvian markets for the rotary wing training program. By including all of the potential markets, there could be 345 to 630 students attending Cornwall Regional Airport. A large proportion of these students will be spending in the City of Cornwall and residing at the NAV Centre. The increase of aircraft based at the airport will necessitate investment on infrastructures. Both presented scenarios predict funding coming from parties other than the municipal owners of the airport.

All Markets - Both types of aircrafts

	Year 1	Year 2	Year 3	Year 4	Year 5
China, Canada, Europe and Peru					
Students per year	345	510	630	390	390
Airport Impact					
Aircrafts	104	153	189	117	117
Necessary hangar space (sq.ft.)	149 175	216 000	270 900	161 100	161 100
NAV Centre Impact					
Rented dorm rooms	173	255	315	195	195
Cornwall Economic Impact					
Employment					
Flight instructor	173	255	315	195	195
English teacher	23	34	42	26	26
Program coordinator	12	17	21	13	13
Ground school instructor	12	17	21	13	13
AME	21	31	38	23	23
Apprentices	10	15	19	12	12