

# **AIRPORT BUSINESS PLAN**

Addition Ray Borney

THE PARTY NO.

## Cornwall Regional Airport (YCC)

## **FINAL REPORT**



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February 2021

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### **Executive Summary**

The Cornwall Regional Airport (YCC) is a registered airport with a class three designation from Transport Canada. The airport is predominately used by recreational pilots and flight training providers, but also regularly serves as a base of operations for medivac, search and rescue, corporation aviation and police operations. The airport generates some non-negligible aviation activities but the revenue from these activities including fuel sales and hangar/land leasing are not sufficient to sustain the cost of airport operations.

The Cornwall Regional Airport Commission is looking to remediate to this situation by restructuring its business development activities with the objective to increase revenues and activity. YCC is located 7 nautical miles (13 km) east-northeast of Cornwall (ON) in the Township of South Glengarry. It's has two paved runway 10/28 at 3,510 feet long (1,070 meters) by 100 feet wide (30 meters), both Jet-A and 100LL fuel are available and there is 18 airport and privately owned hangars on-site. The main tenant is Cornwall Aviation Limited which operate a fair size flight training school. Annual movement average 18 000 over the last few years.

The City of Cornwall is the regional capital of north-east Ontario and serves as the economic hub for manufacturing, retail, logistics & distribution and health care. There is a limited number of regional businesses owning and operating an aircraft. Most of the airport clientele comes from northeast Ontario and southwest Quebec.

As part of assessing airport revenue growth avenues, a benchmarking of similar size and type of activity airports was conducted. The result showed a gap of 10% to 25% between the rates and fees charged at YCC and the average rates at the benchmarked airports. Aircraft parking fees, landing fees and land lease rate are the three rate YCC could look to restructure and raise based on the results average. In such a situation YCC will remain competitive while generating more revenues per based or transient aircraft.

The work also encompassed conducting a series of consultations that reach out to over 70 stakeholders including economic leaders, airport users and tenants, academia, native communities and tourism offices. The listing below groups some of the key highlights:

- YCC should build a taxiway parallel to the runway
- A longer runway is needed too host larger aircraft this project should be tied to the first bullet
- Municipal infrastructure is an issue (water/sewer) as well as reliability of cell phone and internet connectivity
- YCC is well located (between Montreal, Ottawa and Kingston)
- The NAV Centre offers training/educational opportunity could be a good partner
- The Airport restaurant should be brought back
- Attract more flight training activities (Montreal airspace is too busy for flight training)
- The airport needs a new terminal
- YCC needs an active marketing and investment attraction campaign

Beyond the regional data and consultations, the report looked at aviation market trends that will influence the sector over the next decade and more. Pre-pandemic data and business intelligence showed serious workforce issues in the entire industry. From pilots to aircraft technicians and mechanics, the north-American market is short over 3,000 pilots annually and the worldwide situation raises the bar to 19,000 pilots. The shortfall in aircraft maintenance is very similar. There is a strong need for pilot training where YCC is well positioned.

On the aircraft manufacturing side, the sale of the Bombardier Aerospace Commercial Aircraft division is having a major impact on the Canadian aerospace supply chain. Many suppliers have seen a slowed down and are hoping the new owners will rely on the greater Montreal suppliers to pursue the work.

The sector is also looking at various new technologies including drones and urban air mobility, electric aircraft, digital, automation and advanced manufacturing, decarbonization and advanced materials. In term of potential expansion or relocation, the manufacturers are looking at the following requirements in their decision-making process:

- 1. Access to Labour (local labour laws, labour rates and is there a sufficient talent pool)
- 2. Talent Attraction (is the attractiveness of the company increasing with the location)
- 3. Local Amenities (shopping malls, elementary / high schools, good road systems, public transportation, entertainment options)
- 4. Infrastructure and Site Services (sites already serviced and range of services)
- 5. Incentives (Are there tax exemptions and/or special arrangements How does the municipality compete with similar locations in the US where long-term tax exemptions can be arranged with the acquisition land and/or buildings?
- 6. Access to materials (is the location impacting the cost of raw materials, supplies, and shipping)

While each prospective investment opportunity and/or business investor will have varying degrees of which key assets, infrastructure, services and utilities are of primary interest, this list is designed to assist the airport with commencing a discussion around prioritizing and being prepared for investing into these activities to help with any expressions of interest.

If the airport is less attractive today to aerospace manufacturers, it is located at the heart of the Canadian General Aviation (GA) sector. With about half of the national GA fleet based in Ontario and Quebec, this market is still seeing annual increases in the number of aircraft and pilots and associated demand for maintenance, training and supporting services. YCC can also target the 8000 plus GA aircraft owners in NY State.

#### **Staffing and Operations**

Staffing and operational needs will need to be enhanced and further defined in order for the airport to take the necessary steps of becoming financial sustainable. Two senior-level and distinct roles will be required: a) an Airport Operations Manager - responsible for the day-to-day and continued safe operations of the airport; and b) an Airport Business Development Specialist - responsible for the business development, growth and revenue generation needs of the airport. It is also recommended that the airport follow a phased-in approach focus on becoming financially sustainable by leveraging the expertise of a dedicated Airport Business Development Manage to

secure a series of hangar leases prior to undertaking the proposed runway/taxiway expansion, terminal development and establishing the light industrial park for aviation and aerospace-related activities. Looking beyond 2026, the airport can then focus on Parcels B, D and E to determine if market conditions and demand provide compelling reasons by which to proceed with the proposed development activities.

#### Value Proposition

In line with the information collected, YCC value proposition would be: To grow the Cornwall Regional Airport into a low-cost, well maintained and full-service general aviation hub with its proximity to major metropolitan centres such as Ottawa and Montreal, visibility and immediate access from Highway 401, its unrestricted airspace, little-to-no air traffic congestion, limited residential housing in the vicinity and short distance from the Cornwall-based Nav Centre.

From this value proposition, a number of proposed development concepts are suggested to support the expansion of the airport and its financial sustainability. Some of the concepts require large capital investment with a long-term return on investment but others are very supportive of a short-term change in the airport profitability. These concepts are based on the characteristics and location of the various parcels of lands.

Parcel	Concepts
P - A	Commercial and Corporate Aviation Development Zone based on runway 10-28 extension including a new terminal, restaurant and aviation services
Р-В	Agriculture or Non-Aviation use
P - C	General Aviation Hangar Area Expansion and Light Industrial Park
P - D and E	Airport Signage and Agriculture
P - F	Airport Road relocation
P - G and H	Runway Extension and Airport Road Relocation

#### **Development Concepts and Path Forward**

#### Parcel A

The proposed conversion of Parcel A into a Commercial and Corporate Aviation Development Zone is based on runway 10-28 expansion to 5,000 feet which opens up the south side of the runway to future development. It also allows for larger aircraft to access the airport and the region. The expansion brings the obligation of moving Airport Road. With the extended runway, the Airport critical aircraft would evolve to a Challenger 350.

The runway expansion also means more taxiing time for aircraft on the runway thus reducing the number of possible movements. To alleviate this impact, it is recommended to build at the same time a parallel taxiway (code name Charlie(C)) running from Taxiway Alpha to the end of the

expended runway as shown on Figure 20. The proposed Commercial and Corporate Aviation site expansion is expected to make Cornwall Regional Airport more attractive to aviation companies, corporate flight centers and aviation service groups who are looking for a new site or expanding activities. Marketing efforts will have to be conducted to attract new aviation companies to the airport and as such the YCC Commission should retain the services of a dedicated specialized individual or firm to lead this effort.

The financial impact and capital requirements to develop this concept is relatively high as YCC will need to finance part of the runway and taxiway cost along with the terminal, aircraft ramp, car parking and road relocation. Two business models are proposed first with YCC leasing only land and the second with YCC as the owner of all hangars. With the assumption that YCC can obtain up to 90% of funding from the provincial and federal government to pay for runway and taxiway cost, YCC would generate the estimated following profits:

Period	Landlord Option	Hangar Owner Option
20 year	\$333,000	\$2,800,000
40 year	\$2,358,000	\$6,300,000

Parcel A concept also includes the development of tourism packages. These packages do not require any specific airport infrastructure beside aircraft parking space and a coordinated effort between the airport and tourism staff. These packages will not drive much direct revenues to YCC (estimated \$136,000 over 20-year) but they will provide a strong economic impact in the community (\$1,300,000 over 20-year) as aircraft owners eat, sleep, visit, travel and spend.

#### Parcel B

There is very limited aviation use possible in Parcel B. The recommendation is to pursue leasing ag lands or turn this parcel into possibly non-aviation related activities like a light industrial park. Among some of the key advantages and decision-making factors we see: lower operating costs in Eastern Ontario, dependable workforce, leading edge training, leading edge technology, logistics and distribution networks and an established supply chain.

#### Parcel C

The recommendation is to grow General Aviation activities at YCC through the expansion of the GA hangar farm located in Parcel C with the objective of meeting current and future demand. This project includes adding corporate size hangars and T-Hangars to the farm and moving the tiedown area south of the first row of hangars to reduce development cost.

This project is to be supported by a GA attraction campaign aimed at promoting the development of a new T-Hangar building complex comprised of 6 to 10 doors and a series of stand-alone hangars. As YCC should be the catalyst to attract new tenants, the airport could look at this opportunity to pursue growing its portfolio of buildings and generating extra revenues by being the developer and owner of a few hangars. The market rationale for such a project is based on the current growth rate of the Canadian General Aviation market and the lack of hangar space at the majority of airports on Ontario and Quebec.

Overall, this project would be highly profitable to YCC. Both the landlord only and the hangar owner model have been considered with the following estimated profits:

Period	Landlord Option	Hangar Owner Option
20 year	\$1,251,000	\$1,974,000
40 year	\$2,895,000	\$5,900,000

The proposed development of Parcel C also includes the creation of the YCC Light Industrial Park, a long-term project that aims to attract agriculture related (mainly), light manufacturing and logistic-distribution companies. The proposed location for this development is on the northern part of parcel C. The park will provide land and infrastructure for companies looking to expand and be located in close proximity to the airport with easy access to Highway 401. Market research suggested that YCC should concentrate on attracting industries active in the agri-food, warehousing/distribution, aviation and technology sectors, given their high growth potential, their existing presence in the region and, their inherent need to have direct access to an efficient transportation system.

This development entail YCC building the access road and bringing some of the infrastructure. As such the overall profitability is low over the first 20 years.

Period	Landlord Option	<b>Building Owner Option</b>
20 year	\$433,000	\$647,000

The airport-owned model becomes profitable over the long term because capital investments for the development of the supporting infrastructure has been amortized. This situation is typical of any capital-intensive project where infrastructure spending contributes to sharp deterioration of profitability in the first few years

#### Parcel D and E

These parcels offer the possibility to increase the awareness and visibility of the Cornwall Regional Airport from Highway 401, the construction of an airport sign on Parcel E which is visible from Highway 401 (see Figure 29) is recommended. This investment by the airport has the potential to lead to an increase in general aviation usage and showcase the airport as a location for business investment. Publicity revenues from the sign is minimal and estimated at \$41,000 over 20 year.

#### Parcel F-G-H

With the Airport Road realignment suggested in Parcel A, a good portion (estimated at 30%) of Parcel F will host the new road. Considering also that the southern half of the parcel is traverse by a meandering creek, there is at this stage very limited use of the remaining land. Parcel G-H will be used to relocate Airport Road.

Over and above the revenues generated by the development of the various concepts and the provincial and federal funding programs the Airport can apply to, our team looked at the overall taxation generated by the airport and other funding mechanisms.

With the airport located in the Township of South Glengarry, all taxation revenues go to this Municipality. This situation places the City of Cornwall in an expense mode only. The overall development concepts presented in this report require various airside and groundside investment from the Airport.

As such, we would like to recommend an alternate funding strategy, one that will look at providing a more equitable cost and revenue model for all partners and help support future development and ease recurrent discussions at the governing level.

#### Airport Development Fund (ADF)

The development of aviation and non-aviation uses at the airport will be beneficial for the whole regional economy bringing new investments, creating jobs and increasing the taxation revenue base. As such, to help finance investment attraction activities, infrastructure rehabilitation and construction projects tied to these new investments, we suggest both partners negotiate a tax sharing agreement on new taxes only generated through this plan and moving forward.

The purpose of this fund is to provide the long-term funding requirements to meet the airport infrastructure maintenance and rehabilitation needs and reduce annual municipal financial involvement. The ADF is based on leveraging property taxation revenues generated by NEW (2020 and beyond) taxable investments. Again, the creation of this fund will require the City of Cornwall and the Township of South Glengarry to negotiate a joint agreement. This agreement could allow for the airport to obtain a portion of (up to 100%) any new taxes levied from the construction of new buildings on airport lands.

#### Marketing and Development Plan

In support of the Business Strategy Plan, a development plan defining the main orientations of YCC actions, key objective, required tasks and associated timeline provides a clear picture of steps to be undertaken. The development of Parcel C is suggested as the first development phase. This development plan is supported by a series of marketing recommendations to ensure the required staffing, tools and budgets are planned.

### 1. Introduction

The Cornwall Regional Airport (YCC) is a registered airport with a class three designation from Transport Canada. The airport is predominately used by recreational pilots and flight training providers, but also regularly serves as a base of operations for medivac, search and rescue and police operations. The airport also hosts a few business aviation flights on a weekly basis. The airport generates some non-negligible aviation activities but the revenue from these activities including fuel sales and hangar/land leasing are not sufficient to sustain the cost of airport operations, in fact these revenue over only 50% of the operating budget. The ensuing annual deficit is covered by the City of Cornwall (approximatively 90% and the Township of South Glengarry approximately 10%).

The Cornwall Regional Airport Commission is looking to remediate to this situation by restructuring its business development activities with the objective to increase revenues and activity. The Cornwall Regional Airport Commission wishes to ensure long-term financial sustainability of this important transportation asset for the community.

The Commission is seeking for an action-oriented document that will accomplish the following objectives:

- Deliver a Business Plan that will outline strategies to make the Airport self-sufficient and eventually end the requirement of funding from the municipal tax base;
- Prepare and submit a Marketing Plan and Budget that will clearly identify the marketing activities and tactics to attract new businesses and revenues to the airport;
- Meet, review and negotiate contractual agreements with clients and investors of the airport to determine the opportunity for increasing activity and revenues.

In order to develop a solid business and marketing plan identifying growth strategies and actions for the Airport to become financially self-sufficient, we believe that the following underlying priorities were undertaken in the preparation of the Plan:

- Conduct consultations with existing airport tenants, users and potential investors to understand the needs, discuss future growth and expansion plans, and identify opportunities to increase airport revenues.
- Identification of new streams of revenue for the airport;
- Review and assess the growth of existing airport revenues;
- Development of an action-oriented marketing plan to attract new businesses to the airport;

## 2. Airport Portrait & Assets Inventory

#### 2.1 Airport History

The information presented in this section is an extract from the Cornwall Regional Airport website:

"YCC opened in 1973 as the Cornwall/Summerstown Airport. At that time, it was owned and operated by Cornwall Aviation, a privately owned company. It had a 2,865 ft. turf runway, an apron area and a hangar with office space. 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 to manage the airport. The purchase of the Airport included the runway, taxiway, apron area and adjoining property. The management of the Airport was given to Cornwall Aviation which kept ownership of their 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 fuel facilities, an access road and car parking area.

In 1990, the Airport Master Plan was developed and envisioned an airport capable of serving local industry and commerce by making the necessary investments in order to allow corporate jets to use the Airport. Further plans would be drafted in 2008, 2013 and most recently in 2017. The Cornwall Regional Airport celebrated its 45th year of operation in 2018."

#### 2.2 Airport Location, Role and Services

The Cornwall Regional Airport (CYCC) is located 7 nautical miles (13 km) east-northeast of Cornwall (ON) in the Township of South Glengarry. It services the communities and businesses in the greater United Counties of Stormont Dundas and Glengarry (SDG). On a larger scale, YCC is located 52 nautical miles (96 km) from downtown Ottawa and 49 nautical miles (91 km) from downtown Montreal.

Figure 1 presents the location of the nearest competing airports. Massena International is the closest though across the border in the United States but a mere 15.2 nm or 28 km from YCC. On the Canadian side airports with significant enough activities to be considered as competitors would be Les Cedres and Valleyfield to the north, Smith-Falls Montague to the west and Kingston to the south.



#### Figure 1 - Geographical location of the Cornwall Regional Airport

YCC is predominantly used for recreational purposes, flight training, as well as providing a base of operations for medical emergency transport, search and rescue and police operations. Occasionally, private businesses use the airport to transport employees. For example, Trans-Northern Pipeline and Enbridge Pipeline are frequent users. YCC is classified as an airport of entry (AOE-15) by the Canada Border Services Agency (CBSA). CBSA officers are not present at the airport but will travel to meet international flights with 15 passengers or less.

The Cornwall Regional Airport is classified as a Registered Airport and is listed in the Canada Flight Supplement. YCC also appears on a VFR Navigation Chart. The airport also provides the additional services:

- 100LL Avgas and Jet Fuel (24-hour self-serve card lock system);
- A terminal for airport users including a passenger lounge available 24/7;
- Overnight and short-term hangar leasing and parking (aircrafts and cars);
- Flight training services; and
- Aircraft maintenance services.

#### 2.3 Main Tenants and Stakeholders

YCC is operated and managed by the Cornwall Regional Airport Commission. This entity is jointly funded by the City of Cornwall and the Township of South Glengarry. The board is composed of six (6) members, with three (3) members from Cornwall and three (3) members from South Glengarry.

YCC is a general aviation airport with thirty plus tenants. Aside from the multiple private hangar owners (total of 17 owners), the only business located at the airport is Cornwall Aviation, a well-known pilot training school. In terms of services, the company offers up to multi engine and instrument flight training. More precisely, they propose the following courses:

- Recreational Pilot Permit (RPP);
- Private Pilot Course;
- Night Rating Course;
- Multi-Engine Course; and
- Instrument Courses (IFR on Single and Multi-Engine Aircrafts).

The company has experience with International Students and promotse the fact that they received students from Bahrain, Oman, Saudi Arabia, Tahiti, Singapore, France, Belgium, Germany, Switzerland, Scotland, Ireland, Thailand, and Madagascar at their school. In addition, Cornwall Aviation offers aircraft maintenance services. The shop is well equipped to handle general maintenance, as well as structural repairs. The services range from small repairs to extensive rebuilds, including windshield and engine changes, routine annual inspections and more. The company also provides aerial services for pipeline inspection and wildlife surveys. Cornwall Aviation's fleet is composed of Cessna 172 and PA44-180 Seminole. YCC aircraft owners and pilots are members of the COPA 59 chapter.

#### 2.4 Aircraft Movements

Most of the movements at the airport are generated by Cornwall Aviation Flight Training activities. Over the last five years, movements have increased and range between 16 000 to 18 000 annually. 2019 was a good year with just over 18,000 air movements.

#### 2.5 Assets Inventory

The Cornwall Regional Airport (YCC) is a registered airport with a class three designation and has 3,510 feet long (1,070 meters) by 100 feet wide (30 meters) runway that is opened and maintained year-round. Runway 10/28 is asphalted and currently in good condition. An annual crack sealing program ensure that the runway stays in proper condition. The airport has two (2) taxiways, one linking the runway to the apron and the other linking runway to the general aviation hangar zone:

- **Taxiway Alpha**: 368 ft. x 50 ft. for a total surface of 18,400 square feet (1,709 square meters); and
- **Taxiway Bravo**: 395 ft. x 35 ft. for a total surface of 13,825 square feet (1,284 square meters) excluding the three (3) small parallel taxiways that lead to the hangars.

The general aviation hangars are accessible by the eastern segment of Airport Road. Most of the 17 hangars have similar sizes (between 1,600 and 2,000 square feet) except for one that is slightly larger (2,500 square feet). The general aviation hangar zone also offers 16 aircraft tie-down locations and 34 places car parking totaling 12,220 square feet. The airport main parking area,

located south of the central apron, has 44 parking slots while Cornwall Aviation parking has approximatively 15 slots.

The airport's apron is segmented in two (2) distinct zones. The eastern segment is dedicated to all airport users while the western segment of the apron is used mostly by Cornwall Aviation and its aircrafts. Overall, the YCC apron has a total surface of 108,990 square feet (10,125 square meters). Similar to the runway, the apron is currently in good condition.

The airport is licensed for day and night VFR and IFR operations. YCC has a UNICOM System (122.775 within 5 NM and 3200 feet ASL) for radio communications. Finally, the airport is equipped with two (2) RNAV approaches and pilot-controlled lighting (ARCAL System) for night and all-weather operations.

**Note on the equipment:** All the airport-related maintenance equipment is owned by Cornwall Aviation or the Airport Manager personally. This equipment ranges from mowers, snow plow's equipment and transport vehicles. The airport commission subcontracts airport maintenance activities to the Airport manager under a separate contract.

#### 2.6 Portrait of the Region

As part of the mandate, the project team gathered various information to understand the socioeconomic portrait of the region. This section focuses on the presentation of the United Counties of Stormont, Dundas and Glengarry (SDG Counties), which regroups North Dundas, North Glengarry, North Stormont, South Dundas, South Glengarry, South Stormont, the City of Cornwall and Akwesasne (Indian Reserve).



#### Figure 2 - Map of the United Counties of Stormont, Dundas and Glengarry

#### 2.6.1 Regional Population

Table 1 presents the population growth from 2007 to 2019 for the United Counties of Stormont, Dundas and Glengarry (SDG). We observe that South Glengarry is the only Township that experienced a decrease over the period (-5,72%). Overall, the SDG Counties had a slow 2,32% growth compared to 14,11% growth of the Province of Ontario over the same period.

Name	Status	Population Estimate (2007)	Population Estimate (2012)	Population Estimate (2017)	Population Estimate (2019)	Variation (2007-2019)
Stormont, Dundas and Glengarry (SDG)	United Counties	115,431	115,852	116,812	118,114	2,32%
Akwesasne (Part) 59	Indian Reserve	1,625	1,694	1,749	1,769	8,86%
Cornwall	City	47,303	47,509	47,774	48,560	2,66%
North Dundas	Township	11,396	11,583	11,659	11,626	2,02%
North Glengarry	Township	10,900	10,584	10,412	10,277	-5,72%
North Stormont	Township	6,973	7,027	7,142	7,107	1,92%
South Dundas	Municipality	10,938	11,040	11,067	11,206	2,45%
South Glengarry	Township	13,381	13,413	13,501	13,730	2,61%
South Stormont	Township	12,915	13,002	13,508	13,839	7,15%
Ontario	Province	12,764,806	13,390,632	14,072,615	14,566,547	14,11%

		- · · ·			<b>.</b>		-			
Tahle 1	1 - United	Counties of	Stormont	Dundas and	Glendarry	v Population	Growth	(2007 <del> </del>	n 2019	Υī
	o ontou		otormont,	Dunduo una	Clongung	y i opulation	Clower	(2007 1	02010	/

**Note on Population Forecasts:** In 2013, Hemson Consulting Ltd prepared a document called "Population and Growth Projections for the United Counties of Stormont, Dundas and Glengarry". The consultant forecasts that the SDG population would reach 118,400 by 2021 and 121,600 by 2031. Based on these numbers, the counties can expect a 2,95% population growth between 2019 and 2031.

<sup>&</sup>lt;sup>1</sup> Stormont, Dundas and Glengarry Profile. City Population. Consulted March 27, 2020. Web Link.

In addition, Figure 3 presents the age groups among the SDG Counties population in 2016. As can be seen, 59% of the population ranged into the 18-64 years old bracket (the active population), which is slightly lower than the Province of Ontario (66,8%). The 0-17 years old and 65+ years old groups have a similar proportion.



Figure 3 - SDG Counties Age Groups (2016)

**Note on the local languages:** In 2016, 42,760 citizens had knowledge of English and French (38% of the total population)<sup>2</sup>. This makes SDG one of the regions with the highest proportion of bilingual individuals across Ontario. This is mainly due to the proximity of the Province of Quebec.

• 0-17 years = 18-64 years = 65+ years

#### 2.6.2 Households Income

The most recent data on households and their associated incomes comes from the 2016 Census. Table 2 indicates that over a 10 years period (2006-2016), the total number of households in the SDG Counties increased by 8,1% (+3,565 households). South and North Stormont experienced the fastest growth over that period. It is also worth mentioning that the City of Cornwall represented 43.8% of the total number of households in 2016.

The table also presents the median total income of household's variation between 2005 and 2015. The SDG Counties experienced a 3,8% increase over that period to reach \$59,526 per household in 2015. This figure is significantly lower than the province's median total income of households of \$74,287 (+25% compared to SDG Counties).

<sup>&</sup>lt;sup>2</sup> Statistic Canada. Stormont, Dundas and Glengarry Census 2016. Web Link.

Geography	Number of households			Median total income of households		
	2006	2016	% change	2005	2015	% change
Cornwall (City)	19,705	20,930	6.2	46,592	46,564	-0.1
Akwesasne (Part) 59 (Indian reserve)		465			32,320	
South Stormont (Township)	4,635	5,150	11.1	69,278	76,092	9.8
South Glengarry (Township)	4,945	5,300	7.2	73,379	76,702	4.5
South Dundas (Municipality)	4,155	4,555	9.6	62,781	65,067	3.6
North Dundas (Township)	4,180	4,485	7.3	65,925	78,192	18.6
North Stormont (Township)	2,385	2,630	10.3	70,331	76,544	8.8
North Glengarry (Township)	4,255	4,315	1.4	52,185	59,456	13
Stormont, Dundas and Glengarry	44,260	47,825	8.1	57,365	59,526	3.8

#### Table 2 - SDG Counties Number of Households and their Median Total Income<sup>3</sup>

Census data also indicate that in 2015, 19,570 persons (or 17.9% of the population) were in low income, while in 2005, 15.8% of the persons in Stormont, Dundas and Glengarry lived in low income. This represents an increase of 2.1% over 10 years. The low-income rate for persons under 18 years of age was 24.4% compared to 16.6% for persons aged 18 to 64 and 15.5% for persons 65 and over in 2015. Also, persons living in lone-parent families had a higher rate of low income at 37.1%, while those living in couple families without children had a lower rate of 8.2%.

The following chart offers a better visual comparison of the percentage of persons in low income across Canada. The numbers indicate that the City of Cornwall had almost twice the percentage of its population with low income compared to Canada and Ontario. Stormont, Dundas and Glengarry had 3,5% more low-income individuals compared to Ontario in 2015.

<sup>&</sup>lt;sup>3</sup> Statistic Canada. Census Profile Stormont, Dundas and Glengarry, United counties census division. <u>Web</u> <u>Link</u>.



#### Figure 4 - Percentage of persons with Low Income (2015)

#### 2.6.3 Employment

In addition to the population data, this section presents information on the employment and unemployment rates. Between 2006 and 2016, the employment rate stayed stable for the bulk of the active population (25 to 64 years old). On the other hand, we observe a 4.7% decrease in the employment rate for the younger workers (15 to 24 years old) over the studied period (55.80% to 51.10%). Employment rate for the younger workers (15 to 24 years old) over the studied period (55.80% to 51.10%).



#### Figure 5 - Employment Rates (%) by Age Group for SDG (2006-2016)<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> Census Made Simple (Release 12). The Counties SDG. Web Link.

Figure 6 indicates that the unemployment rate increased for all age groups over the 2006-2016 period. In Ontario, the unemployment rate was at 5.8% in 2016 for the 25 to 64 age group, which is almost identical to the 5.9% recorded for the same group in SDG Counties.





Finally, Figure 7 shows that 12.20% of the SDG's labour force was self-employed in 2016. This is precisely half-way between the proportion of the Ontario and Canada that are respectively at 12.10% and 12.30%.



#### Figure 7 - Employed Labour Force by Class of Worker (%) for SDG (2016)

#### 2.6.4 Main Business Sectors

For the consultant, understanding of regional main business sectors is required to propose YCC development concepts that fit the local ecosystem. Table 3 presents the percentage of employed labour force (aged 15+) by industry for 2016. The percentages presented in the second column (SDG) are highlighted in either green or red depending if they are higher or lower than the Provincial average. Therefore, we observe that 9 industries in SDG are above the Ontario average, especially the "Agriculture, Forestry, Fishing and Hunting" (+3.5%), the "Retail Trade" (+2.1%) and the

"Transportation and Warehousing" (+2.0%) industries. Overall, for SDG, the top 5 industries in percentage of the employed labour force aged 15 and over were the following in 2016:

- 1) Healthcare and Social Assistance (13.60%)
- 2) Retail Trade (13.20%)
- 3) Manufacturing (10.00%)
- *4) Construction (8.30%)*
- 5) Public Administration (7.00%)

#### Table 3 - Percentage of the Employed Labour Force Aged 15 and Over for SDG (2016)

Industries	Stormont, Dundas and Glengarry (SDG)	Ontario	Ottawa - Gatineau CMA	Canada
Agriculture, Forestry, Fishing and Hunting	5,00%	1,50%	0,60%	2,40%
Mining, Quarrying, and Oil and Gas Extraction	0,20%	0,40%	0,10%	1,40%
Utilities	0,90%	0,70%	0,30%	0,80%
Construction	8,30%	6,60%	5,50%	7,10%
Manufacturing	10,00%	9,90%	3,20%	8,80%
Wholesale Trade	3,50%	3,90%	2,20%	3,70%
Retail Trade	13,20%	11,10%	10,50%	11,50%
Transportation and Warehousing	6,80%	4,80%	3,00%	4,80%
Information and Cultural Industries	1,10%	2,50%	2,50%	2,30%
Finance and Insurance	2,30%	5,60%	3,10%	4,50%
Real Estate and Rental and Leasing	1,40%	2,10%	1,70%	1,90%
Professional, Scientific and Technical Services	3,70%	8,20%	8,80%	7,40%
Management of Companies	0,10%	0,20%	0,10%	0,20%
Administrative and Support, Waste Management and Remediation Services	4,40%	4,70%	4,40%	4,20%
Educational Services	6,50%	7,60%	8,10%	7,50%
Health Care and Social Assistance	13,60%	11,10%	11,30%	12,10%
Arts, Entertainment and Recreation	1,70%	2,00%	2,00%	2,00%
Accommodation and Food Services	6,10%	6,60%	6,40%	6,90%
Other Services (except Public Administration)	4,40%	4,30%	4,20%	4,50%
Public Administration	7,00%	6,10%	22,10%	6,30%

The following table offers a more detailed presentation of the number of workers by industry and their variation of between 2011 and 2016. Over that period, 345 jobs were lost across all industries. The "Manufacturing" (-1080), the "Administrative and Support, Waste Management and Remediation Services" (-715) and the "Public Administration" (-395) industries were the most affected. On the other hand, the top 3 industries that experienced the most growth are respectively the "Retail Trade" (+670), the "Healthcare and Social Assistance" (+635) and the "Accommodation and Food Services" (+595) industries.

Industries	2011	2016	Net Growth
Agriculture, Forestry, Fishing and Hunting	2275	2610	335
Mining, Quarrying, and Oil and Gas Extraction	110	85	-25
Utilities	420	455	35
Construction	4330	4815	485
Manufacturing	6375	5295	-1080
Wholesale Trade	2175	1900	-275
Retail Trade	6445	7115	670
Transportation and Warehousing	3760	3645	-115
Information and Cultural Industries	760	615	-145
Finance and Insurance	1465	1190	-275
Real Estate and Rental and Leasing	745	745	0
Professional, Scientific and Technical Services	2025	1995	-30
Management of Companies	55	35	-20
Administrative and Support, Waste Management and Remediation Services	3225	2510	-715
Educational Services	3290	3395	105
Health Care and Social Assistance	6550	7185	635
Arts, Entertainment and Recreation	990	940	-50
Accommodation and Food Services	2830	3425	595
Other Services (except Public Administration)	2465	2385	-80
Public Administration	4075	3680	-395
Total :	54365	54020	-345

#### Table 4 - Distribution of the Employed Labour Force Aged 15 Years and Over for SDG (2016)

According to the Economic Development section of the Counties of SDG website's, the key sectors are Agriculture, Distribution & Warehousing, Food & Beverage and Manufacturing & Technology. The various information provided earlier support this information.

Company	Products & Services	# of Employees
Winchester District Memorial Hospital	Winchester District Memorial Hospital (WDMH) is a teaching community hospital located approximately 45 minutes south of Ottawa.	455
<u>Moulure Alexandria</u> Moulding	Wood Moulding (Interior Trim) in solid pine, finger-jointed pine, Mahogany, Oak, and Cedar.	400
Kraft Canada Inc.	Processor of natural cheeses and cheese byproducts.	350
<u>SDS Kerr/ Beaver's</u> <u>Dental</u>	Tungsten Carbide Dental burrs and restorative materials.	350
Guildcrest Homes	Manufacturer of factory-built, modular homes.	200
Parmalat	Cheese, butter, condensed milks, milk powder, custom dairy blends, and whey powder.	188

Company	Products & Services	# of Employees
Ross Video Ltd.	Products for use in broadcast, distribution, live event and production applications.	100
Lafleche Environmental	Bioreactor, landfill and composting	70

## **Occupational Characteristics**

- In 2016, the highest employment was in Sales and Service Occupations, accounting for 23% of total employment compared to 21% in Ottawa Gatineau CMA, 23% in Ontario and 23% in Canada
- Cornwall accounted for 29% of total employment in Sales and Service Occupations followed by Akwesasne with 23% and South Dundas with 22.5%

Total Distribution of the Employed Labour Force Aged 15 Years and Over By Occupational Classification, Stormont, Dundas and Glengarry, 2011 and 2016	2011	2016	Net Growth
Management Occupations	5705	5765	60
Business, Finance and Administration Occupations	7640	7460	-180
Natural and Applied Sciences and Related Occupations	2305	2145	-160
Health Occupations	3510	3970	460
Occupations in Education, Law and Social, Community and Government Services	6070	5755	-315
Occupations in Art, Culture, Recreation and Sport	900	990	90
Sales and Service Occupations	12985	12460	-525
Trades, Transport and Equipment Operators and Related Occupations	9885	10870	985
Natural Resources, Agriculture and Related Production Occupations	1480	1495	15
Occupations in Manufacturing and Utilities	3880	3130	-750
Total	54360	54040	-320

#### 2.6.5 Schools and R&D

The SDG Counties have a wide network of primary and secondary schools, but only one (1) College. The fact that SDG is relatively close to Ottawa and Montreal creates a regional competition, which makes it hard for additional Colleges/Universities to be implanted in the region. The St. Lawrence College has a campus located in the heart of the City of Cornwall. The College offers a total of 40 full-time or part-time programs at the Cornwall Campus. Some programs are available only at the Kingston or Brockville Campuses. St. Lawrence College also proposes 25+ online programs in multiple domains. Across all program formats, the main areas of studies are the following:

- Applied Arts
- Apprenticeship
- Business
- Community Services
- Computer & Engineering Technology
- Fast Track Programs
- Health Sciences
- Hospitality & Culinary Arts
- Justice Studies
- Skilled Trades

No activities specific to Academic Research & Development were found. The St. Lawrence College does not provide such information, so we can assume that most R&D activities in the region are performed by private companies.

Cornwall is also home to the Elegance College of Healthcare Services & Cosmetology. This small school offers programs in Pharmacy Assistance, Massage Therapy, Esthetics, Hairstyling, Electrolysis, Acupuncture and Physiotherapy.

## 3. Airport Benchmarking Analysis

In providing a better understanding of the airport's competitive advantages, Explorer Solutions benchmarked the Cornwall Regional Airport against five (5) airports of similar size and function. These airports included the:

- 1. Parry Sound Area Municipal Airport, ON;
- 2. Saint-Jean-sur-Richelieu Airport, QC;
- 3. Goderich Municipal Airport, ON;
- 4. Wiarton Keppel International Airport, ON; and
- 5. Lachute Airport, QC.

As part of this activity, a series of topics were covered, ranging from revenue generation activities, airport fees, number and use of hangars, airports marketing strategies and future development opportunities. Both the list of airports and evaluation criteria were defined in consultation with the airport commission. The benchmarking exercise evaluated the overall market positioning of Cornwall Regional Airport against some of its major competitors. The benchmarked airports were initially contacted by phone to explain the nature of the mandate, then the list of topics was sent to each airport managers by email. The information was gathered between the weeks of March 23<sup>rd</sup> and April 6<sup>th</sup> 2020.

<u>Note on airport activities and tenants</u>: This benchmarking does not include a complete analysis of the benchmarked airports activities and lists of tenants. All benchmarked airports focus on general aviation activities and their number of tenants can vary. Parry Sound and Lachute have more commercial aviation businesses on site compared to Cornwall which has only Cornwall

Aviation, although the company offers a wide range of services. Lists of tenants and the available services are available on the website of each airport.

#### 3.1 Hangar Inventory

Table 5 reviews the number of hangars (by type) at the Cornwall Regional Airport alongside the five (5) benchmarked airports. The objective is to identify consistencies, irregularities and opportunities for YCC to consider adding other types of hangars to meet the needs of the private and commercial aircraft owners. This includes the potential to better understand the level of general aviation versus commercial activity taking place at each airport to see where YCC may be able to generate new sources of revenue through the construction of new or leasing land out for the development of certain types of hangars.

Number of Hangars				
Airport	Total Number of hangars	Privately-Owned	Airport-Owned	
Cornwall Regional Airport	18	17	1	
Parry Sound Area Municipal Airport	39	37 (ranging between 1,600 – 12,000 sq. ft.)	2 (for the airport's storage needs)	
Saint-Jean-sur-Richelieu Airport	31	31	0	
Goderich Municipal Airport	19	12	7	
Wiarton Keppel International Airport	7	7	0	
Lachute Airport	44	44	0	

#### Table 5 - Number of Airport Hangars by Type

#### Table 6 - Types of Hangars

Types of Hangars					
Airport	T-Hangars	Boxed / Standalone	Commercial	Total	
Cornwall Regional Airport	0	17	1	18	
Parry Sound Area Municipal Airport	3 buildings (24 units/bays)	11	4*	39	
Saint-Jean-sur-Richelieu Airport	13	15	3	31	
Goderich Municipal Airport	17	0	2	19	
Wiarton Keppel International Airport	0	8	0	8	
Lachute Airport	6 (in one building)	32	6 (3 of 10,000+ sq. ft.)	44	

\*Parry Sound also has a total of 6 hangars and 2 industrial buildings on groundside.

**Note on hangar lease rates:** For the airports that own hangars and rent them, it is relevant to assess the monthly or annual hangars lease rates.

#### Table 7 – Hangars Leasing Rates

Hangars Leasing Rates					
Airport	T-Hangars	Boxed / Standalone	Commercial		
Cornwall Regional Airport	Not applicable	Not applicable	\$ 8 sq ft annual (3000 sq ft)		
Parry Sound Area Municipal Airport	Not applicable	Not applicable	Not applicable		
Saint-Jean-sur-Richelieu Airport	\$ 450	Not applicable	Not applicable		
Goderich Municipal Airport	<ul><li>\$ 200 grass entrance</li><li>\$ 240 paved entrance</li></ul>	Not applicable	Not applicable		
Wiarton Keppel International Airport	\$ 250	Not applicable	Not applicable		
Lachute Airport	Not applicable	Not applicable	Not applicable		

With so little of the benchmarked airports owning hangars, this section of the benchmarking was extended to three other airports. At Brantford Municipal Airport unheated T-Hangars average \$265 and \$515 for heated (per month). At Stratford Municipal Airport unheated T-Hangars average of \$275 and \$400 for heated (per month) and at St. Thomas Municipal Airport the average prices for unheated T-Hangars are 250\$ (per month).

#### Hangar Highlights

- YCC has overall fewer on-site hangars than comparable airports
- Very few airports owned hangars
- Hangar occupancy rate is almost 100% across all airport (waiting list at many airports)
- Wiarton Keppel is a more remote destination catering mainly to tourism
- Average monthly unheated T-Hangars leasing rate is \$250

#### 3.2 Land Leasing Rates

To assist YCC in assessing their land leasing rates, Table 8 presents the proposed land lease rates for each studied airport. The objective is to identify average market rate to evaluate options for YCC to consider augmenting (or reducing) their current pricing structure.

#### Table 8 - Leasing Rates

Land Leasing Rates					
	Air	side	Groun		
Airport	Serviced Land	Unserviced Land	Serviced Land	Unserviced	Terminal
	(/sq. ft.)	(/sq. ft.)	(/sq. ft.)	Land (/sq. ft.)	
Cornwall Regional Airport	Cornwall has no se develop. For unser of \$0.26 per sq. ft. include the building feet on either side.	erviced land to viced land, a rate applies which g footprint plus 5	Not applicable	Not applicable	Not applicable
Parry Sound Area Municipal Airport	\$0.80 for building footprint + \$0.40 for surrounding ground	Not applicable	0.80 for building footprint \$0.40 for other lands	Not applicable	Per case
Saint-Jean-sur- Richelieu Airport	N/A	<ul> <li>Yearly at \$ 1.895 /sq. meter (\$0.19 sq ft)</li> <li>Rule of thumb for lot size: <ul> <li>30.5m deep</li> <li>Width of each hangar</li> <li>Plus 6m wide at each end</li> </ul> </li> </ul>	No groundside available		Former terminal is leasing out to the Hot Air Balloon Festival – no other terminal
Goderich Municipal Airport Airport The airport has no defined land lease rates. The airport receives a third of the crops va as a payment for leasing the land for agricultural purposes. The airport has space in terminal to host a flight school or any other aviation-related business that requires off space. The space was last rented in 2005 and therefore the airport has not defined a n lease rate for the terminal				he crops value as space in its requires office defined a new	
Wiarton Keppel International Airport	\$0.3450 sq. ft. ann	ually	N/A	\$100 acres /agricultural land	\$312 monthly per office Board Room at \$20/hour or \$150/daily
Lachute Airport	In its development Lachute decided to leasing them*. T airport with residen	strategy, the City of sell lots instead of hey are the only tial zoning.	The airport has r industrial park bes developers are dir the terminal.	o groundside lot side the airport la ected there. No s	. There is an ind. Interested pace to rent in

\*The City of Lachute decided to sell the airport land due to their unique residential positioning. It is very hard for residential tenants to obtain a house mortgage when you do not own the ground underneath that asset. It is easier from the perspective of the buyer. Also, when the airport started to develop its land, they were in need of money to finance other infrastructure projects. Selling lots helped them to raise their cash flows at a faster pace.

#### Leasing Rate Summary

Parry Sound is in a league of its own with land leasing rate 2.5x above the average Ontario rate. Average rate for the benchmarked airports is in the vicinity of \$0.30 per sq ft per year which basically matches the Ontario average of \$0.29. At this stage only YCC owns a commercial hangar.

#### 3.3 Landing Fees

To assist YCC in assessing their landing fees and rates, Table 9 reviews YCC's fee structure alongside five (5) other airports of similar size and function. The objective is to identify consistencies, irregularities and opportunities for YCC to consider as a way to generate new sources of revenue and potentially augment their current pricing structure.

	Landing Fees				
Airport	Fee				
Cornwall Regional Airport	<ul> <li>No landing fees for the general aviation community</li> <li>The airport tries to charge \$25.00 for commercial operators (OPP, RCMP, Medivac, Charter Operators, etc.) but as no means to identify aircraft landing after hours and when the airport office is unattended</li> </ul>				
Parry Sound Area Municipal Airport	<ul> <li>No landing fees for the general aviation aircraft</li> <li>\$5.75/1,000 kg for commercial operators</li> </ul>				
Saint-Jean-sur-Richelieu Airport	No landing fees for now				
Goderich Municipal Airport	<ul> <li>Under 5,800 lbs.: No landing fee</li> <li>5,800 to 12,500 lbs.: \$45.00 + HST (Waived with fuel purchase of 200L)</li> <li>Over 12,500 lbs.: \$75.00 + HST (Waived with fuel purchase of 200L) Note: The 5,800 – 12,500 lbs. bracket is not subject to annual CPI raise.</li> </ul>				
Wiarton Keppel International Airport	<ul> <li>Max Takeoff Weight (MTOW)</li> <li>1800-2999 kg \$15</li> <li>3000-4999 kg \$25</li> <li>5000-8999 kg \$50</li> <li>9000-12,499 kg \$100</li> <li>12,500-19,999 kg \$150</li> <li>20,000-39,999 kg \$250</li> <li>40,000 kg or greater \$10/1000kg</li> </ul>				
Lachute Airport	No landing fees				

#### Table 9 - Landing Fees

#### Landing fees Summary:

- Most airports do not charge landing fees to the GA community.
- Most airports charge landing fees for commercial activities. There is a growing trend to charge by weight categories and we have seen airport charging by wing span.
- The Wiarton Keppel Airport model is a well-defined example which maximize revenue to a lesser extend the Goderich model is similarly structured
- Some airports are also willing to waive their landing fees in return for a minimum fuel purchase.

#### 3.4 Aircraft Parking Fees

Table 10 reviews aircraft parking fee to identify consistencies, irregularities and opportunities for YCC to consider as a way to generate new sources of revenue and to evaluate their current pricing structure.

Aircraft Parking Fees	
Daily (overnight)	Monthly
\$7.50 (First 3 nights are free with fuel purchase – No minimum fuel purchase requirement)	\$69.00
\$5.00 overnight	\$120.00
<ul> <li>Daily: <ul> <li>None for travelers staying 1-2 nights</li> </ul> </li> <li>Additional Comments: <ul> <li>32 parking spaces on Charlie (paved), 12 still available</li> <li>13 parking spots (gravel) on Echo</li> <li>A few parking spots on Charlie have electricity for an additional \$22/month</li> </ul> </li> </ul>	<ul> <li>Monthly:</li> <li>\$79.06 on Charlie</li> <li>\$ 68.73 on Echo</li> <li>3 Months:</li> <li>\$224.72 on Charlie</li> <li>\$194.55 on Echo</li> <li>Annual:</li> <li>\$852.08 on Charlie</li> <li>\$738.68 on Echo</li> </ul>
Grass: \$7.10 Paved: \$11.45 Paved + Hydro: \$17.20	Grass: \$54.00 Paved: \$80.35 Paved + Hydro: \$112.50
MTOW (kg) Nightly Fee	Monthly Fee
0-2,999 kg N/A 3,000-4,999 kg N/A 5,000–9,999 kg N/A 10,000–19,999 kg \$75 20,000–39,999 kg \$150	\$100 \$150 \$250 \$500 \$1,500
	Aircraft Parking Fees Daily (overnight) \$7.50 (First 3 nights are free with fuel purchase – No minimum fuel purchase requirement) \$5.00 overnight • Daily: - None for travelers staying 1-2 nights • Additional Comments: - 32 parking spaces on Charlie (paved), 12 still available - 13 parking spots (gravel) on Echo - A few parking spots on Charlie have electricity for an additional \$22/month Grass: \$7.10 Paved: \$11.45 Paved + Hydro: \$17.20 MTOW (kg) Nightly Fee 0-2,999 kg N/A 3,000-4,999 kg N/A 10,000–19,999 kg \$75 20,000–39,999 kg \$150 40,000 kg or greater \$300

#### Table 10 - Aircraft Parking Fees

	Note: • Aircraft with MTOW of 4,000 kg or more are subject to daily Parking Fee after 3 hours	Grass Tie-Downs charged at \$50/month for aircraft below 3000kg (no winter maintenance)
Lachute Airport	\$10.00 overnight (first night waived with fuel flowage)	This never happens. The private owners of the land are renting at low rates or for free some space on their land for long periods.
Smiths-Falls Airport	No parking fees for a period less then 30 days.	\$60.00*

\*Aircraft owners having their aircraft at the field for more than 30 days must become a member of the Smiths-Falls Flying Club (\$147.60 annually).

Parking fees do tend to range in the \$5 to \$10 daily range, so YCC rate is right in the middle. For monthly rate, here YCC seem a bit low and extra revenue could be generated by briging this rate probably closer to \$80 per month.

#### 3.5 Other Fees

To assist YCC in assessing what they would identify as other fees and rates, Table reviews YCC's fee structure in comparison to the other airports.

Table 11	- Other	Fees
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Other Fees			
Airport	Other Fees		
Cornwall Regional Airport	<ul> <li>Cornwall Aviation pays a \$309.69 + HST access fee on a monthly basis</li> </ul>		
Parry Sound Area Municipal Airport	<ul> <li>Plug-in fee: \$5.00 per day or \$120 per season.</li> </ul>		
Saint-Jean-sur-Richelieu Airport	<ul> <li>\$0.05/litres royalty on fuel sales</li> </ul>		
	Callout:		
Goderich Municipal Airport	<ul> <li>For 3 hours: \$150.00 (Not subject to CPI)</li> </ul>		
	<ul> <li>Each hour over 3 hours: \$50.00</li> </ul>		
	Medevac/Cargo Aircraft \$50/flight		
	<ul> <li>Enplaning Passenger Fee \$8/passenger</li> </ul>		
	Note: An enplaning passenger fee is payable by all commercial aircraft		
Wiarton Keppel International Airport	operators. Aircraft crew is exempt from the Enplaning Passenger fee		
	After Hour Airport Operations/Fuel Service \$150/first hour +		
	\$50/additional hour		
	After Hour Snow Removal \$150/hour/equipment		

Other Fees			
Airport	Other Fees		
	Car Parking \$20/week, \$50/month		
	Airside Escort & Vehicle \$60/hour/vehicle		
	Aircraft Tow Fee based on MTOW Weight- min \$15		
	Lav Service \$75 per Lavatory		
Lachute Airport	Not applicable		

#### 3.6 Airport Marketing, Strategy and Development Opportunities

The objective of this section is to map out other airport development and marketing strategies in an effort to better understand the competitive landscape. As such, this section considers YCC against the five (5) benchmarked airports as it relates to each airport's marketing strategy, non-aviation sources of revenue and airport development plan and development opportunities.

Table provides a summary of the defined strategies and future development priorities of the benchmarked airports.

#### Table 12 - Airport Development Plan

Airport Development Plan		
Airport	Defined Strategy	Future Priorities
Cornwall Regional Airport	No specific strategies for business development activities. No one is assigned to marketing and business development	This plan will help the Cornwall Regional Airport to set its future priorities by identifying development project and ways to generate revenues.
Parry Sound Area Municipal Airport	The airport development is based on various phases that move forward according to the availability of funds. Business park benefit from the GTA expansion. Phase 1 started in 2003 and Airport is today at Phase 8 – money comes mainly from NOHFC	Development of the business park (especially airside) and infrastructure-related projects. Runway rehabilitation
Saint-Jean-sur- Richelieu Airport	No plan at this stage – the last Strategic Plan was rejected by Council	There is no flight school at the airport and the city council voted a resolution that bans flight schools from setting base in CYJN
Goderich Municipal Airport	No specific strategies for business development activities. The airport does not perform any business development activities at the moment. In the past 3 years, the Town of Goderich tried to cut the expenses linked to the airport.	In 2019, the Town of Goderich implemented an Airport Task Force to define the airport development strategies and how to involve local stakeholders, especially other neighboring communities. This should lead to development project and opportunities in the upcoming years.
Wiarton Keppel International Airport	Airport has a number of infrastructure re runway to rehabilitation of the main ramp	habilitation and development plans. From a new

Airport Development Plan			
Airport	Defined Strategy	Future Priorities	
Lachute Airport	No specific strategies for business	Their Master Plan will dictate the priorities. They have upcoming refection projects for the runway	
	development activities.	and some taxiways.	

#### **Development Strategy**

- Parry Sound is probably the best example of a phased approach from 8 on-site hangars and one business on the groundside in 2003, the Airport through 7 development phases has today 37 hangars airside and 9 companies groundside (Business Park). Funding for various activities and infrastructure upgrades came from the Northern Ontario Heritage Funds
- Most other airports have no defined development strategies and are mainly responding to demands / requests from individuals or organizations as they come.
- Some Airports try to better align their development strategies with the Town as the Town often favours promoting development lands 'within the town' which generate tax revenues.
- To often airport development is seen only as infrastructure development.

Table presents a number of non-aviation sources of revenue between the benchmarked airports and the YCC.

Non-Aviation Sources of Revenue		
Airport	Non-Aviation Sources of Revenue	
Cornwall Regional Airport	<ul> <li>Land lease for agricultural purposes:</li> <li>Parcel B and C (100 acres combined) are leased at \$250/acre</li> <li>Two other parcels of land (60 and 40 acres) are leased at \$200/acre</li> <li>Horse farm next to airport pays \$1,630 per year to lease pasture land (no crop land). Total surface of 39 acres (\$41.80 per acre)</li> </ul>	
Parry Sound Area Municipal Airport	The airport owns the Wings Café (small restaurant), but this does not generate important revenues. Airport is leading and promoting the development of a Business Park on its groundside	
Saint-Jean-sur-Richelieu Airport	Hot Air Balloon Festival	
Goderich Municipal Airport	The airport has an agreement with the farmer operating on the airport land. The airport (Town of Goderich) gets a third of the crops value as a payment for leasing the land for agricultural purposes. Depending the year, revenues can vary between \$60,000 and \$80,000.	
Wiarton Keppel International Airport	Agriculture land lease: \$ 100 acres annual Office space in the terminal: \$312 monthly per office	
Lachute Airport	Not applicable	

#### Table 13 - Non-Aviation Sources of Revenue

Table seeks to understand the airport marketing strategies and those which are supported with examples of past, present and future related activities in an effort to better understand how the effectiveness of Cornwall Regional Airport current marketing strategies and planned activities. The analysis also serves to identify any strategy that could potentially be implemented in Cornwall and South Glengarry to facilitate business attraction and increase aviation traffic.

Airport Marketing Strategy			
Airport	Examples of Marketing Initiatives	Marketing Tools	
Cornwall Regional Airport	The Cornwall Regional Airport has no defined marketing strategy or initiative. They do not participate to events nor do wide scale promotion.	Airport's website and a Facebook page (40 likes and 46 followers)	
Parry Sound Area Municipal Airport	The Parry Sound Airport is well networked with local and regional economic development officers but they do not participate to events nor do wide scale promotion. They respond to demand but demands are coming on a regular base.	Airport's website and a Facebook page (449 likes and 499 followers), Airport Signage fronting Highway 400	
Saint-Jean-sur- Richelieu Airport	None	Airport is promoted on the City Website	
Goderich Municipal Airport	The Goderich Airport has no defined marketing strategy or initiative. They do not participate to events nor do wide scale promotion.	Airport's website and a Facebook page (31 likes)	
Wiarton Keppel International Airport	Airport outsources social medias and focuses on Facebook and Linked In to reach GA pilots and aircraft owners – promoting tourism activities and low fuel prices	Airport Website and Social Medias plus Airport entrance sign	
Lachute Airport	The Lachute Airport has no defined marketing strategy or initiative. They do not participate to events nor do wide scale promotion.	Airport's website, a presentation / promotional video (created in 2019) and a Facebook page (78 likes)	

#### Table 14 - Airport Marketing Strategy

#### Key takeaways

- Most airports use Facebook and a website to showcase their activities, services and facilities
- Most airports do not promote their airport has an economic development engine
- Development Planning other than infrastructure is lacking
- Airport using social media to attract general aviation aircraft (transient) are seeing a fare return on investment

Finally, Table provides a summary of the incentives available for development project at the studied airports (Airport or City-offered incentives). The first takeaway is that no airport has its own incentive program to attract investment.
## Table 15 - Airport or City-Offered Incentives

	Airport or City-Offered Incentives
Airport	Airport or City-Offered Incentives
Cornwall Regional Airport	No specific incentives for airport development projects.
Parry Sound Area Municipal	The Airport and the investor can apply to the Northern Ontario
Airport	Heritage Fund to support new investment
Saint-Jean-sur-Richelieu Airport	No specific incentives for airport development projects.
Goderich Municipal Airport	No incentive at the moment. The airport is located in a neighboring community to the Town of Goderich, meaning that tax revenues are not directed to the Town of Goderich directly, so there is little interest for the Town of Goderich to implement incentives or programs of development projects out of their territory. This should change as the surrounding communities are more and more involved and sensitized in the airport's development.
Wiarton Keppel International Airport	No specific incentives for airport development projects.
Lachute Airport	Not applicable by either the airport or the City of Lachute.

Again, besides Parry Sound, the airports are not structured to attract investment and are not offering any incentive to do so.

# 4. Stakeholder Consultations

The following section provides an overview of the discussions, topics, comments and opportunities that were expressed throughout the various consultations that took place during the initial phase of the mandate. Local businesses, airport tenants, public organizations, academia and government officials were consulted to obtain their views on the Airport, understand the region's economic drivers and identify potential opportunities to grow the Airport. To achieve this objective, our team organized a series of one-on-one interviews and two (2) focus groups with key regional influencers, decision makers and leaders. Phone interviews were also conducted with the organizations that were unable to physically participate in the consultation process. The following section provides a summary of the key comments shared and discussed during the consultations

# 4.1 From the Focus Groups

## 4.1.1 Airport Operations/Infrastructure-Related Suggestions

- Build a taxiway parallel to the runway (to give airside and roadway access)
   Could be a grass taxiway so it increases access to runway 10
- Longer runway (don't stretch the runway if you don't build a taxiway)
- Municipal water/sewer
- Reliable cell phone, landline telephone and broadband internet infrastructure

- Overnight hangar facilities
- Paint shop and avionics
- Air cadet squadron training (currently sending to Waterloo)
- Redo the lighting at the airport

# 4.1.2 Development Concepts/Alternate Sources of Revenue Suggestions

- Remain as a strategic location (between Montreal, Ottawa and Kingston hospitals) for patient transfer (for distances more than 200km) or patients coming up from the US. Also, strategic location for medical helicopter landing when atmosphere conditions are not idea at hospital.
- High-value, low weight freight opportunity
- St. Lawrence College training/educational training opportunity at the airport
- NAV Centre training/educational training opportunity at the airport
- Make some airport lands available for purchase to spur investment and development
- Review past business plan to create business size lots east of the current apron
- Warehousing
- Further agricultural crop production
- A satellite SAR office nearby or a satellite RCMP office of sorts
- A restaurant
- Shooting range (Brockville Airport has one)

# 4.2 One-on-One Meetings

# 4.2.1 General Information

- Montreal airspace is too busy for flight training
- Possibility to attract businesses from Dorval (QC)
- Jolly tours do outbound tour options how about inbound tour options?
- The commission should apply and leverage the Tourism Funding program Need to show how the project can be sustainable and use the funds to get the initiative off the ground.
  - The county also has a fund, but their allotment is a lot smaller maybe \$2500
- Akwesasne Reserve and Indigenous tours.
  - o Looking to attract more tourism, working on tours, they have a cultural centre
- Cornwall Aviation Ltd (CAL) requires conventional Navaids for training, but have to go to Ottawa – they would pay for improved NAVAIDS
- PAL (Provincial Air Lines) is interested in a partnership with CAL
- Tenants 50-50 from southern Québec/greater Montreal and from Cornwall and eastern Ontario
- Cornwall aviation pays a user fee as they are on private property maybe \$1,200/month
- Cornwall is largest city in Ontario without a university, one hour and 20 minutes to the nearest university, 99 out of 100 largest communities in terms of income, province has 24% university attainment, Cornwall has 10%.
- College wants to come in as a training partner

#### 4.2.2 Development Concepts/Alternate Sources of Revenue Suggestions

- Schnitzels (<u>https://schnitzels.ca/</u>) was the restaurant at the airport. Had a good following. Didn't charge him rent, he used to take winters off and head to Mexico
- Could do a communal well and tap into the underground aquafer
- The Airport needs a separate building (terminal)"
- Onsite storage
- Pilot training in association with the NAV Centre
- Maybe R&D play for airspace management systems with NAV Canada
- Drone training and related services
- Dorval is elbowing out GA by business aviation and commercial operations could some of that be attracted to YCC?
- As a transportation hub multi modal transportation for the Cornwall area. Just trucks now. Maybe look at expedited services with aircraft.
- Serviceable airplanes with serviceable components. Needs to have a taxiway. Need to extend runway and have apron or storage area for aircraft, hangarage of appropriate size.
- GS5
- Single building to act as terminal, restaurant, training rooms, office, bathrooms, lounge for COPA, etc.
- Higher margin agricultural products
- Billboard/airport signage with Cornwall Aviation publicity and promote new restaurant if it came onsite signage from 401 verify with MTO
- Aviation Tourism packages
- Biodigester need to verify zoning and location
- Add a new taxiway
- Additional flight training
- Runway expansion
- Long term lease or sale of lands for hangar development

# 5. Aviation Market Analysis

The main objective of the Aviation market Analysis is to provide a good understanding of trends in the aviation and aerospace industry. It will also address some of the factors considered when companies are looking to expansion or relocation. The General Aviation market groups a variety of aircraft from the small private aircraft valued at less than \$100,000 to intercontinental business jets worth 50-60 million dollars and more depending on interior refinishing and on-board avionics systems.

# 5.1 Aviation market statistics

The data available providing a portrait of the aircraft market is numerous and from various sources. However, the analysis of three (3) key statistics can provide the information necessary to fully understand the market situation:

- Overall picture of the number of aircraft delivered and invoiced;
- Evolution of the number of aircraft by type of aircraft for the Canadian market; and
- Sector size (in \$) for Canada.

According to the General Aviation Manufacturers Association (GAMA) website, there was a 4.2% drop in total aircraft billing between 2017 and 2018. On the other hand, aircraft deliveries increased 2.5% during the same period. As shown in Table 2, the increase in deliveries is mainly due to the increase in piston planes.

Aircraft Type	2017	2018	Variation
Piston	1,019	1,085	+6.5%
Turboprop	582	563	-3.3%
Business Jets	667	676	+1.3%
Aircraft Deliveries	2,268	2,324	+2.5%
Total Billing	\$21.1 billion	\$20.2 billion	-4.2%

#### Table 16 - Evolution of deliveries and invoicing of the fix wing aircraft market

For the Rotorcraft category (helicopters), we observed good growth in deliveries and a slight growth in invoicing between 2016 and 2017.

#### Table 7 - Evolution of deliveries and invoicing of the rotorcraft market

Aircraft Type	2017	2018	Variation
Piston Helicopters	224	264	+17.9%
Turbine Helicopters	693	704	+1.6%
Total Deliveries	917	968	+5.6%
Total Billing	\$ 4.1 billion	\$4.1 billion	+0.8%

At the national level, Transport Canada provides specific data on the various types of aircraft registered in the country. Figure 2 shows the growth in the total number of registered aircraft in Canada between 1997 and 2017 (20-year period). In 20 years, the total number of registered aircraft in the country has increased by 8,534 units, an increase of 30.4% but the trend has slowed down over the last four-five years.



In addition to the previous figure, Table 4 presents the total aircraft registered in Canada by category between 2007 and 2017. The data analysis allows two (2) conclusions to be drawn. First, single engine and dual engine aircraft have experienced much the same growth over the past ten (10) years. In terms of segmentation by weight, there is a greater growth (in percentage) in the number of planes of 12,500 pounds and over, which is mainly due to the increase in commercial air travel in the country.

Year	Helicopters	Single Engine	Twin Engine	1,500 lbs. (5,670 kgs) and less	Above 12,500 lbs. (5,670 kgs)
2007	2,317	26,531	4,098	30,223	1,663
2008	2,504	27,406	4,267	31,154	1,779
2009	2,576	27,930	4,353	31,709	1,824
2010	2,658	28,479	4,441	32,330	1,845
2011	2,728	29,079	4,593	32,986	1,961
2012	2,776	29,623	4,629	33,563	1,977
2013	2,849	30,066	4,560	34,050	2,028
2014	2,871	30,313	4,758	34,310	2,064
2015	2,853	30,370	4,777	34,359	2,081
2016	2,836	30,419	4,725	34,355	2,081
2017	2,830	30,539	4,737	34,457	2,114
Variation	22.14%	15.11%	15.60%	14.01%	27.12%

#### Table 18 - Total registered aircraft by category

Quebec and Ontario also saw growth over the same period. In Quebec, over 20 years, the total number of registered aircraft grew by 2,755 units, an increase of 57.1%. in Ontario, over the same period, the total number of registered aircraft grew by 2,023 units, an increase of 24.7%. For the two (2) provinces, the growth since the beginning of the 2010s has been more moderate. Quebec even had a slight decrease in the number of aircraft registered between 2015 and 2017 (-0.58%).





In 2017, general aviation aircraft (piston aircraft) represented a total of 8,546 aircraft in Ontario (83.7% of the total) and 6,107 in Quebec (80.5% of the total). For the two (2) provinces, this represents a total of 14,653 piston aircraft.

#### Figure 10 - Number of piston airplanes for Ontario and Quebec



On the business aviation side, the Canadian Business Aircraft Association (CBAA) estimated the total number of business jets in the country at 1,900 (2017). The following map provides a rough estimate of the number of business jets per province. If we consider that Ontario has the largest market in the Country represents approximately 25% to 30% of the aircraft in the country, we obtain an approximate total of 550 aircraft.





Finally, a 2016 study by InterVISTAS entitled "Economic Benefits of Business Aviation and Aircraft Manufacturing in Canada" showed that in 2015, these two (2) important industries created a total of 43,200 jobs, or \$ 3 billion in wages, a total GDP of \$ 5.1 billion and a total production of \$ 10.7 billion.

Even though the global market for GA in Canada has suffered through the economic downturn in the past, the total number of GA aircraft in operation is still growing. The Canadian aviation market has rebounded faster than the U.S. market. If no major changes in the industry occur in the near future, the trend is likely to continue beyond 2020, thereby providing a stable and healthy market for a G.A. development. Figure 6 below shows the main usage of general aviation aircraft.

#### Table 8 - Main usage of general aviation aircraft

Active General Aviation and Air Taxi Aircraft by Primary Use



General Aviation and Air Taxi Total Hours

Flown by Actual Use

Personal and recreational (leisure/tourism/flying-around) flights are the main reasons G.A. owners and pilots use their aircraft.

## 5.2 Market Segments

#### 5.2.1 Business Aircraft Market

As of March 31, 2019, there were 22,125 business jets in the worldwide fleet and the top 20 country markets account for 89% of this total fleet. About 65% of the fleet is based in North America, the European market is the next largest, with growing activity in the Middle East, Asia, and Central America (JETNET).

#### Market Share

By October 2018, the entire private jet fleet was dominated by Textron (Cessna, Beechcraft) with 43.9%, then Bombardier with 22.4%, Gulfstream with 13.0%, Dassault with 9.6% and Embraer with 5.8%, mostly in North America (64.6%), followed by Europe (13.0%) South America (12.1%) and Asia-Pacific (5.9%).

In 2018, the total airplane billing amounted to US\$21.9 billion, and 718 business jets were delivered to customers across the globe: 199 (27.7%) by Bombardier Aerospace, 166 (23.1%) by Cessna, 154 (21.4%) by Gulfstream Aerospace, 120 (16.7%) by Embraer and 55 (7.7%) by Dassault Aviation.

The previous year (2017), 676 business jets were shipped, led by Gulfstream with \$6.56 billion for 120 aircraft, Bombardier with \$5.2 billion for 140, Cessna with \$2.87 billion (including propeller aircraft and 180 jets), Dassault with \$2.42 billion for 49 and Embraer with \$1.35 billion for 109.

Worldwide the business jet market is projected to grow from an estimated USD 24.7 billion in 2019 to USD 36.4 billion by 2030, at a CAGR of 3.6% during the forecast period. North America is the largest MRO Market – 25% of spending (2019) for \$15.5B, and will remain the largest market in 2029, with 21.9%. The 2019-2029 Global Projected Growth Rates/MRO Segment shows line maintenance growing – 3.9%, Airframe – 1.7% and Engine – 4.1%.

## 5.2.2 Piston and Small General Aviation Aircraft Market

In 2019, more than 90% of the roughly 220,000 civil aircraft registered in the United States are general aviation aircraft. At the same time, more than 80% of the 609,000 pilots certificated in the U.S. fly GA aircraft. Economic Impacts from the 2017 Report from the FAA on the Economic Impacts of Civil Aviation by State (2014 calendar year) indicated that General Aviation generates more than \$150 billion in economic activity annually and creates 7.6M jobs. Nationally, civil aviation contributed 5.1% of the GDP, but at the state level, the value of contribution to a state's GDP ranged from a high of 19% (Hawaii) to a low of 0.5% (Delaware).

#### 5.3 Trends in the aviation and aerospace market

#### 5.3.1 Key trends

Market diversification, rationalization of the supplier base and outsourcing (including outsourcing low-value manufacturing out of the country) are among the most important trends for manufacturing companies. In addition, in the United States and Canada, major airports have recently been seen to increase their leasing rates, pushing smaller companies toward smaller/regional airports. On the other hand, airlines and aviation service providers (mainly FBOs, larger maintenance organisation and charter companies) tend to think that small airports are not always viable due to the sometime limited infrastructure and services and small local markets which reflect often the small size of the airport.

#### 5.3.2 Main issues observed

One of the most pressing considerations for manufacturers in the aerospace industry is to provide on-time delivery of their products while maintaining high quality standards. Also related to supply chain management, finding suppliers who can meet deadlines and meet production volumes was another important issue for the companies surveyed.

Also, securing long-term partnership agreements, consolidating suppliers, improving communication processes, encouraging suppliers to increase their level of certification (AS9100, ISO 9000 or 9001 and Nadcap), developing solid inventory management systems and sharing development costs with suppliers are some of the hot topics for this industry. Likewise, with the use of advanced materials (composite, carbon fiber, intelligent materials) becoming more widespread, companies are looking from their suppliers for lighter and more durable parts and components.

## 5.3.3 Perception of the Canadian market

Most Canadian companies in the aerospace manufacturing sector have experienced revenue growth in recent years, primarily due to sales in international markets. Recruitment of qualified labor and workforce is an increasingly big challenge, which leads some companies to evaluate expansion outside of the country. However, this problem is becoming a global one and does not apply only to Canada.

# 5.4 Aviation Training (pilots and mechanics)

Prior to the coronavirus pandemic, the aviation industry was experiencing a growing demand for new pilots and maintenance technicians in addition to global shortages in the number of certified pilots. The stringent requirements for pilot certification (since the Colgan Air crash in 2009 - Flight 3407) coupled with soaring demand for air travel, cost of flight education, lack of financial aid for students and the cost of purchasing and maintaining aircraft were among the contributing factors explaining the experienced labor shortage and increased demand.

The following market analysis provides the key findings on the future demand for certified pilots, maintenance technicians and aircraft maintenance activities. The analysis also evaluates if eastern Ontario possess the desired assets, programs and location advantages to respond to the market needs and leverage growth opportunities offered with general and business aviation.

#### 5.4.1 Market Size and Analyzed Segments

This section outlines the anticipated demand and supply for the pilot and airframe and propulsion (A&P) training segments at the global and national levels. The data provided summarized the key findings drawn from the literature review.

## 5.4.2 Pilots' Global Demand/Supply Outlook

The CAE<sup>6</sup> Airline and Business Jet Pilot Demand Outlook predicts that more than 300,000 new pilots will be needed over the next 10 years. All of the industry forecasts predict a pilot shortage increase over the coming decades. Boeing Company, in its 2019 Pilot and Technicians Outlook, projects that the world pilot demand will reach 804,000 for the 2019-2038 periods. The Boeing forecast was based on 20 years instead of 10 for the CAE report.

<sup>&</sup>lt;sup>6</sup> CAE Inc. (formerly Canadian Aviation Electronics) is a Canadian manufacturer of simulation technologies, modelling technologies and training services to airlines, aircraft manufacturers, healthcare specialists, and defence customers.

Figure 12 - Pilot Demand by Region as per the CAE Forecast.



Out of the 300,000 pilots, more than 270,000 will be needed by commercial airlines to support pilot replacements and expected passenger growth. The balance will be required by the business aviation industry. Figure 13 provides the breakdown of the number of new pilots needed and total forecasted headcounts over the next 10 years for the business jet and airline segments.



#### Figure 13 - 2018-2028 Pilot Population Forecast

\* \*Including a net 20,000 movement of business jet pilots to airlines

CAE analysis is based on data from the following sources: FAA / Eurocontrol / Amstat / IATA / FlightGlobal / Rolland Vincent Associates.

The previous figure shows that pilot replacements will represent less than half of the manpower needs as the soaring demand for air travel is the primary reason for the pilot shortage.

The flight simulation industry is working on advancing the technology to produce better artificial settings of flight and enhanced virtual reality to provide improved hands-on experience to pilots. The objective is to improve the acquisition of knowledge in order to accelerate the pilot learning curve and reduce simulation hours. The soaring demand for travel, the technological improvements and the new capabilities of Artificial Intelligence (AI) will fuel the growth of the flight simulation sector which is expected to reach \$8.03 billion by 2026<sup>7</sup>. Based on the same report, North America is expected to be the highest revenue generating region in the future, accounting for 29.3% of the market in 2018.

## 5.4.3 Pilots' North American Demand/Supply Outlook

In order to meet the projected demand, a renowned U.S. flight school (ATP Flight School) estimates that 19,000 pilots will need to be trained each year until 2026 in North-America. According to the same analysis, it is estimated that flight schools currently train around 12,000 pilots annually in the United States and 1200 in Canada. The following figure shows the gap between the annual number of pilots trained in the U.S. and the actual need of the airline industry.



## Figure 14 - U.S. Pilot Supply and Demand Forecast

Source: https://atpflightschool.com/airlines/pilot-hiring-outlook.html

The projected shortage of airline pilots is expected to increase in the coming decades fueled by the increased demand for air travel, the aging of the airline pilot population, and the overall decline in the number of private and commercial pilots holding active pilot certificates. Regarding pilot

<sup>&</sup>lt;sup>7</sup> Reports and Data 2019. Consulted on November 1 2019: <u>https://www.globenewswire.com/news-release/2019/07/11/1881533/0/en/Flight-Simulator-Market-to-Reach-USD-8-03-Billion-By-2026-Reports-And-Data.html</u>

certificates, at the end of 2017, in the US, there were an estimated 609,306 active certificated pilots. This number has been declining gradually over the past several decades, down from a high of over 827,000 pilots in 1980. Figure 15 shows the declining pattern in the number of issued pilot certificates across all categories since its peak in 1991.



#### Figure 15 - Original Airmen Certificates Issues by Category

Source: FAA U.S. Civil Airmen Statistics, Table 17

#### 5.4.4 Maintenance Technicians' North American Demand/Supply Outlook

#### 5.4.4.1 A&P Tech Demand

Boeing's technician forecast (2019), which is considered as the most precise forecast information on the market to date, predicts a world demand of 769,000 new technicians by 2038. Asia-Pacific region represents the largest demand at 266,000 technicians (34% of the total forecast). The global aviation maintenance technician workforce will need to add almost 38,450 new technicians annually in order to meet the projected demand. For North America, the projected demand for the 2019-2038 period is estimated at 193,000 heads. If we consider the 2019-2039 period (20 years), it means that an average of 9,650 new technicians per year would need to receive their Transport Canada or FAA A&P Certification.

### 5.4.4.2 A&P Tech Supply

Now that the future demand is defined, the annual level of enrollments (supply) needs to be identified. The FAA provided a comprehensive overview of the "production level" of AMTS across the country (Transport Canada is not providing similar data). Table 9 indicates that in 2018, a total of 9,950 FAA A&P Certificates were issued. During the same year, the FAA estimated that 69% (or 6,843) of the FAA A&P Certificates were issued to individuals that attended an AMTS. The remaining 31% (or 3,107) of the certificates were issued to individuals that earned their experience from the industry. It is also worth noting that after the 2014-2015 decrease in number of new certificates, 2017 and 2018 are showing steady growth.

Year Issued	AMTS based Certifications	Experience based Certifications	Total # A&P Certificates Issued	Variation (%) in Total # A&P Certificates Issued	% A&P Certifications from AMTS
2014	6 693	3 346	10 039	-	67%
2015	6 015	2 892	8 907	-11%	68%
2016	5 839	2 558	8 397	-6%	70%
2017	6 586	2 852	9 438	12%	70%
2018	6 843	3 107	9 950	5%	69%

#### Table 9 - Annual overview of AMTS production

By comparing annual demand (9,650) and supply (9,950) levels for A&P maintenance technicians, it was found that based on 2018 data (Table 9), the number of A&P certificates issued will barely meet future demand. This projection assumes that the 2018 level of production (issued certificates) will remain stable in the decades to come. That being said, this is a very high-level analysis that did not factor in other variables (career change, promotions, and willingness to relocate...) impacting labor supply. Also, it was impossible to breakdown the supply/demand data by region, or state to determine the importance of the labor shortage in Florida. Although, based on consulted organizations, it appears that MRO businesses do have issues in recruiting qualified maintenance technicians to replace aging workforce and support existing contracts. This reveals that existing local demand for maintenance technicians surpasses local supply.

# 5.5 Trends

To complete our analysis, we reviewed and identified the key trends that might have a profound impact on the analyzed segments (pilots, technicians). This evaluation will provide valuable insights and information on current and future technological advancements, regulatory and socioeconomic changes that could generate opportunities or limit growth potential for certain training segments.

#### 5.5.1 Market Trends

Prior to the COVID-19 pandemic, the aviation industry faced soaring demand for air travel and lack of supply of qualified pilot and A&P maintenance technicians. The aging workforce, lack of financial aid for students, and the cost of purchasing and maintaining aircraft are among the factors that further worsen the global shortage of experienced personnel. For the pilot segment, the cost of collegiate flight education further worsens the situation by pushing out students that did not have the financial capacity to pursue an aviation career.

#### 5.5.2 Technology Trends

Today's students are not the ones our training methods were designed to teach – having grown immersed in technology, they have different approaches to learning. As technology evolves, new electronic courseware, supportive equipment and devices emerge to facilitate knowledge sharing and transmission and attract and retain students. Amongst the technologies that are more utilized, we have:

- Virtual reality;
- Augmented reality (ex. helmets (like Google Glass) superimpose digital information over a person's view of the real world;
- Distance learning;
- Adaptive learning; and
- Wearable smart-clothing senses a variety of health data (respiration, heart rate, body temperature, etc.)

Adaptive and distance learning are certainly among the key trends impacting pilot and A&P training. This type of training is designed to adapt to the needs and learning style of each individual learner so that they can achieve the highest level of learning possible, based on their unique intellectual capacity. Since adaptive e-learning will likely, eventually, become a training component of training for all aviation professionals, this technology should be regarded as a complement and an extension of existing classroom, simulator and real-world teaching practices.

More specifically, for the A&P maintenance technicians' segment, a survey of MRO executives identified three (3) emerging technologies vital for the next generation of mechanics, including composite material repair and manufacture (62%); collection and reporting of data for advanced analytics, big data, and predictive maintenance (51%); and the newest avionics and electrical systems."<sup>8</sup>

Any school wishing to attract young students will need to offer access to those technologies as part of their curriculum and include high-tech approaches to teaching. Companies are also heading toward a paperless environment, meaning that they need to review their procedures (workflows) for document approval and security. There is also more electronic document handling, which is why technicians need to have ease with computers.

<sup>&</sup>lt;sup>8</sup> Aging Baby Boomers Cause Aircraft Mechanics Shortage as Global Fleet Expands. Forbes. Consulted in October 2019. <u>Web link</u>.

# 5.6 Market Size

The aircraft maintenance market is expected to reach \$19.95 billion in 2024, for a compound annual growth rate of 1.49% (2019 - 2024). The North America region will continue to dominate the business jet market as the U.S. is one (1) of the premium markets for business jet operations.

While owners of general aviation aircraft typically look more regionally for their MRO needs, it is not unusual for owners of business jets to take a global scan of services and capabilities if reputation and costs are strong. Figure 16 shows global MRO spending by category (which include line, component, engine and airframe MRO). In all areas, over 2019 and into the forecasted years of 2024 and 2029, each category experiences a slight increase in annual MRO-related spending.



# Figure 16 – Global MRO Spending by Category

Figure 17 breaks down global MRO spending by region over a ten-year period between 2019 and 2029. In all regions, each is projected to experience varying degrees of increased spending with the most expected to take place in China, Asia Pacific, Middle East, Western Europe and North America.



#### Figure 17 – MRO Spending by Region

The general aviation sector is also experiencing a series of changes that support aircraft maintenance and modifications. Among those:

- Technological advancements in avionics systems and cabin interior products will support the growth of the refurbishment business jet market;
- Increased utilization of composite material in the manufacturing of aircraft parts and components will impact maintenance and training requirements;
- The introduction of new technologies such as innovative fuels, electrical aircraft and unmanned systems;
- Growth in high net worth individuals is expected to generate demand for newer generation and larger business jets;
- New business jet programs, led by Gulfstream's G700 and Bombardier's Global 7500, are likely to stimulate demand growth over the near term.

## 5.6.1 Market Growth

The global aircraft MRO market accounted for US\$ 80.38 billion in 2018 and is expected to grow at a CAGR of 4.6% over the forecast period 2019-2027, to account for US\$ 119.41 billion by 2027 (PRNewswire, 2020).

In 2019, the business jet segment is evaluated to have the largest share in the general aviation market, and it is expected to continue its domination during the (2020-2025) forecast period, due to an increase in the number of high/ultra-high-net-worth individuals who are the main buyers for the aircraft. Asia-Pacific, North America, and Europe are the largest contributors to the high-net-worth-individual growth in the past decade. The growth of the business jet market is also due to the development of ultra-long-range jets that can travel almost halfway around the world, presenting fresh possibilities in personal and business travel (ReportLinker, 2020).

The global general aviation market was valued at USD\$ 21.1 billion in 2017 and is estimated to register a CAGR of 0.72% during the forecast period of 2018-2023 (Business Wire, 2018). The share of turboprop shipments in North America increased slightly, in 2016, compared to the prior year, 57.8% compared to 56.2%. The second largest market share for turboprop airplane shipments in 2016 was the Asia-Pacific region at 13.2%. Piston-engine aircraft are the most frequently sold general aviation aircraft worldwide followed by business jets and turboprops. In 2016, of the 2,262 aircraft delivered worldwide, 1,019 were piston-powered, 661 were jets, and 582 were turboprops (Business Wire, 2018).

#### 5.6.2 Aircraft Maintenance Requirements

To ensure safety, obtain high levels of aircraft utilization, provide effective and reliable operations as well as preserve the value of the aircraft, a rigorous maintenance program is vital. Fortunately, manufacturers of modern business jets and turboprops all provide guidance and instructions regarding periodic and preventive maintenance. Every aircraft comes from its manufacturer with a specific set of maintenance instructions and a timeline for their observance. These instructions detail when certain inspections and work packages must be undertaken. The OEM develops those instructions through in-house groups.

#### **Difference between Aircraft Maintenance Inspections**

Private aircraft operations face some basic maintenance rules and must undergo an annual inspection within a 12-month period since the last cycle. Commercial operators must subject their aircraft to 100-hour inspections. The difference between an annual inspection and a 100-hour inspection essentially comes down to the time period, since the inspections themselves are identical. There are, however, differences in who can perform these inspections. An annual inspection can be performed only by an Airframe & Powerplant (A&P) mechanic who holds an Inspection Authorization (IA). By comparison, a 100-hour inspection can be performed by any A&P, with or without an IA.

And there are other so-called 'phase inspections' set by the manufacturer; period checks (labeled 'A-Check' through 'D-Check'). An A-Check is essentially performed with every crew change or before every flight, when the aircraft pilot or co-pilot performs the basic walkaround pre-flight inspection. Each phase is progressively more detailed, with the C- and D-Checks being lengthy, involved procedures requiring a deeper examination of the aircraft and its systems and condition. D-Checks are usually the longest and most expensive inspections, requiring a detailed and complete review of every part of the airframe.

## Maintenance Checks

- <u>A-Check</u>: occurs every 120-150 flight hours. Consists of a visual examination of the airframe, powerplant, avionics, and accessories to ascertain the general condition of the aircraft. The A check takes approximately (8) eight hours of ground time and about 60 man-hours;
- <u>B-Check</u>: occurs every 750 flight hours. It includes the A check plus selected operational checks, fluid servicing and lubrication as well as an open inspection of the panels and cowlings. The B check takes about 24 hours of ground time and about 200 man-hours;
- <u>C-Check</u>: occurs every 3,000 flight hours. It includes A- and B- check plus detailed inspection of airframe, engines and accessories, heavy lubrication, and a portion of the corrosion prevention program. Flight controls are calibrated, major internal mechanisms are tested and Service Bulletin requirements are fulfilled. The C check takes about 72 hours of ground time and about 3,000 man-hours;
- <u>D-Check</u>: occurs every 20,000 flight hours. It includes removal of cabin interiors to allow detailed structural inspection, essentially stripping the aircraft to its shell and rebuilding the interior. The D check takes about 21 days of ground time and about 10,000 man-hours.

Apart from the above-mentioned checks, there are few more verification (check) types:

- <u>Transit check</u>: every ground transit involves some standard aircraft system servicing and general exterior inspection
- <u>Daily check and Weekly check</u>: some of scheduled or routine maintenance tasks stated in maintenance schedule could be packed together in a consolidate check sheet, which are called up in transit check with longer ground time. There are required about every 36 flight hours and 7 days for Daily check and Weekly check respectively.
- Note that these checks are considered routine checks covering maintenance, not including some additional – unscheduled maintenance – either reported by flight crews or found during inspection or a routine check.
- Progressive Inspections

To minimize maintenance downtime, owners may opt for a progressive inspection plan. Progressive inspections benefit owners whose aircraft experience high usage such as FBOs, flight schools, and corporate flight departments. Unlike an annual or 100-hour inspection, a progressive inspection allows for more frequent but shorter inspection phases, as long as all items required for the annual and 100-hour are inspected within the required time.

For example, flight schools with aircraft that must comply with the 100-hour inspection normally use four inspection phases at 25-hour intervals. The inspection cycle is completed when the last inspection is endorsed.

# 6. SWOT Analysis and Value Proposition

A Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis of the Cornwall Regional Airport was carried out for the purposes of supporting current and future aviation activity at the airport in addition to the proposed development concepts which are presented below. Details within the SWOT Analysis were obtained from secondary research and augmented through an extensive consultation process.

# 6.1 Strengths

- The airport is in proximity to nearby major metropolitan centres (ie: Montreal and Ottawa);
- The airport falls within unrestricted airspace;
- There is little to no air traffic congestion;
- The airport benefits from a renowned flight school on site;
- There is room/land available to expand general aviation hangars;
- The runway and movement areas are in fairly good shape;
- There is limited residential housing in the vicinity;
- The airport is well maintained; and
- The airport is located just off Highway 401 (and is also partially visible from the highway).

## 6.2 Weaknesses

- There is no parallel taxiway;
- There is limited civil infrastructure;
- No real terminal exists on site other than more of a trailer-type structure;
- There are communication issues (ie: reliable cell phone connectivity and available wifi);
- There is little to no defined marketing plan, nor airport promotion;
- Marketing responsibilities are not assigned;
- Limited space in the vicinity of the terminal to house new hangars/buildings;
- The airport is not yet financially sustainable; and
- There is limited population in the area to draw upon making it difficult to grow/increase aviation activities will need to expand the attraction radius.

## 6.3 **Opportunities**

- There is available space/land to grow aviation and non-aviation activities;
- The runway extension would allow larger jets to fly in more safely; and
- There remains the possibility of future joint/mutual undertakings with Nav Centre.

## 6.4 Threats

- A potential reduction in municipal grants;
- A reduction of aviation activities leading to a reduction in revenues.

# 6.5 Investment Readiness

To assist YCC and the Cornwall Airport Commission in preparing the airport to begin advertising, enticing and competing for business investment attraction (albeit from within Canada or abroad), it is important to have an updated and strong understand of the current requirements that are being sought out by prospective companies which are seeking strategic locations to play home to and support their future growth requirements.

A number of aerospace companies from Montreal's aerospace cluster were targeted (see Table 10) for consultation and to understand what kinds of requirements they would require to support future locations and to understand if any of them were currently in the process of considering new potential locations and/or considering new opportunities/projects.

Company	Description
Abipa Canada	Abipa offers high-precision machining, mechanical assembly and kitting of engine, landing gear and structural components in complex alloys (aluminum, titanium, inconel, steel) for its customer base consisting of OEMs, equipment manufacturers and integrators.
Alta Precision	Alta Precision is a world leader in supplying build-to-print landing gear assemblies and sub-assemblies for the military and commercial aerospace markets.
Arconic	Arconic is a world-class producer of titanium and a leader in airframe components and multi-material subassemblies as well as advanced technologies, such as 3D printing.
AV&R	AV&R offers robotic profiling systems, automated polishing equipment, automatic deburring and automated visual inspections systems in the 4.0 Industry era. Our expertise focuses on new and used turbine parts in the aerospace and energy sectors.
Avior Integrated Products	Avior Integrated Products is a full-service manufacturer of lightweight structures and complex mechanical assemblies.
CEL Aerospace Test Equipment	CEL is a world leader in test equipment for aircraft engines; turboprops, helicopters, business and airline jets, as well as APUs (Auxilliary Power Units) and industrial applications.
Dart Aerospace	DART Aerospace provides industry-leading design, manufacturing and market- certified solutions for the helicopter and aerospace industry.
DERICHEBOURG aeronautics Canada	DERICHEBOURG provides qualified and efficient manpower to the aerospace market for trades and job positions such as manufacturing engineers, technical support, quality inspectors, structural assembly, mechanical & electrical installation, cabin installation, static & flight testing, logistics and all trades related to the management and maintenance of aircraft navigability, transactions and customer representation.
e2ip Technologies	E2IP Technologies is a global leader in the design, engineering and manufacturing of custom Human Machine Interface (HMI) technology.
Hemmingford Aerospace	Hemmingford Aerospace is specialized in the machining, assembly and testing of highly complex and precise components for aircraft engines.

## Table 10 - Industry Validation with Montreal Aerospace Companies

The following summary represents a consolidation of the key takeaways which were noted during the various consultations:

## 1. Access to Labour:

a. What are the local labour laws, labour rates and is there a sufficient talent pool by which to attract talent?

# 2. Talent Attraction (as seen by the incoming company):

- a. Does the company have the overall appeal to attract a blue-collar employee and/or a design professional?
- b. Does the attractiveness of the company/role increase as a result of the community which the business is located (think amenities and infrastructure).
- c. Many companies which expand into new areas bring some of their existing staff with them which helps to accelerate production and knowledge transfer just need to balance the costs.

# 3. Local Amenities:

a. Does the local economy have shopping malls, elementary / high schools, good road systems, public transportation, entertainment options? These are needed to attract and retain low and high skilled people from within the community.

# 4. Infrastructure and Site Services:

- a. Are the sites already serviced (by the municipality) versus having to make that investment by the investor?
  - i. If not, is that reflective in the price of real estate?
  - ii. Need to determine what is most important for the target site (ie: Cornwall Regional Airport)? 3-phase power, natural gas, municipal water/sewer vs. well water/septic, fibreoptic (broadband), cell phone connectivity, etc.

# 5. Incentives:

- a. How does the municipality work within the parameters of the Municipal Act? Are there tax exemptions and/or special arrangements which can be arranged for the land and/or building?
- b. How does the municipality compete with similar locations in the US where longterm tax exemptions can be arranged with the acquisition land and/or buildings?

## 6. Access to Materials:

a. In theory, aerospace materials are made on commodities traded on the open market, so regardless of where a business is situated, they should be paying the same price.

To help further understand Cornwall Regional Airport's state of investment readiness, up until this time, the airport may not have had a need (as it does today) to significantly invest in either establishing and/or upgrading key infrastructure to support business investment attraction.

From the onsite assessment and in consultation with the Airport Manager, members of the Cornwall Regional Airport Commission and other identified stakeholders, the following findings do little to support the airport's current bid for attracting aerospace companies at this time:

- Broadband fibre optic is situated at end of Airport Road, but it has yet to be brought down;
- Natural gas located at end of Airport Road, but hasn't been brought down;
- Reliable/stable cell phone connectivity;
- Serviced sites;
- Municipal water and wastewater; and
- Communal well to tap into the underground aquafer.

While each prospective investment opportunity and/or business investor will have varying degrees of which key assets, infrastructure, services and utilities are of primary interest, this list is designed to assist the airport with commencing a discussion around prioritizing and being prepared for investing into these activities to help with any expressions of interest.

In today's fast-paced and competitive society, when working with site selectors which are acting on behalf of both small and large corporations which are seeking strategic locations by which to invest, many of them are looking for reasons for which to condense their list of eligible locations (often as a result of the abundance of potential locations that are originally put forth).

One positive step forward would be for the airport to simulate the process to know exactly which permits, associated costs, anticipated hurdles, implementation timelines and the like are required (and can be expected) to be overcome in order to have each of the items listed above in operation (if and when required) so that they can act more strategically when an investment inquiry is presented.

The alternative would be to invest in establishing and/or enhancing new and existing services and utilities which then places the airport near the top of any site selector list (assuming that other requirements are met such as access to talent, transportation networks, etc.).

# 6.6 Value Proposition

A vision to grow the Cornwall Regional Airport into a low-cost, well maintained and full-service aviation hub with its proximity to major metropolitan centres such as Ottawa and Montreal, visibility and immediate access from Highway 401, its unrestricted airspace, little-to-no air traffic congestion, limited residential housing in the vicinity and short distance from the Cornwall-based Nav Centre.

# 7. Development Options

From the previous work, a series of development options and concepts were identified to maximize and plan future land use developments. The tasks supporting these options involved a review of past studies, consulting with local businesses, economic leaders, airport tenants, key stakeholders and conducting various market research initiatives to identify opportunities that could be implemented or expanded at the airport.

The airport property (as shown on Figure 18) has previously been divided into eight (8) parcels (A through H) of land.



#### Figure 18 - Overview of available Land Parcels

The following table provides an overview of the proposed development options and concepts with a description of the highest and best usage for each identified developable parcel.

Parcel	Concept	Description		
	Runway Extension	The centre piece of the strategic plan is the expansion of runway 10/28 and the growth/opening of the developable lands south- east of the existing trailer terminal		
Ρ-Δ	commercial development	The concept also includes the relocation of the Airport main car parking lot which opens up room to add additional hangars.		
	concepts including a new terminal, restaurant and aviation services	The proposed development concept for Parcel A focuses on commercial development and is centred on the expansion of aviation services such as flight training, maintenance, food and tourism. It includes the removal of the existing trailer-terminal and the construction of a new multi-function terminal.		
Р-В	Agriculture	The short-term recommendation is to maintain agricultural activities in parcel B but look at higher yield crops. The longer-term vision is to convert this parcel to a light industrial park once parcel C is full.		
P-C	General Aviation Hangar Area and Light Industrial Park	Parcel C would be dedicated to the future growth of the general aviation hangar farm. We also suggest the development of a light industrial park with or without airside access for aerospace and aeronautic companies or others as the market dictates.		
P-D	Agriculture	The recommendation is the maintain agricultural activities in parcel D but look at higher yield crops.		
		This parcel can accommodate a series of opportunities:		
P-E	Agriculture and	First, to promote the Airport's and its tenants, we suggest the installation of an airport sign in proximity to the 401.		
		Second, to maintain agricultural activities in parcel E but look at higher yield crops.		
P-F Airport road P relocation g		Parcel F will be used to realign Airport Road to match the new runway 10/28 expansion. The future southside of airport road good be dedicated to a light industrial park		
P-G and H	Runway expansion and Airport Road	Parcel G and H will host runway 10/28 expansion and the Airport Road expansion/relocation		

# Table 11 - Land Use Development Concepts

# 7.1 Parcel A

#### 7.1.1 Commercial and Corporate Aviation Development Zone and Runway Expansion

Beyond the development of various concepts on airport lands, the center piece of the plan is the extension of runway 10/28 by approximately 1500 feet (457 meters) x 100 feet (45 m) to the east as shown on Figure 19.



#### Figure 19 - Proposed Runway 10/28 expansion - 1500 feet (457m) x 100 ft (45m)

The proposed runway expansion will impose a number of infrastructure requirements but also allow the growth of aviation services on the south side of runway 10/28 as describe in section 7.1.2. This expansion brings the obligation of either moving and extending Airport Road beyond the runway threshold or creating a dead end on both side of the road. This second option is probably not favourable as it would isolate the general aviation hangar farm located north of the runway, reduce its "marketability" and value and obligate its tenants to a long detour to access the site.

On the positive side, the runway extension will allow for larger aircraft to access the airport and the region. With a 5,000 feet runway, the airport will be able to host mid-size business jets and commercial aircraft up to a Q-400. These larger aircraft are usually a good source of revenue for the airport as they pay higher landing fees, parking fees and often owners will lease a hangar to overnight the aircraft and they take on more jet fuel.

Extending the runway will also support business retention and expansion along with investment attraction as many Fortune 500 companies do operate business jets to visit their various locations. The International Economic Development Council in its 2018 site selection top ten (10) criteria review shows having an accessible airport as tone of the top 10 requirement.

#### **Critical Aircraft**

With the extended runway, the Airport critical aircraft could evolve to a Challenger 350 requiring 4830 feet of runway to take-off and 3383 for landing.

The runway extension will require the relocation and redesign of NavAids. The airport could choose to upgrade its approaches to LPV at the same time.

The runway expansion will also mean more taxiing time for aircraft on the runway thus reducing the number of possible movements. To reduce this impact, it is recommended to build at the same time a parallel taxiway (code name Charlie(C)) running from Taxiway Alpha to the end of the expended runway as shown on Figure 20. As most take-offs and landings occur on Runway 28 due to dominant winds, Taxiway Charlie will play a key role in reducing runway congestion and help raise aircraft movements availability.

Taxiway Charlie will also support the development and expansion of Parcel and aviation related lands east of the former PEM-Air hangar.



#### Figure 20 - Proposed Taxiway Charlie (C) Development

Taxiway Charlie will also support the development and expansion of Parcel A and aviation related lands east of the former PEM-Air hangar. Due to the present location of Airport Road, runway 10/28 configuration and the private ownership of lands west of the airport main ramp, YCC has had little room to grow commercial aviation. Taxiway Charlie and the expansion of Runway 10/28 would open up an estimated 16 acres (see Figure 22) of airside commercial lands on the south side of Taxiway C. It would also open about 13 acres of land of the northside of the runway (expansion of Parcel C - Figure 29) which would require the addition of another taxiway (Echo

(E)) to access this area. Parcel A lands can host commercial aviation activities as flight training, aircraft maintenance and painting, larger corporate hangars and aerial work activities. It also opens space to building a new multi-use terminal and associated car parking lots and a new main aircraft ramp (see Figure 23).

The runway expansion will also require a reconfiguration of Airport Road. Figure 21 presents three potential expansion/relocation. These options are based on the previously proposed developments of Parcel A and C. The shortest route (at 6437 feet) is lined in blue and supports the expansion of Parcel A and C and depending on wetlands and other environmental concerns not addressed in this report part of Parcel F. Another option about 1200 feet longer would be to move airport road to the north side of the airport allowing for the development of Parcel E and creating a new entrance into Parcel C.

A long-term vision could also be the Yellow route which suggest the Airport acquires all lands between the runway and Highway 401. This option opens the way to the development of a future light industrial park facing the 401 and bringing water and sewer lines from Highway 27.



#### Figure 21 - New Airport Road Options

# 7.1.1.1 Key features of each route

Table 12 - Key Features of Each Route	Table 12 - Ke	ey Features of	Each Route
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Route	Length	Advantages and Disadvantages
Blue route	6437 feet - 1962 meters	The Blue route is the shortest thus possibly the less costly but it creates a series of sharp (90 degree) turns. It runs on property already owned by the Airport commission and allows at the same time for the development of Parcel A, C and possibly the southern portion of parcel F.
White route	7694 feet - 2345 meters	The white route is the longest and not the preferred one. It also runs on property already owned by the Airport Commission. It has a very limited impact on aviation lands and would obligate the Commission to still relocate part of Airport road (Blue road) on both side of the runway to expand aviation activities into Parcel A and C. It does facilitate the development of parcel D and E and the proposed light industrial park on the northern end of Parcel C.
Yellow route	7430 feet - 2265 meters	The Yellow route is an out of the box long-term vision where the Airport Commission acquires all lands between the runway and Highway 401. This option opens the way to the development of a future light industrial park facing the 401 and support bringing water and sewer lines from Highway 27. It does facilitate the development of parcel D and E and the proposed light industrial park on the northern end of Parcel C. It does not support expansion of Parcel A and C.

## 7.1.1.2 Cost estimates

The runway 10/28 expansion along with the construction of Taxiway Charlie and the relocation of Airport Road with room to expand Parcel A and C were estimates with Class D cost figures. Costs are derived from previous comparable infrastructure estimates from various Ontario and Quebec Airport plans in 2019 and include a 30% contingency.

#### Table 13 - Cost Estimates

Project	Size (m²)	Cost (m²)	Total estimated cost
Runway expansion	20,565 m² (457 x 45)	\$ 330	\$ 6,786,450
Taxiway Charlie Development	14,256 m² (792 x 18)	\$ 200	\$ 2,851,200
Airport Road realignment and expansion (Blue Road)	19,620 m <sup>2</sup> (1,962 x 10)	\$ 225	\$ 4,414,500
		Total	\$ 14,052,150

#### 7.1.2 Aviation Development Concepts

The development of Parcel A is centered on Figure 22 key activities. It offers the best airside location to grow aviation related services like flight training, aviation maintenance, aerial work and other commercial aviation operations. Some of the following development opportunities are doable without the runway expansion but would require the construction of Taxiway Charlie on a portion of it's envision length.

Figure 22 - Parcel A Expansion - Commercial Hangar Development Area (16 acres)



#### The vision: Grow YCC into a full-service aviation hub

To achieve this vision, we recommend the proposed development be based on the removal of the old trailer-terminal, the construction of a new terminal located east of the existing location with the addition of larger size commercial hangars eastward. The objective with the new terminal is to raise the image and notoriety of YCC and use the new terminal as a multiuse facility anchored by two main tenants; first, a full course meal restaurant and second; a housing and boarding facilities for flight training students. (See Figure 23 on the next page)

The relocation of the old terminal and car parking area also opens up these parcels of lands to add new corporate or commercial hangars. We envision that two corporate hangar size hangars could be located where the car parking area is presently located and the adjacent vacant land. In parallel, we recommend trying the raise aviation activities at YCC by launching a number of pilot orientated tourism packages and destinations to bring more visitors to the region and raise the regional economic impact along with airport revenues (see section 7.1.2.1.7 for a detailed description).

Figure 23 - Parcel A Expansion and Envisioned Layout Plan



# 7.1.2.1 Concept 1 - Attract Corporate and Aviation Services Tenants

## 7.1.2.1.1 Introduction

The need for developing additional commercial land parcels/hangars for aviation use was raised by current tenants and through the consultations. Attendees expressed interest in the prospect of building/renting additional hangars space for their operations. It also reflects the market analysis and the growth of the Canadian aviation industry including general and business aviation.

#### COVID-19

The pandemic has severely impacted regular commercial aviation and large airlines like Air Canada, WestJet and Transat are still struggling as the number of travelers remains very low compared to pre-COVID numbers. Other the hand, general aviation and corporate aviation have caught up more than 75% of their volume of activities and general aviation airport are doing much better overall than the commercial air service airports.

The proposed Parcel A development and expansion will increase aircraft traffic at YCC leading to a greater demand for aircraft fuel, hangarage and maintenance. The proposed Commercial and Corporate Aviation site expansion is expected to make Cornwall Regional Airport more attractive to aviation companies, corporate flight centers and aviation service groups who are looking for a new site or expanding activities.

Marketing efforts will have to be conducted to attract new aviation companies to the airport. These could include the development of a unique branding highlighting the many opportunities and the value proposition of YCC and Northeast Ontario. The image should revolve around the airport's location advantages such as its uncongested airspace, its proximity to major infrastructures (Highway 401), the support from local governments for industrial developments and the quality of the lands available for development.

The proposed development phasing is projected over 20 years and encompasses Phase 1 and 2 developments and long-range development planned for Year 20+. To maximize revenues, land not ready for development should be lease for agricultural use.

## 7.1.2.1.2 Positioning - Markets and Clienteles

The target customers for the proposed Commercial and Corporate Aviation site are companies who need direct access to the runway and hangar space for their operations. Table 14 below shows the number of general aviation aircraft registered in each province. Just by themselves Ontario and Quebec represent 50% of the Canadian market. The state of New-York is also home to another 7,161 general aviation aircraft. So YCC primary market account for mote than 22,000 general and business aviation aircraft.

## Table 14 - General Aviation Market in Canada

	Pacific	Prairies & Northern	Ontario	Quebec	Atlantic	Outside of Canada	National
Private- owned Aeroplanes	4,762	9,422	8,865	6,191	1,222	67	30,529

Other potential clients could include companies that offer aerial work, aircraft maintenance and paint shops, and small aircraft manufacturers who are attracted to Cornwall central location (50 nautical miles to both Montreal and Ottawa, proximity to Lake Ontario and New-York State and major transport infrastructure (401, 417, US border crossing).

#### 7.1.2.1.3 Development Site and Building Requirements

As shown on Table 15, Parcel A development will require runway access through the construction of Taxiway Charlie (C). As part of Phase 1 developments (Year 1 to 10), we suggest expanding the Parcel A with the construction of taxiway Charlie. (480 ft long by 60 ft wide - 28,800 sq.ft), the new terminal and its main ramp and adjacent hangars as required by new tenants.

The new terminal is envisioned to be a 1,200 sq.ft. mixed use building with hangar space, a restaurant and boarding rooms for student pilot. A large parking lot is also planned on the east side between the terminal and the future hangars. Two more buildings can be considered in phase 1 of Aviation Services development.

First the addition of up to two 4,000 sq.ft. hangar on the site of the present car parking area and the adjacent vacant land. Construction of these hangars should be tied to market demand. On a trigger approach, tied to investor interest, other hangars can be built moving eastward along Taxiway C either in Phase 1 or 2.

#### 7.1.2.1.4 Envisioned Develop Timeframe (Assumption)

The development timeframe for Parcel A will be as follows:

- Phase 1 (Year 1-10): Starting on Year 2, construction of the 1200 sq. m. mix-use terminal building with associated Taxiway Charlie and terminal ramp. Year 4 construction of a 1000 sg m. hangar, Year 6 construction of a 400 sq. m. hangar and Year 8 construction of a second 1000 sq. m hangar associated facilities.
- Phase 2 (Year 11-20): Construction of three (3) 400 to 1000 sq. m. medium-size hangar, at a rate of one (1) every three (3) years starting on Year 11.
- Long range (Year 21+): Reserved land in Parcel A for future extension of Commercial Aviation Development or general aviation.

## 7.1.2.1.5 Capital Requirements, Cost and Revenue Assumptions

The chart below provides an estimate of the construction cost and capital requirements for the Commercial Aviation expansion.

Timeframe	Assumptions			
Phase 1 Development Parcel A (Year 1-10)	Terminal with hangarSmall HangarSurface: 1200Hangar: 400 sq.m.sq.m.Sq.m.		<u>Large Hangar</u> Surface: 1000 sq.m.	
Estimated building cost per square meter	\$1,750 \$1,250		\$1,500	
Building Requirements (total construction cost)	\$2,100,000	00 \$500,000		\$1,500,000
New Terminal Ramp	\$742,500 (100 m long x 23 m wide x \$330 sq. m)			
New Car parking	\$330,000 (1,000 sq.m x \$330 sq. m)			
Phase 2 Development Parcel F (Year 11-20)	Small HangarLarge HangarHangar: 400 sq.m.Surface: 1,000 sq.m.			arge Hangar ce: 1,000 sq.m.
Estimated building cost per square feet	\$1,250 \$ 1,500		\$ 1,500	
Building Requirements (total construction cost)	\$500,000		,	\$1,500,000

#### Table 15 - Capital Requirements, Cost and Revenue Assumptions

## A) Landlord Scenario: Revenue and Cost Assumptions

Given the revenue model where the airport is simply the landlord, expenditures are mostly tied to operating charges. We have detailed here below the assumptions used to build the financial projections.

#### Table 16 - Landlord Scenario: Revenue and Cost Assumptions

Item	Assumptions Landlord
Revenue	
Fuel Purchase	Revenue per aircraft was based on a King Air B200, on an average flight time of 100 hours, for a consumption of 428l/fl.hr at a margin of \$0.35/l. It was assumed that for each new hangar constructed, a medium-size props aircraft will be stationed at the airport and will purchase fuel there
Annual land leasing rate / sq.	\$2.80 per sq. m.

Item	Assumptions Landlord	
	Leasing rate for new construction. Land lease was calculated	
	on a surface corresponding to 1.5% the size of the building	
	footprint.	
Boarding Room leasing	\$450/month	
Restaurant	5% of revenues	
Property Taxes	Commercial – 0.820088% for Terminal building	
	(2020 Township of South Glengarry tax schedule).	
Cost		
Site maintenance - road and	A charge corresponding to 10% of the annual capital	
services infrastructure	repayment was budgeted	

# B) Airport-owned Scenario: Revenues and Costs Assumptions

For the airport-owned scenario, the capital requirements will be tied to the construction and maintenance of the various buildings. The assumptions are as follows:

Item	Assumptions Airport Owned
Revenue	
Fuel Purchase	Revenue per aircraft was based on a King Air B200, on an average flight time of 100 hours, for a consumption of 428l/fl.hr at a margin of \$0.35/l. It was assumed that for each new 5,000 sq. ft. hangar constructed, a medium-size props aircraft will be stationed at the airport and will purchase fuel there
Boarding Room leasing	\$450/month
Restaurant	5% of sales
Hangar annual leasing rate / sq. m. per building type	Large hangar \$90.00 sq. m (\$9 sq ft) existing tenant rate charge for its other hangar Small to Medium-size hangar \$70.00 sq. m (\$7 sq ft) Leasing rate vary greatly between location. Heat and lighting cost are borne by the tenants. Price should be indexed by 2% per year
Costs	
Construction cost /sq. m.	<ul> <li>Large hangar \$1500.00 sq. m.</li> <li>Average cost estimate for large heated hangar with office in mezzanine (Source: Aveiro Constructors Ltd.)</li> <li>Small to Medium-size hangar \$1250.00 sq. m.</li> <li>Average cost estimate for small/medium size heated hangar (Source: Aveiro Constructors Ltd.)</li> </ul>

# Table 17 - Airport-owned Scenario: Revenues and Costs Assumptions
Taxiway	and	Ramp	\$330 sq. m							
construction	cost									
Site maintenance - road and			A charge	corresponding	to	10%	of	the	annual	capital
services infrastructure			repayment of	on supporting ir	nfras	structu	re v	vas b	udgeted	
Building maintenance – repair			A charge	corresponding	to	10%	of	the	annual	capital
and upgrades			repayment of	on constructed	buil	dings v	was	bud	geted	

## 7.1.2.1.6 Financial Projections

### A) Landlord scenario

The bulk of the revenues originate from two principal sources: land leasing and taxation. Costs for the construction of the supporting infrastructure was also incorporated in our projections to determine the impact capital costs may have on overall profitability. We have depicted in the table below the anticipated revenue and profit margins:

	Year 1	Year 1 to 5	20-Year Period	40-Year Period
Revenues				
Fuel Purchase	\$0	\$44,101	\$497,915	\$1,112,056
Land rental	\$0	\$29,256	\$372,251	\$1,117,882
Restaurant	\$0	\$0	\$0	\$0
Boarding Rooms	\$0	\$0	\$0	\$0
Taxation	\$0	\$93,486	\$975,045	\$2,392,920
Total	\$0	\$166,843	\$1,845,211	\$4,622,858
Expenses				
Loan Payment for supporting Infrastructure* (interest (1.89%) and capital repayment (over 25 years)) Based on a 30% investment by the commission (grant of 70%)	\$211,721	\$1,058,605	\$4,234,420	\$5,081,304
Loan Payment for supporting Infrastructure - based on a 10% investment by the commission (grant of 90%)	\$70 572	\$352,865	\$1,411,460	\$1,764,325
Site maintenance - road and services infrastructure	\$0	\$14,000	\$100,000	\$500,000
Total	\$211,721	\$1,072,605	\$4,032,640	\$5,581,304
Pre-Tax-Profit-30%investment(with 10% investment)	(\$211,721) (\$70,572)	(\$905,762) (\$200,022)	(\$2,489,209) \$333,751	(\$958,446) \$2,358,533

As a Landlord only model and a 30% investment (\$4.5M) in the project, Parcel A Commercial and Corporate Aviation development shows a major deficit. An investment of no more than 10% (1.4 million) by the Airport Commission would lead to a small profit over the first 20 years and a more substantial one after 40 years.

## B) Airport-owned Scenario

The ownership model includes the cost to build the terminal and supporting infrastructure and the various hangars with their private ramp and car parking and entrance.

As depicted in the table below, the airport-owned model is not generating a profit unless building value is accounted for. Overall construction costs are too high even with infrastructure cost funded at 10%. We have depicted in the table below the anticipated revenue and profit margins. The building construction assumption are for a 25-year mortgage at 1,89% of interest rate.

	Year 1	Year 1 to 5	20-Year Period	40-Year Period	
Fuel Purchase	\$0	\$44,101	\$497,915	\$1,022,036	
Restaurant (5% annual					
based on \$ 300K of	\$0	\$60,000	\$285,000	\$585,000	
revenues)					
Boarding Rooms (\$450	\$0	\$216,000	\$1 206 000	\$2 946 000	
month)	ΨΟ	φ210,000	ψ1,200,000	φ2,540,000	
Hangar Leasing	\$0	\$408,000	\$6,052,000	\$11,232,000	
Total	\$0	\$728,101	\$8,040,915	\$15,785,036	
Expenses					
Loan Payment –					
Buildings	\$105.468	\$678,012	\$6 452 172	\$11 254 286	
(interest and capital	ψ100,400		ψ0, 102, 172	φ11,201,200	
repayment)					
Loan Payment –					
Infrastructure (at 30%	\$211,721	\$1,058,605	\$4,234,420	\$5,081,304	
investment)					
Loan Payment -	·	•	• • • • • • • • •	•	
Infrastructure	\$70 572	\$352,865	\$1,411,460	\$1,764,325	
(at 10% investment)	<b>-</b> -	<b>•</b> • • • • • • •	• • • • • • • • •	<b>•</b>	
Terminal Operations	\$0	\$ 400,000	\$1,900,000	\$3,900,00	
Site maintenance - road					
and services	\$0	\$13,182	\$104,142	\$500,000	
intrastructure					
Building maintenance -	\$0	\$49.947	\$400.597	\$1.000.000	
repairs and upgrades	÷ -	+ ;	+ ;	÷ · ; • • • ; • • •	

Total	\$317,189	\$2,199,746	\$13,091,331	\$21,719,805
Pre-Tax-Profit - infras at 30%	(\$317,189)	(\$1,471,645)	(\$5,050,416)	(\$5,934,769)
Pre-Tax-Profit - infras at 10%	(\$176,040)	(\$765,905)	(\$2,227,456)	(\$2,633,575)
Net Building Value (approx.)	\$103,474	\$605,197	\$5,000,000	\$8,900,00

## 7.1.2.2 Concept 2 – Tourism Fly-In Packages for GA Pilots

This section looks at the potential for developing a series of tourism fly-in packages along with understanding the potential target audience, associated costs, revenue streams and funding programs to get them started.

The packages are based on creating turn-key tourism fly-in packages to promote YCC's location advantages to recreational pilots and business aircraft owners. The fly-in packages will bundle activities together to create a unique experience for visitors. Special attention should be given to respond to the needs of the whole family and especially the children. The proposed activities and tours should also be easily accessible from the airport so pilots and their family can hop off the plane and start enjoying the great amenities Cornwall and Stormont Dundas Glengarry United Counties have to offer. These packages have been designed to play on the region's strengths and to offer year-round activities for GA tourists.

The packages will help to attract additional traffic, increase fuel sales and augment transient activity at the airport. The development of the packages as well as the marketing material that will accompany the promotional efforts should be done in collaboration with local and regional tourism agencies, organizations and operators. The recommended clientele is GA aircraft owners and operators seeking daily or weekend gateway and adventures.

The proposed fly-in packages are detailed in section 7.1.2.2.1. The proposed packages revolve around four (4) general activities, which are Fishing/Angling, Events and Festivals, Scuba Diving and Cycling.

Marketing and branding efforts of these fly-in packages should highlight some of the following features:

- A four-season recreational area with breathtaking natural sites and activities;
- The place for memorable flying vacations;
- Conveniently located with an hour flight from major urban centres; and
- Exclusive turnkey packages at exclusive rates.

More specifically, these packages should be customizable and convey a different message and value proposition according to the season. We have outlined below the proposed themes and associated activities that could be potentially marketed in the packages.

It is also recommended that arrangements be made with one (1) or multiple rental vehicle agencies so that there is a minimum number of rental vehicles are available onsite (or could be quickly dropped off) at the airport to accommodate visitors who require a rental vehicle for a single or multi-day use for purposes of their own and/or to participate in any of the proposed fly-in packages below. The following tables represent the various proposed fly-in packages.

## 7.1.2.2.1 Tourism Packages

### Table 18 - Fly-in Package #1

Fly-in Pa	ckage #1
Theme	Events and Festivals
Season	Spring / Summer / Fall / Winter
	<b>Concept Defined</b> Fly-in Package #1 is intended to incorporate more of a marketing approach whereby the airport (supported and in collaboration with local/regional tourism offices) sends out a bi-weekly newsletter highlighting upcoming festivals, activities and signature events that may attract the interest of aircraft owners and pilots. Below is a showcase of many such events that can be promoted;
	Historic SDG Jail
	Historic Walking Tour
	Lost Villages Museum     Glongarry Pioneer Museum
	<ul> <li>Upper Canada Village</li> </ul>
Concept	<ul> <li>Special Interest / Theme</li> <li>Medieval Festival (June 8-9)</li> <li>Father's Day Fly-In Breakfast (June 16) Cornwall Regional Airport</li> <li>Civil War Re-enactment (June 22-23)</li> <li>Downtown Summer Celebration (July 25-27)</li> <li>Glengarry Highland Games (August 2-3)</li> <li>Akwesasne International Pow-Wow (September 7)</li> <li>Cornwall Comedy Festival (October 17-19)</li> <li>Halloween Comicfest (October 26)</li> </ul>
	<ul> <li>Food &amp; Beverage</li> <li>A Glengarry Affair: Local Wine &amp; Food Pairings (June 6)</li> <li>Beer, Bourbon, BBQ and Blues Festival (July 13)</li> <li>Cornwall Ribfest (July 25-28)</li> <li>Poutine Feast (August 8-11)</li> </ul>

Fly-in Pa	ckage #1				
Theme	Events and Festivals				
Season	Spring / Summer / Fall / Winter				
	<ul> <li>Cornwall Food Fest (August 17)</li> <li>Eastern Ontario Garlic Festival (August 30)</li> <li>Cornfest Blockparty (August 29-September 1)</li> <li>Pumpkinferno (September 27-29, October 3-17)</li> </ul>				
	<ul> <li>Sports</li> <li>St. Lawrence Marathon (April 27)</li> <li>Long Sault Hydroplane Regatta (June 8-9)</li> <li>Cornwall Waterfest Dragon Boat Race (August 8)</li> </ul>				
	Animal				
	K9 Sportfest (July 20-21)				
	SDG Dog Show (August 23-26)				
	<ul> <li>Horse Lovers' Weekend (August 31-September 2)</li> </ul>				
	<ul> <li>Cornwall Kennel Club Dog Show (August 30-September 1)</li> </ul>				

## Table 19 - Fly-in Package #2

Fly-in Pa	ckage #2		
Theme	Cycling and Trails		
Season	Spring / Summer / Fall		
	Head out from the Airport to Long sault to opt on a day, weekend or week long bike right among some of Canada's most beautiful scenic bike routes following the St-Lawrence seaway toward Kingston and back.		
	Waterfront Trail - Cornwall East		
	Waterfront Trail: Cornwall to Long Sault		
	Waterfront Trail – Long Sault Parkway		
	Other trails		
Concept	Summerstown Trails - Red Trail		
	Gray's Creek Trail		
	Guindon Park Loop		
	Lamoureaux Park Loop		
	Summerstown Trails - Green Route		
	Web sites: https://www.visitcornwall.com/about-cornwall/cycle-trails https://www.stlawrenceparks.com/things-to-do-activities/cycling/		

## Table 20 - Fly-in Package #3

Fly-in Pa
Theme
Season
Concept

#### Table 21 - Fly-in Package #4

Fly-in Package #4						
Theme						
Season						
Concept						

The Fly-In Tourism packages are developed to attract and bring more aircraft to the airport. Besides providing additional fuel sales and a few parking revenues, these packages drives the Airport Economic Impact in the region as visitors will spend a lot more money locally than at the airport itself. It also serves to showcase the airport to potential tenants and help to raise the notoriety and awareness pilots and aircrafts owners have of YCC. Budget wise, we have used the following assumptions to estimate 5-, 10-, 15- and 20-year revenue forecast:

Budget Assumptions	
Transient movements	Begin at 80/yr. Increase by 20 movements/yr.
50% of aircrafts purchase fuel	Fuel markup of \$0.35/I
	Assuming two people per plane
Economic Impact	40% of visitors stay one night – rest of visitors return same day
Assumptions	Hotel room charge: \$150
Assumptions	Average stay: 1 night
	Meal purchases: \$200
	Discretionary spending: \$150 (\$50/head/day * 1.5 days)

## Table 22 - Budget Assumptions

	5-Year Total	10-Year Total	15-Year Total	20-Year Total
VISITORS				
Visitors (Same Day)	360	1,080	2,205	3,480
Visitors (Overnight)	240	720	1,470	2,320
TOTAL	600	1,800	3,675	5,800
REVENUES				
Parking fees	\$0	\$0	\$0	\$0
Fuel sales	\$16,485	\$52,553	\$113,715	\$188,462
Public funding to finance	¢15.000	¢15 000	¢15 000	¢15 000
marketing activities	\$15,000	\$15,000	\$15,000	\$15,000
TOTAL	31,485	67,553	128,715	203,462
EXPENSES				
Promotion and marketing	-\$26,546	-\$38,999	-\$52,748	-\$67,928
ESTIMATED SURPLUS	\$4,939	\$28,554	\$75,967	\$135,534
ECONOMIC IMPACT				
Visitors (Same Day)	\$72,000	\$216,000	\$441,000	\$696,000
Visitors (Overnight)	\$120,000.00	\$360,000.00	\$735,000.00	\$1,160,000.00
TOTAL	\$192,000	\$576,000	\$1,176,000	\$1,856,000

### Table 23 - Fly-In packages Revenue Forecast and Economic Impact

## 7.2 Parcel B

The proposed development activities for Parcel B are more strategically suited to be considered in the future (subject to alignment with market conditions and market demand). The proposed development activity for Parcel B is a non-aviation related project.

## 7.3 Parcel C

## 7.3.1.1 General Aviation Hangar Development

## 7.3.1.1.1 Concept Definition

We recommend growing General Aviation activities at YCC through the expansion of the general aviation hangar farm, in order to meet current and future demand. We also suggest adding a corporate hangar section to the farm and moving the tie-down area to reduce development cost.

The phased expansion of the General Aviation Park would be based on the construction of a new group of stand-alone hangars, yet will also address existing needs for hangar space expressed by a few parties. To carry this momentum forward, we also recommend that YCC launches a GA attraction campaign aimed at promoting the development of a new T-Hangar building complex comprised of 6 to 10 doors and a series of stand-alone hangars. We recommend that the marketing campaign and strategy be included in the promotion of T-Hangar building.

These hangars usually come at a lower rental rate catering to a different segment of clientele. T-Hangars are deemed high density buildings. Developing such a building and attracting tenants will support higher fuel sales for the airport and potentially more maintenance work to support attraction of an MRO/AME operator.

As YCC should be the catalyst to attract new tenants, the airport could look at this opportunity to pursue growing its portfolio of buildings and generating extra revenues by being the developer and owner of a few hangars. Section 7.1.4.1.7 presents financial modeling which showcases two (2) development models: a) the airport as the landlord (only leasing land), and b) the airport as the owner of the hangars and leasing the hangars which provides a higher revenue. As stated earlier in this report, the market rationale for such a project is based on the current growth rate of the Canadian General Aviation market and the lack of hangar space at the majority of airports.

## 7.3.1.1.2 Positioning – Markets and Clientele

The main clientele for the GA Park expansion will be pilots and aircraft owners from the region (60 nautical miles attraction radius), as well as local businesses that need to store or relocate their aircraft. This will also include current tenants who need additional space to park their aircraft, and future potential tenants who wish to relocate at YCC. In order to support the rental of available hangar space, a marketing campaign targeting recreational pilots and businesses which require (new or additional) storage space will have to be launched.

The GA market in Ontario is one of the largest in North America. According to Transport Canada, in 2018, there were 8,865 privately registered piston aircraft, the type usually attributed to GA. The Canadian total is 30,529 aircraft, which means that 29% of all GA aircraft are registered in Ontario. Figure 24 below compares the number of aircraft registered in Ontario with other provinces in Canada:



## Figure 24 - Number of Private Registered Aircraft

#### 7.3.1.1.3 Marketing Strategy and Promotion

Specifically, pilot clubs, COPA chapters and recreational pilots can be reached through various means. Advertising can be done in specialized magazines (such as COPA Flight newspaper, Wings, Skies Magazine or Canadian Aviator) and GA aviation websites such as Pilot Adventure.

Other means of communication could be a YCC newsletter highlighting the various activities taking place at and around Cornwall and South Glengarry. It is also recommended that YCC prepares a press release and a media kit to support the launch of larger projects such as the expansion of the GA and Light Industrial Park as well as others.

Depending on the type of development model chosen (landlord or airport-owned), the sales approach will be different. For the landlord model, the marketing should focus on promoting the location advantages – uncontrolled airspace, proximity to great tourism activities, a few kilometers from Montreal and Ottawa and major infrastructure networks, the quality of its facilities, the advantageous rental rates and the active local clubs (COPA Flight 59 - to attract long-term tenants and developers interested in erecting hangars at the airport.

For the airport-owned model, YCC could use a "real estate" strategy, where a break-even number of units are to be sold or rented before construction begins. This guarantees pre-construction revenues, through deposits, and ensures rental and sales revenues from day 1 of the hangar delivery.

Regardless of the model chosen, marketing efforts should be undertaken to leverage tourism activities in the region as an attempt to attract recreational pilots from Ontario and the neighboring Great Lakes provinces and US states. Targeting these segments will allow the airport to first capture additional traffic as well as having the opportunity to present them with the hangar leasing or ownership options.

Another way to attract GA tourists would be to create a marketing campaign revolving around the activities that take place at the airport or building on the active COPA Chapter Father's Day Fly-In Breakfast. In order to increase the outreach of this event, the airport could offer additional communication to help improve participation and attendance for this occasion. With the creation of these packages and events, the airport could also develop a newsletter to update pilots on things to do in the area and entice them to come and fly to YCC.

In order to advertise to GA tourists, marketing activity costs will have to be taken into account in the overall airport budget. We have provided below an estimate of the various costs associated with these marketing activities, over a period of 3 years.

	Year 1	Year 2	Year 3
Web Site Updates	\$1,000	\$500	\$500
Fly-In-Packages Brochure	\$1,500	\$750	\$750
Promotional Leaflet – local activities and renting opportunities	\$1,000	\$500	\$500
Pilots Newsletters (Electronic) 2 issues per year (Spring and Summer)	\$1,000	\$500	\$500
<b>Media Advertising</b> Purchase advertising space (3-4 times per year – Wings, Adventure Pilots, Canadian Aviator)	\$3,000 (for 1/6 page advertising in 3 different magazines)	\$4,000 (for 1/6 page advertising in 4 different magazines)	\$5,000 (for 1/6 page advertising in 5 different magazines)
Promoting/Dev Existing COPA Event	\$1,000	\$1,500	\$2,000
Annual Budget Estimate	\$8,500	\$7,750	\$9,250

### Table 24 - 3-Year Estimated Marketing Activities and Costs

## 7.3.1.1.4 Development Site and Building Requirements

The proposed development for the GA Park can be conducted in multiple stages.

**Stage 1** - The first stage would encompass the construction of one new taxiway to service a larger corporate hangar zone and a T-Hangar area west of Taxiway Bravo. This development would allow YCC to host a wider range of clients. (A first is potentially identified for the corporate hangar area). The hangar layout can accommodate corporate size hangars of 4,000 to 5,000 sq. ft. and an initial six (6) to ten (10) bay T-Hangars.

**Stage 2** – The second stage recommends filling existing available hangar space and tie-down areas with small private hangars. This recommendation implies moving the tie-down area. We recommend using the grass area south of the first row of box hangar as shown on Figure 25. We suggest building a grass taxiway to access that area. This phase would be financially sound for YCC as limited infrastructure development and associated cost will be required but revenue will substantially increase. The hangar layout will be roughly the size of existing hangars - 1,300 to 1,500 sq. ft. found in the General Aviation Park.

**Note**: the proposed new location for the tie-down area will need to consider the proposed expansion of Parcel C tied to the main runway expansion project.

**Stage 3** – The third stage will see the expansion of the westside of Taxiway Bravo with more t-Hangar and Corporate hangars on a per-demand basis.

**Stage 4** – The fourth stage is tied to the expansion of runway 28 and the development of the north side of the expanded runway 28.



Figure 25 - Proposed Development Layout for GA Park Extension (Stage 2)

Figure 26 - Proposed Development Layout for GA Park Extension (Stage 1 and 3)



Presented as Phase 4, the proposed runway expansion project will open up parcels of land totaling approximately 13 acres on the northside of the new runway allowing the expansion of Parcel C and making it easily accessible with the necessary relocation of airport road.



Figure 27 - Phase 4 - Commercial and General Hangar Development Area Expansion

Parcel C expansion will require the construction of a new taxiway (Delta), which we suggesting locating on its most southern edge. As previously stated, we recommend the westerly part of this new parcel (close to Taxiway B) be dedicated to grass tie-downs. The eastern part could serve for corporate and general aviation markets.

## 7.3.1.1.5 Development Timeframe

For budgetary purposes, we suggest a conservative, but consistent construction timeframe where one (1) new hangar will be erected every two year and instalments of six (6) T-Hangars every ten-years. This assumption would mean the following development schedule:

- Year 1-10: Construction of five (5) hangars in the existing park, at the rate of one (1) hangar every two-year (triggered by demand), construction of two (2) corporate hangar at the rate if one (1) every five (5) year and construction of one (1) six (6) bay T-Hangar building to house as many aircraft.
- Year 11-20: Construction of five (5) hangars in the existing park, at the rate of one (1) hangar every two-year (triggered by demand), construction of two (2) corporate hangar at the rate if one (1) every five (5) year and construction of one (1) six (6) bay T-Hangar building to house as many aircraft.
- Year 20+: Construction of Taxiway delta and development of expanded Parcel C area

## 7.3.1.1.6 Capital Requirements, Cost and Revenue Assumptions

The table below provides an estimate of the capital requirements for the two (2) phases of development (GA Park growth and expansion) projected over the 20-year period. We present these costs per the proposed development scenarios introduced at article 7.1.4.1.5: the landlord scenario or the airport-owned scenario.

Timeframe	Assumptions			
Phase 1 Development (Year 1-10)	<u>T-Hangar</u> Hangar surface: 104 sq.m. per unit One building of 6 units	Stand-Alone Hangar Hangar surface: 130 sq.m. # of units: 5	Corporate Hangar Hangar surface: 250 sq.m. # of units: 2	
Building Requirements T-Hangar: \$450 sq. m. Stand-Alone: \$950 sq.m. Corporate: \$ 1100 sq. m.	\$292,500	\$1,235,000	\$550,000	
Aircraft Service Road \$100 sq. m. (120 m long and 9 m wide – 1080 sq.m)	\$108,000	\$0	Included in the T-Hangar column	
Phase 2 Development (Year 11-20)	<u>T-Hangar</u> Hangar surface: 104 sq.m. per unit One building of 6 units	Stand-Alone Hangar Hangar surface: 130 sq.m. # of units: 5	Corporate Hangar Hangar surface: 250 sq.m. # of units: 2	
Building Requirements T-Hangar: \$450 sq. m. Stand-Alone: \$950 sq.m. Corporate: \$ 1100 sq. m.	\$292,500	\$1,235,000	\$550,000	
Aircraft Service Road \$100 sq. m. (120 m long and 9 m wide – 1080 sq.m)	\$108,000	\$0	Included in the T-Hangar column	

For calculation purposes, we based the revenue projections and building costs on the assumption that a total of 26 constructed hangars (14 stand-alone/corporate and 12 T-hangars) will be built over 20 years.

#### Table 25 - Landlord Scenario: Revenues and Costs Assumptions

Item	Assumptions			
Revenue				
Annual leasing rate / sq. m.	\$2.80 sq. m. rate for new lease construction			
	As per South Glengarry Schedule A's Fees and Charges			
	Schedule - 2.5% increase applied every five (5) years.			
Property Taxes	1.241881% tax rate applied on property construction cost			
(RT- 1.241881%)	(2020 South Glengarry tax schedule).			
Cost				
Site maintenance - road and	A charge corresponding to 10% of the annual capital			
services infrastructure	repayment was budgeted			

#### Table 26 - Airport-Owned Scenario: Revenues and Costs Assumptions

Item	Assumptions				
Revenue					
Annual leasing rate – monthly	T-Hangar - \$300 monthly				
or by sq. m.	Stand-alone hangar - \$ 55 sq. m.				
	Small Corporate - \$ 72 sq. m.				
Costs					
Construction cost /sq. ft.	<b>T-Hangar</b> \$450.00 sq. m.				
	Stand-alone hangar \$950.00 sq. m.				
	Small Corporate \$1100 sq. m.				
Site maintenance - road and	A charge corresponding to 10% of the annual capital				
services infrastructure	repayment on supporting infrastructure was budgeted.				
Building maintenance – repair	A charge corresponding to 10% of the annual capital				
and upgrades	repayment on constructed hangars was budgeted.				

## 7.3.1.1.7 Financial Projections

The table below provides a portrait of the revenues and profit margins per scenario for year 1 of operation, for the first five years and over the 20-year period. For the landlord scenario, land lease rates were inflated by 2.5% every five years and taxation revenue are included. This percentage ratio was used for budgetary purposes only. Fuel revenues were based on the assumption that each new hangar would provide additional \$1,263 fuel revenue (assuming that all fuel being purchased at YCC). To arrive to this conclusion, we calculated the fuel purchase value for a Cessna 172 averaging 100 flight hours per year, at a fuel consumption of 30l/hr, for a margin of \$0.35 per litre representing the actual markup charged by YCC.

## Landlord scenario

We have depicted in the table below the anticipated revenue and expenses:

Table 27 - Landlord Scenario: Anticipated Revenue and Expenses

	Year 1	Year 1-5	20-Year Period	40-Year Period
Revenues				
Fuel	\$1,050	\$66,990	\$728,518	\$1,524,026
Land lease				
(for Stand-Alone and Corporate				
hangars, the building footprint is				
augmented by 25%)				
T-Hangar space	\$0	\$4,550	\$59,150	\$145,600
Stand-Alone	\$454	\$4,086	\$51,122	\$145,475
Corporate Hangar	\$0	\$2,622	\$41,952	\$108,376
Property Taxes	\$1,533	\$27,818	\$371,152	\$971,590
Total	\$3,037	\$106,066	\$1,251,894	\$2,895,067
Expenses				
Loan Payment for Supporting				
Infrastructure (Aircraft Service				
Road: \$108,000 – 25 year at	\$5,424	\$27,120	\$108,480	\$240,600
1,89%)				
(interest and capital repayment)				
Site maintenance - road and	\$0	\$ 5,000	\$50,000	\$150,000
services infrastructure	ΨΟ	ψ 5,000	ψ00,000	ψ130,000
Total	\$5,424	\$32,120	\$158,480	\$390,600
Pre-tax Profit	(\$2,387)	\$73,946	\$1,093414	\$2,504,467

Developing the GA farm concept beyond the construction of the lots already available for which infrastructure is already in place or needs a small expansion makes financial sense. Should the landlord scenario be favored, the cost for the supporting infrastructure will have can easily be borne by the Commission/Airport. Forecasted revenues are sufficient to cover the \$240,600 charge needed for building two new aircraft service road of 120 metres each.

## Airport-Owned Scenario

We have depicted in the table below the anticipated revenue and profit margins: Table 28 - Airport-Owned Scenario: Anticipated Revenue and Profit Margins

	Year 1	Year 1 to 5 20-Year Period		40-Year Period
Revenues		-		
Fuel Purchase	\$1,050	\$66,990	\$728,518	\$1,524,026
T-Hangar Leasing	\$0	\$43,200	\$561,600	\$1,166,400
Stand-Alone Hangar Leasing	\$7,150	\$64,350	\$805,126	\$1,535,844
Small Corporate Hangar	\$0	\$54,000	\$883,553	\$2,387,138
Leasing				
Total	\$8,200	\$228,540	\$2,173,671	\$6,613,408
Expenses				
Loan Payment – Aviation				
Hangars (interest and capital	\$6,204	\$126,648	\$1,727,304	\$3,907,944
repayment)				
Loan Payment for Supporting				
Infrastructure (Aircraft Service	<b>ФГ 404</b>	<b>#07 400</b>	¢400.400	<b>\$040,000</b>
Road: $$108,000 - 25$ year at	\$5,424	\$27,120	\$108,480	\$240,600
ropayment)				
Site maintenance - road and				
services infrastructure	\$0	\$1,500	\$5,500	\$15,000
Building maintenance -				
repairs and upgrades	\$0	\$6,000	\$85,000	\$200,000
Total	\$11.628	\$161.268	\$1.926.284	\$4.363.544
Dro Toy Profit	(\$2,420)	¢c7.070	¢047.007	¢2.240.964
	(\$3,428)	Φ01,212	¢∠47,387	φ∠,∠49,864
Net Building Value	\$6,204	\$126,648	\$1,727,304	\$3,650,556

The ownership model generates more expenses but over the forty-year timeline will provide a higher value (mix of profits and building value). It is directly driven by the construction cost associated with the hangars and the infrastructure. As previously stated, the construction costs are established with a 30% contingency so the Airport Commission could probably obtain better prices from local contractors. Some of the infrastructure cost could also be funded through grants.

## 7.3.1.2 YCC Light Industrial Park

#### 7.3.1.2.1 Concept Presentation

The YCC Light Industrial Park is a long-term project that aims to attract agriculture related (mainly), light manufacturing (food processing) and logistic-distribution companies. The proposed location for this development is on the northern part of parcel C. The park will provide land and infrastructure for companies looking to expand and be located in close proximity to the airport with easy access to Highway 401. Market research suggested that YCC should concentrate on attracting industries active in the agri-food, warehousing/distribution, aviation and technology sectors, given their high growth potential, their existing presence in the region and, their inherent need to have direct access to an efficient transportation system.

To support the overall development and promotion of the YCC Light Industrial Park, it is recommended that the eastern chapter of the Ontario Federation of Agriculture could be a strong partner given their knowledge, experience and expertise in agriculture industry.

#### 7.3.1.2.2 Positioning – Markets and Clientele

The marketing of the Light Industrial Park should highlight the assets and location advantages of the region, including affordable land and rental rates in the South Glengarry and Cornwall areas, as well as the low cost of living compared to Ottawa (being just over an hour away).

Promotional activities of the future airport's Light Industrial Park should also underscore the ideal location of Cornwall Regional Airport, again, being approximately an hour's drive from Ottawa, Montreal and a few minutes from the US border. The area also offers major transport infrastructure for the commercial corridor along Highway 401 and 417.

#### 7.3.1.2.3 Development Site and Building Requirements

We suggest locating the initial section of the park in the northern part of Parcel C. The property could offer four (4) lots with airside access and four (4) groundside-only lots. The total available surface for construction and development is approximately 25 acres (101,171 sqm). The light industrial park will be accessible from Airport Road. Site development will need to meet TP 312 5<sup>th</sup> and the obstacle limitation surface requirements.

The lack of regular water and sewer may be a deterrent to some investors. As well, the lower cell phone quality and internet (broadband) services will need to be addressed.

The notion of creating a joint "Development Corporation" was raised in the focus groups. According to the government of Ontario, a Development Corporation is a non-profit form of governance that encourages and assists in the development and diversification of industry in Ontario. They can provide financial assistance, sites, equipment, facilities and services, as well as providing technical, business and financial information, advice or training to the organization.

As stated with in the Development Corporation Act of 1990<sup>9</sup>:

8. (1) The objects of a development corporation must be consistent with encouraging and assisting in the development and diversification of industry in Ontario, including, without limiting the generality of the foregoing,

- (a) by providing financial assistance by loan, guarantee or purchase of shares or other securities;
- (b) by providing sites, equipment, premises, facilities and services; and
- (c) by providing technical, business and financial information, advice, training and guidance to persons or organizations, whether or not incidental to the provision of financial assistance. 2012, c. 8, Sched. 12, s. 2 (1).

The City can create a Development Corporation which would facilitate the participation of several interested partners in the construction of the Light Industrial Park. Such a structure would help in the construction of the sewer system, buildings and supporting infrastructure. Two (2) alternatives are therefore possible for the construction of the Light Industrial Park. On the one hand, a Development Corporation could be set up with the city so that various stakeholders could participate directly in the development and construction of the park, as well as the overall management, once it is constructed. On the other hand, the airport could develop and construct the buildings itself, with assistance of the various stakeholders. With this option, the airport retains overall control of the Light Industrial Park, however this does put extra financial and resource pressure on its operations. The choice between the two (2) options will ultimately rest on the airport's decision and the readiness of other stakeholders to participate in a such a joint venture.

Following this suggestion, two (2) possible development models are recommended: a), where the airport acts as the landlord and leases the land to organizations that wish to build their own buildings; or b) where the airport constructs the buildings itself and leases them to interested organizations.

<sup>&</sup>lt;sup>9</sup> https://www.ontario.ca/laws/statute/90d10

Figure 28 presents an illustration of the proposed light industrial park on Parcel C and location on of eight (8) potential buildings.





### 7.3.1.2.4 Development Timeframe

Before construction can commence, the airport will have to undertake the necessary steps to prepare the site, work to identify the necessary funding and do the actual extension of infrastructure (if required).

The suggested development timeline for the Light Industrial Business Park is as follows:

- **Phase 1:** Years 1-10: Infrastructure requirement and construction of the first four (4) light industrial buildings (including two with airside access).
  - Construction timeframe: Building of one light industrial building every two years starting in Year 3. First light industrial building is projected to be operational at the beginning of Year 4.
- **Phase 2:** Years 11-20: Construction of additional four (4) other light industrial buildings (including two with airside access).
  - Construction timeframe: One new building in Year 11, another building in Year 13, followed by the construction of two additional buildings, one in Year 15 and another in Year 17.

#### 7.3.1.2.5 Capital Requirements, Cost and Revenue Assumptions

The charts below provide an estimate of the construction cost and capital requirements for the Light Industrial Park construction.

Timeframe	Assumptions
	Light Industrial Buildings
Phase 1 Development (Years 1-10)	Surface per unit:3.125 acres (12,646.4 sqm) # of constructed units: 4
Building Requirements	
Building size: 929 sqm Outdoor space: 50% of building size and includes driveway, walkway and parking Total construction cost: \$1,049.48/sqm	\$5,849,802
Infrastructure Requirements (total construction cost) Access Road Construction Cost: \$333/sqm	\$533,333
	Light Industrial Buildings
Phase 2 Development (Years 11-20)	Surface per unit:3.125 acres (12,646.4 sqm) # of constructed units: 4
Building Requirements	
Building size: 929 sqm Outdoor space: 50% of building size and includes driveway, walkway and parking Total construction cost: \$1,049.48/sqm	\$5,849,802
Infrastructure Requirements (total construction cost) Access Road Construction Cost: \$333/sqm	\$533,333

#### Table 29 - Capital Requirements, Cost and Revenue Assumptions

#### Landlord Scenario: Revenues and Costs Assumptions

Given the revenue model where the airport acts solely as the landlord, expenditures are mostly tied to operating charges. Detailed below are the assumptions used to build these financial projections. Regarding taxation, an additional assumption has been proposed whereby the airport could retain 100% of the taxes collected on newly constructed buildings. In following the landlord scenario, Table 30 presents the revenue and cost assumptions.

Item	Assumptions
Revenue	
Annual land leasing rate / sqm.	<ul> <li>Land lease rate #1 (building footprint only): \$2.15/sqm</li> <li>Land lease rate #2 (usable land around surrounding building such as driveway, walkway, parking – calculated at 50% of building footprint): \$1.61/sqm</li> <li>Land lease rate #3 (balance of grassy area onsite): \$1.08/sqm</li> </ul>
	Land lease rate increase of 2.5% every five (5) years.
Property Taxes	Buildings – 3.260199% for industrial new construction (occupied)
Cost	
Site Maintenance (Road and Services Infrastructure)	<ul> <li>A charge corresponding to 5% of the annual capital repayment on supporting infrastructure was budgeted for Years 1-5.</li> <li>A charge corresponding to 10% of the annual capital repayment on supporting infrastructure was budgeted for Years 6-20.</li> </ul>

## Table 30 - Landlord Scenario: Revenue and Cost Assumptions

## Airport-Owned Scenario: Revenues and Costs Assumptions

For the airport-owned scenario, the capital requirements will be tied to the construction and maintenance of the various buildings. The assumptions are as follows:

Table 31 -	Airport-Owned	Scenario:	Revenues and	Costs	Assumptions
------------	---------------	-----------	--------------	-------	-------------

Item	Assumptions		
Revenue			
Appual building lease rate	<ul> <li>Light industrial buildings - \$86.11/sqm.</li> </ul>		
(\$/sam)	• Lease rate increases at a rate of 2.5% every five (5)		
	years.		
Costs			
	Construction cost: \$1,049.48/sqm		
Building construction cost	<ul> <li>Based on 2020 Altus Group Construction price guide</li> </ul>		
(\$/sqm)	for the Ottawa/Gatineau region.		
	Financing interest rate: 1.89%		
Road construction cost	Construction cost: \$333/sqm		
(\$/sqm)	Road dimensions into Light Industrial Park: 292m x 10m		

Item	Assumptions		
Site Maintenance (Road and Services Infrastructure)	<ul> <li>A charge corresponding to 5% of the annual capital repayment on supporting infrastructure was budgeted for Years 1-5.</li> <li>A charge corresponding to 10% of the annual capital repayment on supporting infrastructure was budgeted for Years 6-20.</li> </ul>		
Building Maintenance (Road and Services Infrastructure)	<ul> <li>A charge corresponding to 5% of the annual capital repayment on supporting infrastructure was budgeted for Years 1-5.</li> <li>A charge corresponding to 10% of the annual capital repayment on supporting infrastructure was budgeted for Years 6-20.</li> </ul>		

## 7.3.1.2.6 Financial Projections

#### Landlord Scenario

In general terms, most of the revenues are expected to originate from leasing of the land and levying property taxes. Costs are tied to the financing of the servicing and road infrastructure which are assumed to be paid by the airport. These costs were included in the calculations to evaluate the impact that financing the supporting infrastructure may have on profitability. The airport will always have the opportunity of negotiating terms with future developers and determine who will pay for these capital expenditures.

We have depicted in the table below the anticipated revenue and profit margins under the landlord scenario:

	5-Year Total	10-Year Total	15-Year Total	20-Year Total	
Revenues					
Land Lease (Rate #1)	\$8,100	\$41,100	\$102,350	\$186,600	
Land Lease (Rate #2)	\$3,038	\$15,413	\$38,381	\$69,975	
Land Lease (Rate #3)	\$49,056	\$248,912	\$619,856	\$1,130,095	
Property Taxes (3.260199%)	\$13,699	\$69,507	\$173,092	\$315,573	
Total Revenues	\$73,892	\$374,931	\$933,679	\$1,702,243	
Expenses					
3-phase hydro					
Water line upgrade/service to property line (loan payment)	Cost to be borne by the tenants				
Access Road (Principal Payments)*	\$210,090 \$440,797 \$694,147 \$972,360				
Site Maintenance (Road and Services Infrastructure)	\$14,583	\$43,750	\$72,917	\$102,083	
Total Expenses	\$224,673	\$484,547	\$767,063	\$1,074,443	
EBITDA	-\$150,781	-\$109,616	\$166,616	\$627,800	
Access Road (Interest Payments)	\$81,577	\$142,536	\$180,854	\$194,307	
Total Deductions	\$81,577	\$142,536	\$180,854	\$194,307	
Pre-Tax Profit	-\$232,359	-\$252,152	-\$14,238	\$433,493	

#### Table 32 - Landlord Scenario: Anticipated Revenue and Profit Margins

\* The cost to develop the access road is repaid by the tenants on an annual percentage over 20 years borne for each lot.

Based on the anticipated revenues and expenditures, the airport begins to generate a positive annual surplus in Year 9, but it is not until Year 16 where the project begins to break-even. In the first five years, the project anticipates a pre-tax loss of \$232,359. Following years 10 and 15, the projects estimate a pre-tax loss of \$252,152 and \$14,238 respectfully. At the completion of the 20-year horizon, the overall project generates a pre-tax profit of \$433,493.

A contributing factor to the spike in lost revenues between Year 5 and Year 10 is due in part to the delayed start and the staggering of confirmed land leases over the first decade. It is not until the second decade which the majority of lots are leased and the project can start recouping most of its expenses.

## **Airport-Owned Scenario**

In this scenario, the majority of revenue is expected to originate from the leasing of buildings. The main advantage of this model is the higher revenue potential and the opportunity for the airport to retain control over the buildings.

We have depicted in the table below the anticipated revenue and profit margins under the airportowned scenario:

	5-Year Total	10-Year Total	15-Year Total	20-Year Total
Revenues				
Building Leases	\$323,989	\$1,643,945	\$4,093,862	\$7,463,749
Property Taxes (3.260199%)	(not included)	(not included)	(not included)	(not included)
Total Revenues	\$323,989	\$1,643,945	\$4,093,862	\$7,463,749
Expenses				
3-phase hydro				
Water line upgrade/service to property line (loan payment)	Cost to be borne by the tenants			nts
Access Road (Principal Payments)	\$210,090	\$440,797	\$694,147	\$972,360
Building Construction (Principal Payments)	\$164,586	\$850,877	\$2,846,379	\$4,004,952
Site Maintenance (Road and Services Infrastructure)	\$14,583	\$43,750	\$72,917	\$102,083
Building Maintenance (Repair and Upgrades)	\$11,698	\$70,188	\$201,790	\$400,655
Total Expenses	\$400,957	\$1,405,612	\$3,815,232	\$5,480,051
EBITDA	-\$76,968	\$238,333	\$278,630	\$1,983,698
Access Road (Interest Payments)	\$81,577	\$142,536	\$180,854	\$194,307
Building Construction (Interest Payments)	\$69,373	\$318,919	\$713,767	\$1,142,147
Total Deductions	\$150,950	\$461,455	\$894,620	\$1,336,454
Pre-Tax Profit	-\$227,918	-\$223,122	-\$615,990	\$647,244

## Table 33 - Airport-Owned Scenario: Anticipated Revenue and Profit Margins

The airport-owned model becomes profitable over the long term because capital investments for the development of the supporting infrastructure has been amortized. This situation is typical of any capital-intensive project where infrastructure spending contributes to sharp deterioration of profitability in the first few years. Other than the building construction costs, the main expenditure for the development of the designated light industrial park is the large amount of capital (\$1.166 million) required for the installation of the access road.

Based on the anticipated revenues and expenditures, the airport does begin to generate a positive annual surplus in Year 9, but it not until Year 15 where the project begins to break-even. In the first five years, the project anticipates a pre-tax loss of \$227,918. Following years 10 and 15, they estimate a pre-tax loss of \$223,122 and \$615,990 respectfully. At the completion of the 20-year

horizon, the overall project generates a pre-tax profit of \$647,244. Important to note within this financial analysis is that tax revenue generation is not accounted for.

## 7.4 Parcel D

The proposed development activity for Parcel D coincides with a proposed development activity slated for Parcel E and is more strategically suited to be considered in the future (subject to alignment with market conditions and market demand). The proposed development activity for Parcel D is a non-aviation related project.

## 7.5 Parcel E

## 7.5.1.1 Airport Sign (Highway 401 Visible)

## 7.5.1.1.1 Concept Description

## Figure 29 - Proposed Location of Airport Sign



To increase the awareness and visibility of the Cornwall Regional Airport from Highway 401, the construction of an airport sign on Parcel E which is visible from Highway 401 (see Figure 29) is recommended. The specific location is marked with a star ( $\star$ ). This investment by the airport has the potential to lead to an increase in general aviation usage and showcase the airport as a location for business investment.

In consultation with the Ontario Ministry of Transportation (MTO), an airport sign with the intentions of being visible from Highway 401 would have to demonstrate that it is situated on airport-owned lands and would be categorized as a "location sign". This classification would allow for this type of sign to advertise goods or services available on the property which the sign is located on. To proceed with the construction and development location sign, a series of rules would have to be adhered to from within

MTO's Corridor Signing Policy (Ontario Ministry of Transportation, 2020).

The classification of these types of signs by the MTO specifies that they would fall under the category of "individual business" which means that the airport can advertise upwards of two business units on the same property. As a result, this presents a unique opportunity for the airport to generate advertising revenues from a future tenant such as an onsite restaurant.

Figure 30 - Sample Location Sign (Parry Sound Area Municipal Airport)



Location signs can either face а single or bidirectional direction. The use of logos, logograms, pictures. picturegrams, maps, catch phrases, etc. are acceptable on a location sign as evident in Figure 30 at the Parry Sound Area Municipal Airport which is visible from Highway 400.

Location signs are permitted to be luminous or illuminated by direct or indirect lighting or may contain reflective material or luminous paint, however, must not cause direct or indirect glare that may interfere with traffic safety.

#### Amount of Signing Permitted on Property

In order to proceed, a permit is required for all location signing which exceeds 32 sq. ft. in total area. Alternatively, a letter of approval shall be required for a sign measuring between 2 sq. ft. and 32 sq. ft. in area. The Ministry may also prescribe a fee to be paid for any permit issued under the provisions of the Public Transportation and Highway Improvement Act (PTHIA). From a municipal perspective, since Parcel E is owned by the Airport Commission and serves the airport, the municipality would consider these lands federally regulated and the township would not be issuing building permits for this property.

Freestanding and landscape signs must not be placed closer to the highway property line than 10 ft. behind the property line (Ontario Ministry of Transportation, 2020).

Based on Category A classification, Individual Business - Under 27,870 sqm (300,000 sq. ft.) of total land area under active development would follow one (1) of the three (3) options (see Table 34) based on the airport's preferred sign requirements or preferences.

#### Table 34 - Location Sign Size Options

Option	Distance from Property Line to Sign Closest to Highway	Maximum Signing Allowed	Maximum Height from Centre Line or Ground Elevation
1	61 m or less	46 sqm	9 m
2	over 61 m and up to 183 m	56 sqm	10 m
3	over 183 m and within 400 m	65 sqm	12 m

## 7.5.1.1.2 Market Analysis / Rationale

An executive market analysis was conducted on the recommendation to construct a location sign and the results of which, determined that an increase in awareness of the Cornwall Regional Airport may lead to:

- The generation of net new revenues by promoting one (1) other business onsite (such as a restaurant) based on the airport sign classification which permits the promotion of two (2) business units;
- An increase in flight school training;
- An increase in additional hangar investment and/or development;
- An overall increase in general aviation activity; and
- An increase in industrial/commercial investment and/or development.

## 7.5.1.1.3 Financial Analysis

Efforts were made to obtain a quotation from three (3) different sign manufacturers and installers within close proximity of the Cornwall Regional Airport. They included Boyer Signs, Dave's Signs and Dave's Reliable Signs.

Boyer Signs responded and provided a quotation which assisted in preparing the following two (2) 5, 10, 15 and 20-year revenue and expense projections.

Table 35 provides a summary of the estimated revenues and expenses associated with a singlesided location sign over a 5, 10, 15 and 20-year period which is supported by a \$250 recurring monthly charge for the ability to identify a second business onsite. An annual inflation rate of 2% was also calculated into the annual advertising renewal fee. Due to the initial investment associated with overall sign construction, installation and graphics (\$22,035 – incl. HST), the first five (5) years show a loss in revenue of \$6,435. Following the 10, 15 and 20-year horizons (see Table 35), the project generates \$10,665, \$29,265 and \$49,365 in revenues respectively.

#### Table 35 - 20-Year Financial Projects for Single-Sided Billboard Sign

	5-Year Total	10-Year Total	15-Year Total	20-Year Total
REVENUES				
Signage Fee (\$250/Month)	\$15,600	\$32,700	\$51,300	\$71,400
EXPENSES				
Single sided 16' (H) x 24' (W) billboard complete with graphics and installation	-\$22,035	-\$22,035	-\$22,035	-\$22,035
ESTIMATED SURPLUS	-\$6,435	\$10,665	\$29,265	\$49,365

Table 36 provides a summary of the estimated revenues and expenses associated with a doublesided location sign over a 5, 10, 15 and 20-year period which is supported by the same \$250 recurring monthly charge for the ability to identify a second business onsite. An annual inflation rate of 2% was also calculated into the annual advertising renewal fee. Due to the initial investment associated with overall sign construction, installation and graphics (\$29,945 – incl. HST), the first five (5) years show a loss in revenue of \$14,335, however, following the 10, 15 and 20-year horizons, the project generates \$2,755, \$21,355 and \$41,455 in revenues respectively.

## Table 36 - 20-Year Financial Projects for Double-Sized Billboard Sign

	5-Year Total	10-Year Total	15-Year Total	20-Year Total
REVENUES				
Signage Fee (\$250/Month)	\$15,600	\$32,700	\$51,300	\$71,400
EXPENSES				
Double sided 16' (H) x 24' (W) billboard complete with graphics and installation	-\$29,945	-\$29,945	-\$29,945	-\$29,945
ESTIMATED SURPLUS	-\$14,345	\$2,755	\$21,355	\$41,455

Over the long term, this endeavour not only generates a nominal amount of revenue for the airport, it has the added benefit of profiling and increasing the exposure of the airport to passersby travelling along Highway 401. With respect to determining whether to invest in a single- or double-sided location sign, the difference in cost is \$7,000. It would have to be determined if it was felt

that having the additional exposure to westbound traffic along Highway 401 was not only justified, but also in practicality, whether it was perceived/determined that the location of the sign on the property was at an angle and size that may be easy to catch the eye of those travelling westerly along the highway.

## 7.6 Parcel F - G - H

## 7.6.1.1 Keep Available for Future Expansion

With the Airport Road realignment suggested in Parcel A, a good portion (estimated at 30%) of Parcel F will host the new road. Considering also that the southern half of the parcel is traverse by a meandering creek, there is at this stage very limited use of the remaining land. One option would be to clear most of the trees on the parcel during road construction and offer the remaining land for grazing or agriculture. Parcel G-H will also be used to relocate Airport Road.

# 8. Rates and Fees Strategy

The general consensus shows that rates at YCC are on average 5% to 25% lower than at similar airports in Ontario and southern Quebec. The airport is leaving money on the table and should potentially raise some of its rate to match industry standards and generate more revenues.

## 8.1 General Airport Fees

### **Parking Fees**

The monthly parking fee rate at YCC is \$69. The benchmarking results show an average of \$80 to \$100 for a general aviation aircraft. Some airports like Wiarton also have a parking fee based on the weight (sometime size – wing span). We recommend YCC raises its monthly parking fee to a minimum of \$80 per month.

## Land Lease Rate

The same situation applies for the land lease rate. YCC's rate is at 0.26 per sq. ft (or \$2,60 per sq. m.). With the Ontario average at \$0.29 to \$0.32 sq. ft., we recommend the land lease rate be adjusted to at least \$0.28 per sq. ft. (\$2.80 sq. m.). All land leases should be indexed at least every five (5) year if not every year.

## Landing Fees

YCC does not charge landing fees. Here again we believe the airport is leaving money on the table. Understanding the objective of landing fees are not to push tenants and clientele away but to ensure infrastructure rehabilitation and maintenance cost are partly funded, we recommend YCC implements landing fees based on aircraft maximum takeoff weight (MTOW) and the type of activities. With most general aviation aircraft weighting less than 2000 kg, we suggest starting fees for aircraft with a minimum 1999kg of MTOW and for all aircraft used for commercial activities such as aerial work (surveillance, photography, spraying,...), charters, military, police activities and business aviation.

The following schedule of fees is an extract from the Wiarton Airport (YVV) schedule of fees and one that could implement at YCC.

Max Takeoff Weight (MTOW)

- 1999-2999 kg \$15
- 3000-4999 kg \$25
- 5000-8999 kg \$50
- 9000-12,499 kg \$100
- 12,500-19,999 kg \$150
- 20,000-39,999 kg \$250
- 40,000 kg or greater \$10 per 1000kg

To support the associated accounting, CAL Unicom services can provide the daily list of aircraft movements with tail numbers and a camera can be mounted on the former PEMAIR hangar to capture flights arriving after daily operating hours.

### Hangar Leasing

There is only one hangar for lease at YCC. The requested price of \$8 per square feet matches industry average. This price could slightly be reduced for a long-term leasing agreement. Looking ahead, if the airport was to build non-heated T-Hangar we recommend a monthly rate around \$400.

#### Other fees

The listing below presents a series of other potential fees YCC should consider:

- Medevac/Cargo Aircraft \$50/flight
- Enplaning Passenger Fee \$8/passenger

**Note**: An enplaning passenger fee is payable by all commercial aircraft operators. Aircraft crew is exempt from the Enplaning Passenger fee

- After Hour Airport Operations/Fuel Service \$150/first hour + \$50/additional hour
- After Hour Snow Removal \$150/hour/equipment
- Car Parking \$20/week, \$50/month
- Airside Escort & Vehicle \$60/hour/vehicle
- Aircraft Tow
   Fee based on MTOW Weight- min \$15
- Lav Service \$75 per Lavatory

## 8.2 Cornwall Aviation Ltd (CAL)

Cornwall Aviation pays an average of \$310 a month to access the airport property and infrastructure. The flight school operates 7 aircrafts (4 C-150 and 3 Piper Seminole). They have their own fuel tanks for which the Airport is not collecting a fuel flowage fee. Cornwall Aviation also provides under contract with the airport UNICOM and welcoming services on weekdays only from 9 am to 4 pm.

To best evaluate this situation, a benchmarking of flight school fees at other airports was conducted. The results show mainly two key components. First, an airport fuel flowage fee should be applied to fuel pumped into planes by CAL as it should apply to any other tenants looking to manage its own fuel. This fuel flowage fee usually varies between \$0.02 to \$0.07 and could be based on monthly fuel purchase bills by CAL.

A second component ties landing fees, to parking fees, to access fees. With CAL operating on their own lands, YCC is at a disadvantage and will require a different model. Most airport usually charge either landing fees (at the larger airports) or a land lease or ramp parking fees. CAL already pays an airport access fee which seem a bit low considering the volume of activity at the school. To estimate what could be a reasonable access rate, we suggest using the airport monthly aircraft parking fee. This fee usually varies from \$70 to \$120 a month per aircraft at general aviation airports. In the present situation, YCC monthly parking fee is at \$69 so such an arrangement would bring CAL's monthly access fee to \$483 (7 aircraft at \$69) and provide the airport with a structured methodology to base its fee on.

# 9. Staffing and Operations

We recommend that the following actions be delivered as part of the phased-in approach commencing in 2021 in order to meet the future staffing and operational needs of the airport. This will also ensure that the airport is in a financially sustainable position prior to proceeding with the runway/taxiway expansion and development of a new terminal.

## 9.1 Staffing

As the top-level needs of the airport expand, become more comprehensive and require a significant level of business development expertise, we recommend some modifications to the existing staffing requirements of the airport.

Firstly, and critical to the day-to-day and continued safe operations of the airport, is the need for an experienced Airport Operations Manager. Secondly, to support the business development, growth and revenue generation needs of the airport, we recommend that a new role in the form of an Airport Business Development Specialist be created.

At the moment and in order to attract, negotiate and secure commercial tenants, the airport needs to determine if it has the right / appropriate staffing resources necessary to respond to those types of top-level requests.

The airport already has an individual who is responsible for the operational requirements of the airport, however, what the airport is lacking is a single source/dedicated individual capable of managing the business development, marketing and brand awareness needs of the airport. The following recommendation sees the Airport Commission maintain two (2) distinct positions (one full time and one part-time) necessary to meet both the operational and business development needs of the airport.

### 9.1.1 Airport Operations Manager

- Employment Type: Full Time
- Reports to: Airport Commission
- Salary: \$45,000
- Job Purpose:
  - This full-time position with benefits, reporting to the Airport Commission. The Airport Operations Manager is responsible for many administrative tasks, and safety sensitive functions in the daily operation of the Airport. This includes a variety of tasks in the Airport Administrative offices and Airside.
- Duties and Responsibilities:
  - Monitoring of airside and groundside operations, providing Unicom advisories to air traffic, and escorting persons/vehicles airside
  - Ensuring the adherence to the Airport Inspection Program and Safety Management System regulations
  - Ensure Airside safety and security through the performance of airfield/runway inspections and wildlife inspections and control.
  - o Delegate to, and supervise Airport Operations & Maintenance staff
  - Working with the Accountable Executive on operational issues as required
  - Ensuring the health and safety of operational staff and airport users
  - Gather and provide information to airport users regarding local air traffic procedures, arrival and departure routes, noise abatement procedures, weather conditions, airport facilities and other local services.
  - Explain and enforce Airport rules and regulations.
  - Ensure Airport policies are followed, make recommendations for policy modifications, or creation.
  - Receive, monitor and respond to community relations as required
  - Participate in the formulation of the annual airport budget, as well as manage the airport's operational budget, and make recommendations for capital expenditures including applications for funding.
  - Initiate emergency response/activation of Airport Emergency Response Plan. May be on-call in the event of an airport emergency. Provide assistance and support for distressed or disabled aircraft and assist in emergency operations by providing first aid, operating rescue equipment, operating radio, providing information, and notifying fire and other emergency services.
  - Contribute to the development and execution of the Master Plan
  - Preparing invoices and monitoring Accounts Receivable
  - Developing Winter Maintenance Plans
  - Professional presentation and interaction with Airport tenants, employees, customers, and industry representatives.
  - Operate heavy equipment including tractors and attachments, loader, snow blower, sweeper, and single and tandem axle trucks for winter and summer maintenance activities including grass cutting, vegetation control, and snow clearing.
  - Performing and recording repairs and maintenance to buildings, equipment, and airport property

- Use of chainsaw, hand and power tools
- Attend and participate in airport training and safety programs
- Qualifications:
  - Post-Secondary Aviation Education or equivalent aviation knowledge/experience
  - TP312E course or equivalent experience
  - Restricted Radio Operators Certificate (ROC-A)
  - Communication skills, written and verbal, to respond to customers and complete required Airport documentation procedures
  - Proficiency with Microsoft Office software
  - Accredited Airport Professional designation
  - Valid "D" Driver's License with "Z" brake endorsement/Heavy Equipment Operator's Certificate, or equivalent experience is an asset
  - Communication skills, written and verbal, to respond to customers, and to interpret instructions and procedural manuals.
  - o Ability to analyze situations in order to problem solve effectively
  - Ability to work independently or as part of a team
  - o Clean drivers' abstract
  - Criminal Record Check Level 2
- Qualifications considered assets to the position:
  - Airfield Lighting Maintenance Course
  - Private Pilot's License or flight training experience
  - Chainsaw safety certification
  - Firearms Possession and Acquisition Permit
  - Current C.P.R. and First Aid training
- Working Conditions:
  - This job is performed approximately 50% of the time, out of doors. The hours for this position include shifts, weekends, statutory holidays, and rotational on call.
  - Due to the nature of this position, applicant must live within one hour's drive of the Airport.
- Physical Requirements:
  - This position requires the ability to lift up to 30 kg, prolonged periods of standing or sitting while using equipment or at a desk, lifting, pulling, and managing heavy equipment and objects.

## 9.1.2 Airport Business Development Specialist

- Employment Type: Part Time
- Salary: \$30,000 (2 days per week)
- Description and Responsibilities:
  - The responsibility of this role is to provide a single point of contact for customer relationship issues, business or technical, that may arise during the term of a customer agreement. The Business Development Specialist will be responsible for

managing ongoing airport and corporate accounts to achieve customer satisfaction and secure account retention.

- Team leading, marketing and promotion of YCC assets, lands, and available buildings; contributing to sales/marketing efforts, including customer presentations and hosting;
- Leading and overseeing contracts negotiation, terms and conditions
- Prepare costing estimates and proposals for follow-on work / add on; and being alert to new business opportunities, and therefore being knowledgeable of all Cornwall Regional Airport systems, products and services to add strategic value to customer needs.
- Ensure that technical, logistical, and operational Customer requests and day-today business needs are met and communicate to the Airport Operations Manager (when appropriate).
- o Manage Customer's requested moves/adds/changes/deletions.
- Provide support to the Airport Operations Manager in the development of Budgetary Proposals for new equipment, addition of authorized users or out of scope.
- The Airport Operations Manager and the Airport Business Development Specialist will work on a mutually agreeable format and content of the reports.
- Minimum Qualifications:
  - Experience as an Business Developer, Relationship Manager or Sales Manager ideally within the aviation and aerospace industry.
  - Possess organizational, communication, and interpersonal skills and a proven track record of successful account management.
  - Must be a self-starter with the ability to manage day-to-day account management issues autonomously.
  - Experience with Microsoft Word, Excel, Powerpoint and other Microsoft Office tools as well as financial management experience.
  - Bachelor's degree and 5 years of relevant experience OR an Advanced degree and 3 years of relevant experience OR In absence of a degree, 9 years of relevant experience is required.
  - Knowledge in Contract Management and Administration.
  - Knowledge of airport and aviation industry.

## 9.2 Revenue Generation

Once the staffing needs are in place, the Airport must focus on generating revenue. In order to do this, the airport requires the appropriate tools (marketing) and product (hangars) by which to present to interested/prospective investors.

## 9.2.1 Marketing Materials

To assist the Business Development Specialist in generating airport revenues, it is crucial that this individual is provided with the appropriate tools to aid in the process. This also offers the added benefit of giving the airport a professional image/brand which the Airport Commission is looking to convey. A full breakdown of the proposed marketing tools is expanded upon in section 11.2.

### 9.2.2 Hangar Promotion and Leasing

The Airport Business Development Specialist will also responsible for identifying and securing leasable contracts to support the commercial, corporate and private hangar development as part of Parcel A expansion (see Figure 23 in section 7.1.2).

In addition, will be the need profile, garner interest and negotiate contracts to support the development of the general aviation hangar farm development in Parcel C. This would be based on the construction of a new group of stand-alone hangars.

To carry this momentum forward, we also recommend that the Airport Business Development Specialist launch a GA attraction campaign aimed at promoting the development of a new T-Hangar building complex comprised of 6 to 10 doors and a series of stand-alone hangars.

On the basis that the airport is or close to achieving financial sustainability by this point, the airport should be progressing towards meeting its runway expansion and taxiway/terminal development obligations. During this stage, the Airport Business Development Specialist will be responsible for applying to and securing project financing; securing an experienced engineering firm to act as the project lead; and continuing to market and secure leases with the balance of aircraft hangars situated on Parcels A and/or C.

## 9.3 Pre-Construction and Project Execution

Once project financing and the retained engineering firm are in place, the objective is to complete necessary engineering drawings for the runway expansion and taxiway development, and complete architectural drawings for the future terminal building. Following the completion of preconstruction phase, the project should then move towards commencing construction.

During this time, the Airport Business Development Specialist will continue to actively promote, negotiate and secure leased contracts with any of the remaining aircraft hangers situated on Parcels A or C. This may also be a strategic time to begin promotion of the development of a future light industrial park (in the balance of Parcel C) which offers airside and groundside access for aerospace and aeronautic companies (or others as the market dictates).

## 9.4 Expanding Development into Parcels B, D and E

With the expanded runway and development of the new taxiway and terminal building, including increased GA activity (as a result of the increase in tenancy), the airport will become more attractive, competitive and strategic location for additional commercial/industrial investment. Based on market conditions (during this phase), is may now be appropriate to reinvestigate the proposed non-aviation projects.
## **10. Funding Strategies**

Over and above the revenues generated by the development of the various concepts and the provincial and federal funding programs the Airport can apply to, our team looked at the overall taxation generated by the airport and other funding mechanisms.

With the airport located in the Township of South Glengarry, all taxation revenues go to this Municipality. This situation places the City of Cornwall in an expense mode only. The overall development concepts presented in this report require various airside and groundside investment from the Airport.

As such, we would like to recommend an alternate funding strategy, one that will look at providing a more equitable cost and revenue model for all partners and help support future development and ease recurrent discussions at the governing level.

## **10.1 Airport Development Fund (ADF)**

The development of aviation and non-aviation uses at the airport will be beneficial for the whole regional economy bringing new investments, creating jobs and increasing the taxation revenue base. As such, to help finance investment attraction activities and infrastructure rehabilitation and construction projects tied to these new investments, we suggest both partners negotiate a tax sharing agreement on new taxes only generated through this plan and moving forward.

The purpose of this fund is to provide the long-term funding requirements to meet the airport infrastructure maintenance and rehabilitation needs and reduce annual municipal financial involvement.

The ADF is based on leveraging property taxation revenues generated by NEW (2021 and beyond) taxable investments. Again, the creation of this fund will require the City of Cornwall and the Township of South Glengarry to negotiate a joint agreement.

This agreement could allow for the airport to obtain a portion of (up to 100%) any new taxes levied from the construction of new buildings on airport lands. The ADF would mandatorily assign these revenues to the maintenance and rehabilitation of YCC infrastructure. As a negotiation point, if taxation revenues were to provide more than the required funding, the extra revenue could be returned back to the Municipalities.

## **10.2 Government Funding**

The Airport Business Development Specialist will be responsible for verifying existing, while identifying new funding sources and ensuring that the proposed Airport projects match the eligibility requirements of the identified funding program(s). At the time of writing this report, the following funding programs should be revisited (during this phase) to ensure applications are still being accepted and that sufficient funds remain to be disbursed:

- The Ontario Community Infrastructure Fund (OCIF) provides funding for small, rural and northern communities to develop and renew their infrastructure<sup>10</sup>
- Airports Capital Assistance Program (ACAP)<sup>11</sup>
- New Building Canada Fund Provincial-Territorial Infrastructure Component Small Communities Fund (PTIC-SCF)<sup>12</sup>

## **11. Marketing Plan**

This section examines the marketing strategy and communication tools required by the Airport/Commission to market and promote the Cornwall Regional Airport and onsite services. The plan also evaluates the airport's utilization of the diverse media platforms to reach its targeted clienteles.

The 2017 Raymond Chabot Grant Thornton Development Opportunity Assessment indicated that an aggressive marketing strategy [is needed] 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. At the time of this study, an online presence in the form of a website (www.cornwallregionalairport.ca) is active online with basic information about the airport and onsite services. Furthermore, an active Facebook page (www.facebook.com/CornwallRegionalAirport) is also in use, however, only had two (2) posts added in 2019; no social media activity in 2018; and some visible activity in 2017 (when the Facebook page commenced).

A further search also revealed that YCC is profiled on the <u>City of Cornwall website</u> and that YCC has nine (9) 5-star ratings on Google Reviews and the following comments:

- "Beautiful clean airport with 24-hour 100ll and Jet A"
- "Nice place"
- "By chance, everyone at the flight school is very nice! Take us to the simulation classroom, hangar, single-engine aircraft and twin-engine aircraft. I also introduced a lot of information about the airport to us, and sent me a souvenir. I hope to come here again!"

The 2017 Development Opportunity Assessment also indicated that although the management contract does not 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.

<sup>&</sup>lt;sup>10</sup> https://www.ontario.ca/page/municipal-infrastructure-support-for-communities

<sup>&</sup>lt;sup>11</sup> https://tc.canada.ca/en/programs/airports-capital-assistance-program

<sup>&</sup>lt;sup>12</sup> https://www.infrastructure.gc.ca/prog/programs-infc-summary-eng.html#scf

The following contains a series of recommendations on how the airport should/could communicate its value proposition to recreational pilots and executive jet operators and other potential businesses for the landside use opportunities.

## 11.1 Branding, Image and Key messages

The first step in any development initiative is to create a brand image around which all promotional concepts and efforts will revolve. More concretely, it is a question of defining the identity of the Cornwall Regional Airport and what makes it unique in order to more effectively promote the concepts and projects, both to the different target clienteles (aviation pilots, aircraft owners, tourists and businesses) as stakeholders and potential investors. By definition, branding presents a vision and a clear and coherent message that communicate what makes the essence of a destination, that is, what it is associated with and the values it advocates.

Even beyond the promotion, it facilitates the benefits of successfully establishing a brand image are manifold, contributing to the development of a community in several ways, including:

- Raising awareness of the airport role and the overall community (regionally, provincially, in eastern Canada and in the United States);
- By strengthening the feeling of belonging, well-being and pride of users and citizens;
- Attracting new businesses and industries as well as investments and events; and
- By contributing to tourism;

The recommendations related to the YCC brand stem directly from the research and analyzes presented above, based on the strengths and opportunities identified through this mandate and the elements raised during the consultations. Given the willingness of the Airport Commission and regional stakeholders to move the airport toward a full aviation hub, we suggest building the heart of the brand some of the present asset and the envisioned one's.

Below, we have listed, in a non-exhaustive way, the keywords and ideas around which we suggest building the brand image:

Aviation Training	Nav Centre	Aviation Hub	Tourism
Cornwall	General and Business	Logistics	Cornwall
Aviation	Aviation	Manufacturing	Aerial Work

The City of Cornwall being the major business center of the region, the airport's brand image should also take this into account.

Here are some ideas for key messages that could be put forward in airport communications and marketing tools:

- Cornwall Regional Airport, your gateway to the 1000 Islands!
- Cornwall Regional Airport, train, work, plane and reside!
- Cornwall Regional Airport a world of opportunities! (The aim here is to position the airport as a must-see whether for business or pleasure).

## 11.2 Marketing tools

Once the brand image is well defined, you must ensure that it is reflected in communication tools. This section presents the main tools recommended for carrying out airport promotion and development concepts. Given the future markets targeted by the development concepts and the current presence of an international clientele in Cornwall, all of these tools could be translated into French and Spanish.

## 11.2.1 Website

The airport's website is an important vehicle and an essential medium for promoting the brand image to different audiences. The site could also contain new projects such as the tourist packages, marketing material and images to support the construction of new hangars and others activities. In general, the current content is concise but sharp and includes the essential elements for pilots and users. The site could benefit from more recent updates, information on charters, land available for hangars and other uses and other mains operators present or users of the airport. The site could also benefit from a series of links to various partners in the sectors of tourism, economic development, the City, the Municipality, the chamber of commerce and any other organization linked to the reception of all types of visitors.

#### Website recommendations

- In the website create select buttons for the selected development concepts with images and supporting text.
- Technical information from the airport must be easily accessible, as well as weather data.
- Clearly present the key elements of the tourist package offer, the development opportunity for hangars and the value proposition.
- Importance of establishing reciprocal links with partner sites, relevant and / or influential to improve the visibility and positioning of the airport.
- It is important that the content is always up to date. Special attention should be paid to website SEO in order to maximize brand presence and YCC's image in search engines.

## **11.2.2 Electronic newsletters**

Electronic newsletters make it possible to maintain regular contact with customers. This medium can be used to promote new products, promotions, and even share information of interest with users. Also, they can simply serve as a reminder and help maintain brand awareness among various customer segments. It is possible and even recommended to create several mailing lists and send personalized newsletters to different target segments.

Nevertheless, given the regulations, it is highly recommended to build a mailing list through a registration system, in order to obtain the consent of the recipients. To do this, a registration link should be available online, on the airport's website, partner sites and, where applicable, social networks. Pilot associations could also be asked to share links and registration forms with their members (see a non-exhaustive list of associations in Table 9).

#### **Recommendations related to electronic newsletters**

- We recommend creating a newsletter with the associated mailing list to reach the target clienteles of the selected concepts. An average of 3 to 4 mailing per year is suggested (at least one per season).
- In order to build the mailing list, it is interesting to include a registration link on the website as well as any other relevant platform (social networks, disseminate registration sheets at partner businesses or during events) in order to avoid concerns with the Canadian anti-spam law governing this type of process.
- A telephone campaign with airport managers, pilots' clubs and associations and the aircraft owners themselves can also be used to enhance an email address list

## 11.2.3 Brochures

Despite the success of digital, paper brochures still provide an advantage in providing detailed information. This effectively makes it possible to distribute tangible material support at events or at the airport itself. Several types of brochures could be developed depending on the concepts selected. Nevertheless, we recommend creating a general information brochure presenting the airport's key messages and development opportunities. As with the website, it is important to ensure that the visual is clear and clean.

#### **Brochure recommendations**

- It is recommended to create separate brochures for each of the proposed concepts. Maximum length of 1-2 pages.
- Neat visual presentation.
- Emphasize images.
- Explain the value proposition and key location advantages.

#### 11.2.4 Social networks

Marketing on social networks is developing very quickly, in particular on Facebook, Twitter, LinkedIn, Instagram and YouTube. Each of these supports offers to create an account and a dedicated page that will allow you to interact directly with customers. Some networks, like LinkedIn, also offer interesting prospecting tools. As interactivity and consistency of posting are key success factors, these tools, while often free, may require the allocation of resources to really pay off.

#### Social media recommendations

- Taking into account the suggested tourism positioning, improving and adding frequent content on Facebook should be considered in order to obtain more "likes" and "followers", which will make it possible to broaden the reputation of the airport on this platform.
- In the same vein, the YCC could also create and promote a Twitter and YouTube page \*.
- To another extent, networks such as LinkedIn could help promote concepts through posts in groups dedicated to corporate aviation, tourism and aerial work. This professional media could above all help to develop partnerships.

\* These two media should only be considered if the airport or the Commission has the human resources necessary for the frequent updating of these platforms. Also, in the case of YouTube, a certain amount of content (video) should be designed before using this medium.

## 11.3 Marketing of development concepts

Among the various development concepts proposed, it is relevant to develop more in-depth marketing strategies for tourist packages and the corporate and general aviation hangars. This section presents the most relevant key messages, target audiences, communication channels and marketing tools to attract and retain aviation tenants.

## 11.3.1 Tourist packages for pilots

We suggest that the airport identify tourism partners to develop (refine) and offer the four suggested packages. In addition to integrating its packages into the marketing tools put forward by regional tourism organizations, the airport could develop a paper document (one double-sided page) presenting the packages as well as the technical data of the airport for the pilots. The same information could be posted on the airport's website. The packages can therefore be promoted via various tools such as the site, the newsletter, hand-delivered during events and available at the airport and in tourist offices. Additionally, advertising space could be purchased in trade magazines for general aviation (see Table 19 - page 72).

#### 11.3.2 Corporate and General aviation hangar development campaign

YCC is already interest from a few pilots and businesses in developing private and commercial activities at YCC. As such, the airport should launch a sales and marketing campaign promoting the space available and the airport's willingness to build certain hangars for short- and long-term rental.

We suggest that this campaign also uses print media, the newsletter and the website as the main communication tools. This could all be supported by a campaign to various aviation service providers, commercial operators and aircraft owners. The email list used for tourist packages could be enhanced to include commercial businesses in the sector.

#### 11.3.3 Target audiences

The aviation related development concepts target aircraft owners, corporate flight centers, aircraft manufacturers and other aviation enthusiasts whose primary goal is to live their passion to the fullest or find the best suitable location for their business.

Given the average range of recreational aircraft, this targeted clientele is located in Ontario, southern Quebec, in nearby New-York state and potentially Vermont and New-Hampshire. In term of aircraft manufacturers, the first market should the Montreal and Ottawa regions where over 300 such manufacturers are located. But since this is a worldwide market, YCC should also look to get involved with investment attraction partners from the provincial and federal government to be recognized as one of the many contenders on this market.

We propose to target as a priority the densest and most urban regions, including Montreal, Ottawa, Syracuse, Kingston, the greater Toronto and all-around Lake Ontario. These markets concentrate a large number of pilots who are particularly inclined to escape the city in their spare time.

#### 11.3.3.1 Communication channels

Numerous communication channels will allow the dissemination of the future offer of the airport. Advertisements in print media, such as regional and trade aviation journals, and electronic media, such as specialist websites, represent powerful and relevant dissemination channels.

#### **Potential media**

The high cost of some traditional written media (several thousand dollars in some cases) led us to consider additional promotion and communication strategies to reach the pilot community. Of the media proposed in Table 37, only Aviation Magazine and the Adventure Pilot website require significant investment. Pilot associations could also be approached to relay the message to their members, or to develop other forms of partnerships. These organizations sometimes offer the option of placing banner ads on their website and posting news through letters to members or social media.

Media	Category / Details
	Aviation Magazine is now the most important aviation magazine in Quebec
	and is the official publication of the Association Québécoise du Transport
Aviation Magazine	Aérien (AQTA). Distributed quarterly to more than 4,000 subscribers, Aviation
	Magazine is the only publication to directly reach decision-makers and
	stakeholders in the Quebec airline industry since 1985.
	Wings magazine is Canada's only premiere national aviation magazine,
	providing comprehensive coverage of commercial, corporate, general and
	military aviation in Canada and around the world.
WINGS	
	Wings magazine is behind many of Canada's leading aviation initiatives, such
	as the Careers in Aviation guide and expos, the annual FBO Survey, MRO
	Directory, Industry Roundtable, CBAA showguide and directory, and more.

#### Table 37 - Media available for the promotion of tourist packages and general aviation hangars

	Skies' audited circulation features over 60,000 readers and includes
	owner/operators of turbine aircraft in Canada and the U.S., both fixed- and
	rotary-wing.
Skies Mag	
5	Delivered bi-monthly, Skies is also complemented by our online brands,
	Skiesmag.com and Skies News e-newsletter, giving our readers a daily dose
	of the most current news from our diverse and dynamic industry.
	Canadian Aviator is Canada's independently owned magazine for pilots,
	future pilots and those interested in Canadian aviation. It is owned by Steve
	Drinkwater and edited by Russ Niles. Both Steve and Russ are aircraft
	owners and pilots of a Piper Cherokee and a Cessna 140 respectively.
Canadian Aviators	Canada has a vibrant aviation industry and we cover it from coast to coast
	featuring the people, businesses and aircraft that make our country a world
	leader in aviation. Every story that appears in our magazine has a Canadian
	connection and with that focus our readership is steadily growing. Canadian
	Aviators clearly want a truly Canadian aviation magazine.
Letters / Communications t	o members
	COPA is the most important aviation associations in Canada. It is possible to
0000	advertise in COPA magazine, which covers all of Canada. COPA also has a
СОРА	number of chapters across Ontario and Quebec. It would be interesting to
	see the information could be transferred to their members.
	In Quebec, several associations and flying clubs organize aviation activities
Quebec Association of pilots	in their respective regions. These groups often have Facebook pages and
and aircraft owners	distribute information to their members via email. Associations per region:
	Mauricie / Mont-Laurier / Mascouche / St-Jean-sur-Richelieu
American Ourners and Bilate	The American counter part of COPA with many chapters throughout every
American Owners and Pliots	US state. AOPA offer the same marketing tools – need to see if they can be
Association	regionalized.
Websites / Social Media	
Les Ailes Québécoises	Les Ailes Québécoises is the largest group of members of general aviation
(Facebook page only)	pilots in Quebec with more than 2,300 active members.
	Pilotes Québec is one of the most active websites in Quebec concerning
Quebec Pilots	everything related to the world of aviation. The site includes a News section,
	and their Facebook page is followed by over 1,270 people.
	This association promotes general aviation across the province and has more
Association of aviators and	than 500 "followers" on their Facebook page. This pilot network has contacts
bush pilots of Quebec	in all administrative regions of Quebec
	Adventure Pilot lists hundreds of destinations and establishments across
Adventure Bilet	Auventure Find hists hundreds of destinations and establishments across
Adventure Filot	allows pilots to search for destinations based on their needs and interests -
(interesting to reach a larger	fly-ins hikes colf museums etc
markety	http://www.adventurepilot.com
	http://www.adventurepilot.com

We recommend the placement of advertisements in Aviation Magazine when the budget allows it in order to promote the tourist packages and hangars. The other organizations above should also be contacted in order to verify the possible frequency of publications and the cost that could be attached to them.

## 11.3.3.2 Events

Air shows and fly-ins, which bring together thousands of pilots each year, represent the perfect opportunity to reach target customers and promote pilot escapade packages and the possibilities of renting and building hangars at the airport. Airport promoters could choose from the following (non-exhaustive) list two (2) to three (3) events to attend annually in order to establish direct contact with target customers. Although a number of events take place in the regions, the fact that they attract pilots from all over Quebec and Ontario makes them relevant targets. Most events offer the option of renting a booth.

#### Table 38 - List of suggested events to join the pilots

Events	Location	Annual Dates
Les Faucheurs de Marguerites	Sherbrooke, Qc	3rd weekend of June
Bagotville International Airshow	Bagotville, Qc	4th weekend of June
Eastern Township Airshow	Bromont, Qc	Usually, mid-September
Quinte International Airshow	Trenton, Ontario	Bi-Annual – late June
Great Lakes International Airshow	St Thomas, Ontario	Late June

Among the most relevant events for the promotion of tourist packages and hangars are pilots' gatherings. These events almost exclusively include pilots and their families, unlike the "Air Shows" which have a larger audience. It is therefore relevant to frequently consult the website of the pilots' associations to identify relevant upcoming events.

Finally, we suggest that the airport organize an annual pilot gathering at the airport. This event would provide an opportunity to meet pilots from the region, but also from the entire province, and tell them about new features offered at the airport, particularly in terms of tourist packages and the development of hangars. These events should be promoted through pilots' associations and on the airport's various media platforms (website and social media). The event could take the form of a barbecue during the summer season.

# 12. Development and Action Plan

## 12.1 Phase 1 – Parcel A and C Hangar Development

Strategic Priorities	Objectives	Actions (Tasks)	Timeline
		YCC Commission to hire/retain an Airport Business Development Specialist (marketing and investment attraction lead)	Q2-2021
	Designate a marketing	Site survey required to identify and resolve gaps to becoming "investment ready"	Q2-2021
	lead and launch	Finalize new fees and rates chart	Q2-2021
	campaign	Prepare supporting marketing materials and overall YCC branding and marketing campaign	Q2-2021
		Allocate required budget	Q2-2021
Phase I		Network with tourism partners to finalize fly-in package concepts and be ready to host clients	Q4-2021
	Develop Fly-In Packages Prepare marketing material including email list of aircraft owners and pilots/COPA chapters, member, other pilots associations	Identify and confirm funding (if required)	Q4-2021
		Q4-2021	
		Launch marketing campaign	Q4-2021
	Fill and expand Parcel	Launch promotional campaign for Parcel A (commercial hangar development) and Parcel C (general aviation hangar farm)	Q4-2021
	A and C	Secure land leases on Parcels A and C	Q4-2023

## 12.2 Phase 2 – Expand Infrastructure – Parcel A and C

Strategic Priorities	Objectives	Actions (Tasks)	Timeline
	Implement the Airport	Establish % of taxes going to the New Airport Fund	Q1-2024
Phase 2	concept	New taxes sharing model between Airport owners	Q1-2024
	Raise funding for the various projects (runway expansion	Review and prepare an updated detailed short and long- term budget forecast for the various projects tied to Commission choices and market evolution	Q3-2024
	taxiway development,	Identify large funding programs and opportunities	Q3-2024

	realignment of Airport Road)	Prepare required funding application for all projects	Q3-2024
		Lobby and advocate	Q3-2024
		Design and construction plans	Q1-2025
	Plan Runway 28 Expansion and the	RFP	Q4-2025
	construction of Taxiway Charlie	Launch construction	Q1-2027
		Construction supervision	On-going
		Preliminary Design and construction plans Terminal, main ramp and associated car parking	Q1-2025
	Plan construction of the	Final Design and construction plans	Q2-2025
	associated	RFP	Q4-2025
	Infrastructure	Launch construction	Q1-2027
		Construction supervision	On-going
		Design and construction plans	Q1-2025
	Relocation of Airport	RFP	Q4-2025
	Road	Launch construction	Q1-2027
		Construction supervision	On-going
		Prepare marketing material and start promoting Parcel A present and future lots and hangar	Q1-2024
		Confirm boarding room rental by CAL students or others	Q1-2024
		Identify and attract a restaurant owner/operator	Q2-2024
	Launch development of	Prepare associated contracts	Q2-2024
	Parcel A	Launch marketing campaign	Q3-2024
		Identify launch tenant for the Terminal hangar space	Q3-2024
		Identify other usage for the terminal	Q3-2024
		Identify tenants/investors for Parcel A hangars	on-going
		Prepare Aircraft Access road design and plans to allow construction of larger hangars and T-Hangars	Q1-2024
	Plan the construction of	Evaluate if outside funding is required (if yes - prepare funding applications)	Q2-2024
	Parcel C Roads	Prepare design and plan for Parcel C Industrial Park Access Road	Q4-2024
		RFP for one or both projects	Q1-2025

		Launch construction	Q2-2025
		Project and construction supervision	On-going
		Design and construction plans	Q1-2024
Plan the Airport Sign construction	Plan the Airport Sign	RFP	Q2-2024
	construction	Launch construction	Q3-2024
		Construction supervision	Q4-2024

# 12.3 Phase 3: Focus on the remaining lands (aviation and non-aviation)

Strategic Priorities	Objectives	Actions (Tasks)	Timeline
		Designate YCC Parcel B project lead to supervise all activities	2028
	Launch Development	Prepare marketing material	2028
	of Parcel B	Prepare list of targeted prospects	2028
		Launch promotion campaign for Parcel B available and future lots	2028
		Prepare Parcel B Access road design and plans	2028
		Identify, apply and negotiate funding	2028
	Plan the construction of Parcel B Roads	RFP	2028
Phase 3		Launch Construction	2028
		Construction supervision	2028
		Designate YCC Parcel E project lead to supervise all activities	2028
		Prepare marketing material	2028
		Start promoting Parcel E lots	2028
	Launch Development	Define concept and cost for an Airport Sign facing the 401	2028
		Identify and confirm the required funding	2028
		Sell publicity space on the Sign - prepare sales contracts	2028
		Prepare list of targeted prospects	2028

## **13. Budget Summary**

Table summaries the revenues and expenses as outlined in Phases 1, 2 and 3. Important to note is that without the cost of the proposed Airport Business Development Specialist, the airport's five-year estimated surplus moves to a positive balance of \$83,823. However, it is important to recognize that an investment in such a position is a strategic investment, necessary to spur, stimulate and secure additional investment(s) and alternate sources of revenue needed to continuously grow and expand airport operations. Throughout this report, attempts were made to present and consider the financial analysis from the perspective of both a landlord and an airport-owned scenario. For the purposes of this master budget, the landlord perspective was utilized (to act as a baseline by which the Airport Commission may build upon). It can also be argued that it is the more conservative (low risk) options of the two despite the potential for a larger return on investment by following the airport-owned scenarios.

	5-Year Total	10-Year Total	15-Year Total	20-Year Total	25-Year Total	30-Year Total
Phase 1						
Revenues						
Parcel A: Land Lease of 2 x Commercial Hangars (Landlord Scenario)	\$30,438	\$74,908	\$120,458	\$167,087		
Parcel A: Fly-in Packages for GA Pilots	\$31,485	\$67,553	\$128,715	\$203,462		
Parcel C: GA Hangar Park Development (Landlord Scenario)	\$106,066	\$424,220	\$835,780	\$1,251,894		
Sub-Total:	\$167,989	\$566,681	\$1,084,953	\$1,622,443	\$0	\$0
Expenses						
Parcel A: Land Lease of 2 x Commercial Hangars (Landlord Scenario)	\$0	\$0	\$0	\$0		
Parcel A: Fly-in Packages for GA Pilots	-\$26,546	-\$38,999	-\$52,748	-\$67,928		
Phase 1: Estimated Marketing Activities and Costs	-\$25,500					
Parcel C: GA Hangar Farm Development (Landlord Scenario)	-\$32,120	\$64,240	\$96,360	-\$158,480		
Staffing: Airport Business Development Specialist	-\$156,000	-\$327,000	-\$513,000	-\$714,000		
Sub-Total:	-\$240,166	-\$430,239	-\$609,360	-\$940,408	\$0	\$0
Total:	-\$72,177	\$136,442	\$475,593	\$682,035	\$0	\$0

#### Table 39 - Proposed Budget to Support Immediate Priorities

	5-Year Total	10-Year Total	15-Year Total	20-Year Total	25-Year Total	30-Year Total
Phase 2						
Revenue						
Parcel A: Hangar and Airport Terminal with taxation included		\$166,843	\$579,356	\$1,265,855	\$1,845,211	
Parcel C: Light Industrial Park (Landlord Scenario)		\$73,892	\$374,931	\$933,679	\$1,702,243	
Parcel E: Airport Single-Sided Billboard Sign (Hwy 401 Frontage)		\$15,600	\$32,700	\$51,300	\$71,400	
Sub-Total:	\$0	\$256,335	\$986,987	\$2,250,834	\$3,618,854	\$0
Expenses						
Parcel A: Runway Expansion (Loan Repayment)		-\$203,565	-\$407,129	-\$610,694	-\$814,259	
Parcel A: Taxiway Charlie Development (Loan Repayment)		-\$85,524	-\$171,048	-\$256,572	-\$342,096	
Parcel A: Airport Road Realignment and Expansion (Loan Repayment)		-\$132,416	-\$264,833	-\$397,249	-\$529,665	
Parcel A: Infrastructure maintenance		-\$14,000	-\$42,500	-\$71,000	-\$100,000	
Parcel C: Light Industrial Park (Landlord Scenario)		-\$306,250	-\$627,083	-\$947,917	-\$1,268,750	
Parcel E: Airport Single-Sided Billboard Sign (Hwy 401 Frontage)		-\$22,035	-\$22,035	-\$22,035	-\$22,035	
Sub-Total:	\$0	-\$763,790	-\$1,534.628	-\$2,305,467	-\$3,076,805	\$0
Total:	\$0	-\$507,455	-\$547,641	-\$54,633	\$542,049	\$0
Phase 3						

## **14. Conclusions**

In conclusion, the Business Development Plan for Cornwall Regional Airport provides a series of strategic recommendations supported by a comprehensive and in-depth market review and financial analysis to move the airport into a financially sustainable operating position.

The proposed action plan details a series of activities which requires that the airport include a future runway/taxiway expansion and the construction of a new terminal building. This major development is required to support the growing aviation and aerospace activity which has been planned for the airport. This infrastructure investment will also act as a catalyst to further propel and position the airport as a leading competitive location for future business investment and development.

Moving forward, the airport has the ability to become a low-cost, well maintained and full-service aviation hub, which benefits from its proximity to major metropolitan centres such as Ottawa and Montreal; visibility and immediate access from Highway 401; unrestricted airspace; little-to-no air traffic congestion; limited residential housing in the vicinity; and short distance from the Cornwall-based Nav Centre. At the same time, the airport must think more strategically about how to articulate and demonstrate its access to labour; ability to attract talent to the area; availability of local amenities to retain local talent; airport infrastructure and site services to support aviation, aerospace or light industrial activities; capacity to offer incentives to compete against other competing jurisdictions (or airports); and being cognisant of various supply chain activities so that tenants can easily access the materials they require.

In addition to addressing and demonstrating these key priorities to prospective investors, so too is the need to be "shovel-ready" to the point where surveying, site plan, servicing, among other requirements are in place to ensure that a prospective investor can begin to move forward in the short-term with their development plans and can avoid significant delays if these components are not already in place.

To help with becoming shovel-ready, the proposed Airport Development Fund, through a tax sharing agreement on new taxes generated through this plan and moving forward, is designed to help finance investment attraction activities, infrastructure rehabilitation and construction projects tied to new investments at the airport.

None of these proposed activities can take flight without the right dedicated support staff. While this report revisits the role of a dedicated Airport Operations Manager, it does recommend the need of a devoted Airport Business Development Specialist, capable of handling the sales and marketing needs of the airport. Ensuring that this individual has the right resources, albeit self-developed or done in collaboration with other municipal partners, will be crucial for starting conversations with prospective investors.

# **Appendix 1**

## Focus Group Participants

- Abram Benedict, Grand Chief of Akwesasne, Mohawk Council of Akwesasne
- Barry Franklin, RD Wing 5/ SD 379, 661 SQNs.
- Bill Lister, EMS Chief, City of Cornwall Emergency Medical Services
- Boyd Parsons, Operations Officer, GS5
- Claude Saint-Martin, retired Air Canada flight examiner and pilot
- Dave Small, Cornwall Aviation
- Earle DePass, President, Cornwall Flying Club
- Eric Lamontagne, President, Morbern
- Ewen MacDonald, General Manager of Infrastructure Services, Township of South Glengarry
- Fergie Legge, Treasurer COPA Flight 59
- Mr. Frank lives in district, aviation enthusiast
- Garry Brown, Director, International Training Programs and Delivery, NAV Canada
- Greg Pietersma, Executive Director, Cornwall Chamber of Commerce
- Jean-Danielle (JD) Houde
- Jennifer Haley, Dean, Cornwall Campus, Dean, Cornwall Campus
- Jessie Ming- redevelopment of school
- Jim McDonell, MPP, Government of Ontario
- John Rattray, Director, North American Sales, TRU Simulation and Training
- Joyce Gravelle, Cornwall Manager, MPAC
- Kathy Small, Cornwall Aviation
- Kevin Sutka, Past President, COPA Flight 59
- Lachlan McDonald, GM of Corporate Services/Treasurer, GM of Corporate Services/Treasurer
- Lesley Thompson, Executive Director, Community Future Development Corporation -Cornwall and the Counties
- Martha Woods, Executive Director, Eastern Ontario Training Board
- Martin Lang, Councillor/Commission Members, Township of South Glengarry
- Mat Eamer, Administrative Sergeant, OPP Stormont Dundas Glengarry Detachment
- Megan Bingley, Economic Development & Tourism Coordinator, Township of South Glengarry
- Pat Elliott
- Pierre Roy, Retired Air Canada Mechanic / Project Manager
- Stephanie Jaworski, Councillor, Township of South Glengarry
- Stephen Alexander, Former General Manager of Planning, Parks and Recreation, City of Cornwall
- Stephen Small, Airport Manager, Cornwall Regional Airport
- Tim Mills, Chief Administrative Officer, Township of South Glengarry
- Tom Hughes, Vice President, Weaving Baskets Group

## **One-on-One Participants**

- Amy Malyon, Tourism Coordinator, City of Cornwall
- Bob Gauthier, President, Seaway Express
- Bob Peters, Division Manager, Economic Development, Cornwall Economic Development, City of Cornwall
- Boyd Parsons, Operations Officer, GS5
- Claude Saint-Martin, retired Air Canada flight examiner and pilot
- Dave Small, Cornwall Aviation
- Ewen MacDonald, General Manager of Infrastructure Services, Township of South Glengarry
- Frank Prevost, Mayor, South Glengarry / Airport Commission Chair
- Garry Brown, Director, International Training Programs and Delivery, NAV Canada
- George LaPierre, Supervisor Maintenance Services, Montreal System, Supervisor Maintenance Services, Montreal System
- Gord Small, Cornwall Aviation
- Kathy Small, Cornwall Aviation
- Katie Nolan, Agriculture and Rural Economic Development Advisor, Ontario Ministry of Agriculture, Food and Rural Affairs
- Kevin Lajoie, Tourism Officer, City of Cornwall
- Marty Benson, President Benson Group
- Nick Seguin, Tourism, United Counties of Stormont, Dundas and Glengarry
- Ruth Vogel, Member Service Representative, Ontario Federation of Agriculture
- Sean Helmkay, Manager Warranty, Customer Services and Support, Bombardier
- Sonia Dignard, Member Service Representative (Glengarry, Stormont, Prescott, Russell), Ontario Federation of Agriculture
- Stephen Alexander, Former General Manager of Planning, Parks and Recreation, City of Cornwall
- Stephen Small, Airport Manager, Cornwall Regional Airport
- Tim Mills, Chief Administrative Officer, Township of South Glengarry
- Tom Hughes, Vice President, Weaving Baskets Group
- Tom Kenab
- Trevor Baker, Manager of Operations, United Counties of Stormont, Dundas and Glengarry