



CONFIDENTIAL

STRATEGIC PLAN AND BUSINESS CASE: FINAL REPORT

PEMBROKE AND AREA AIRPORT

DECEMBER 2017

—
WSP Canada Inc.
1611 Queensview Drive, Suite 300
Ottawa, ON N2B 8K2
Phone : +1 613-690-1083
www.wspgroup.com



EXECUTIVE SUMMARY

The Pembroke and Area Airport Commission has identified the need to prepare a Strategic Plan and Business Case. The Airport is at a critical decision making point for its future with a number of differing opinions about the importance of the Airport to the six municipalities that provide financial support, their citizens, and Garrison Petawawa. The intent of this report is to identify current uses of the Airport, articulate strategic decisions that should be made in the near future, and study potential business opportunities. In the completion of this report, WSP Canada Inc. undertook a review of background information, completed site visits to the Airport, and consulted with numerous stakeholders.

The report outlines an overall Airport Vision and Airport Mission:

Airport Vision Statement: An air transportation facility critical to the economic and social prosperity of the six municipalities it serves.

Airport Mission Statement: The provision of safe, secure and viable airport facilities and services which meet user needs and support the community's economic development goals.

These are further supported by specific objectives to help enhance the Airport and guide its future development.

Through research, WSP identified that the Pembroke and Area Airport offers the six owner municipalities, businesses, and Garrison Petawawa important services, which include, among others:

- Provides Garrison Petawawa “critical infrastructure” that supports the base; both in terms of its helicopter operation, but also training and deployment and access to the airfield for fixed wing aircraft. The Garrison employs 6,000 military and civilian personnel and is an economic driver and largest employer in the region. It also provides \$44,167 (Year 2016) in funding to the Airport operation in the form of a subsidy.
- Provides ORNGE, and in turn patients of the Pembroke Regional Hospital, the Deep River and District Hospital and St. Francis Memorial Hospital in Barry's Bay, with a fuel stop and access point for rotary and fixed-wing aircraft. Without ORNGE, additional ambulances would likely be required, which could increase costs to local residents and impact response or travel times and the overall quality of healthcare in the region. Costs associated with up-staffing an additional ambulance vehicle would be approximately \$1M. Organ donor transfers are also facilitated through ORNGE.
- Bearskin Airlines utilizes Pembroke to transport students, who require specialized schools for blind, low vision, or deaf-blind, to take them to school throughout Ontario.
- The Ontario Ministry of Natural Resources and Forestry (OMNRF) uses the Airport as a base for fire suppression operations. It also completes wildlife counts and has a fish re-stocking program. These services help protect the natural habitat of the six municipalities and surrounding parks and in turn support local business.
- Hydro One, Trans Canada Pipeline, and the OPP are common users of the Airport providing important services to the surrounding municipalities.

All of the above services and the community benefits, including quality of life and economic activity, would be reduced or not possible without the Airport.

To provide the above services, the municipalities in 2016 contributed a total of \$73,302 or \$1.34 per capita to subsidize the Airport. As detailed below, for comparable municipal-run airports studied in this report, this subsidy is low, where the average municipal contribution is \$6.54 per capita or 386% more than the Pembroke and Area Airport.

Table 3.7 – Municipal Operating Subsidy for Comparable Airports

Airport	Total Municipal Subsidy	Subsidy per Capita	Percentage increase from Pembroke
Pembroke and Area Airport	\$73,302	\$1.34	-
Peterborough Airport	\$760,850	\$9.67	+619%
Brantford Airport	\$625,840	\$6.40	+376%
Lake Simcoe Airport	\$751,429	\$4.63	+244%
North Bay Airport	\$369,588	\$5.25	+291%
Arnprior Airport	\$59,282	\$6.74	+401%
	Average	\$6.54	+386%

Many of the comparative airports were recently in a similar situation as the Pembroke and Area Airport, facing a crossroads of degrading infrastructure, necessitating expensive capital projects. The owners of these airports decided to view the airport as a piece of critical infrastructure providing services to the community and consciously made investments. While many are operating at an administrative loss, they are highly active, generate jobs and economic growth within their communities. If the Pembroke and Area Airport received funding equivalent to the average subsidy of these comparable airports, it would allow for investment in new business opportunities, fund a portion of the infrastructure repairs, and provide for a new business development position and continued marketing and promotion efforts at the Airport.

Traditionally, municipal airports do not operate with an operating surplus. Like a road, a park, or recreation centre; they enhance the quality of life of a community and provide the infrastructure to support other businesses or key services necessary for the well-being and economic health of the community. It is important for the public to realize the Airport's value and determine whether it is a fundamental piece of transportation infrastructure that can be used to attract and retain corporate investments and is worthy of ongoing and additional support. From another perspective, if a municipality had a local business that employed 7,000 people, as the Garrison does, and it deemed the airport as critical infrastructure to support its business, the airport would likely be a priority for funding.

To preserve the Airport, as identified in the *2015 Economic Impact and Infrastructure Review Report* by the Loomex Group, there are some necessary investments required. Most Airport facilities are over 30 years old and structural deterioration of the pavement is evident posing a hazard to aircraft via the potential for Foreign Object Debris (FOD) and creating a liability for the Airport owners. The 2015 report estimated that the pavement and electrical rehabilitation costs are approximately \$7.3 million.

To aid in funding the needed airfield rehabilitation projects, federal and provincial funding programs were identified. The funding program with the highest potential opportunity for the Airport is the new National Trade Corridors Fund. This program may offer an opportunity for the PAAC to submit an application for funding, however it does require a municipal contribution and will not fund 100% of a proposed project. In addition, the Airport should continue to seek out funding through the Federal Economic Development Agency for Southern Ontario (FedDev Ontario) and the Community Futures program for which FedDev Ontario acts as an agent.

Different approaches to airport governance were identified. It was recommended that a new governance structure be considered to move towards a true 'Airport Commission' model, to allow for improved and independent decision making ability, alignment on the future business direction of the Airport, and re-negotiation of the municipal subsidy.

The report studied three business opportunities using 20 Year financial pro forma's:

1. Card Lock Fuel System
2. T-Hangars
3. Private Contracted Military Training Activity

Based on the 20 Year financial statements for the three options as summarized below, the most viable option is T-Hangar construction, followed by a Card Lock Fuel System, with the last being Private Contracted Military training.

Table 8.1 – Summary of Pro Forma Statements

Summary	Status Quo	Option 1	Option 2	Option 3
		Fuel System	T-Hangar	Military Training
20 Year Total Revenue	\$14,443,094	\$14,700,230	\$14,720,556	\$15,226,319
20 Year Total Expense	\$13,249,616	\$13,893,668	\$13,765,895	\$13,663,665
20 Year Operating Surplus	\$1,193,478	\$806,562	\$954,661	\$1,562,654
Capital Cost	N/A	\$350,000	\$350,000	\$7,300,000
Net Surplus / Deficits	N/A	\$456,562	\$604,661	-\$5,737,346

The team identified key short, medium and long term actions required to help advance the Airport's strategic direction and implement the recommendations in this study. As noted by several stakeholders during the consultation process, the Pembroke and Area Airport has a public awareness problem, where some people do not understand its economic and social value, which in turn impedes funding support from municipalities and/or support for funding applications to federal or provincial agencies. Given the lack of awareness of the importance of the Airport to the communities that subsidize the Airport, the project team articulated a Communication Plan and Advocacy Strategy. This can be used by members of the PAAC, the Garrison, and other support personnel as key speaking points to share with colleagues and the public on the benefits of the Airport, the results of this study, and a recommended path forward.

Notwithstanding the new business opportunities that could be provided, investments are required to help support existing services, businesses, and uses of the Airport. Thus, a key decision for the municipalities at this stage is whether these services are worthy of continued support, which will require increased investment. The Airport is owned by the municipalities, so they alone must decide its importance to their citizens and what the loss of services will mean to the people, their quality of life, and businesses in their communities.

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1.0 PROJECT BACKGROUND AND APPROACH

1.1 Background

The Pembroke and Area Airport, like many small to medium sized municipal airports, has only modest activity levels which lead to low revenue values, presenting difficulty in offsetting operational and capital costs. Many municipal and regional airports are operated at a loss and, if operated profitably or at break-even, do not have the cash reserves to fund capital improvements or expansions. However, airports like the Pembroke and Area Airport should be considered a loss leader, as the transportation and infrastructure provided by the Airport can support offsite economic activity. It supports not only the six owner municipalities, but also other residents within the County of Renfrew.

Airport infrastructure is aging and many sites require expensive rehabilitation to maintain current operations. Federal and provincial funding is not regularly provided to local and regional airports without scheduled air service. Funding was provided by Transport Canada prior to divestiture; however, this has ended and present funds are not sufficient for current infrastructure rehabilitation, especially with the aging infrastructure at the Pembroke and Area Airport.

Furthermore, governance issues at some small airports arise where each municipality operates with varying priorities and agendas pertaining to investment priorities, or in some cases, agreement on a unified strategic direction for the future, given limited information on the airport's economic impact potential. Airports, as with any key asset, need the appropriate governance model to be successful in operating, developing, planning and marketing the airport as an economic asset.

Despite its challenges, the Pembroke and Area Airport has many advantages that work in its favour. It is the only certified airport between Carp and North Bay. The Department of National Defence presence at 4th Canadian Division Support Base Petawawa (Garrison Petawawa) is a unique opportunity for the Pembroke and Area Airport as the Garrison has an onsite heliport facility, but not a runway for fixed wing aircraft. The airport serves as an alternate IFR approach for the heliport. The Garrison also employs 7,000 military and civilian personnel. The Canadian Nuclear Laboratories (CNL) are in close proximity at Chalk River and have historically made use of the Airport. In addition, the Ontario Ministry of Natural Resources and Forestry (OMNRF) is active with firefighting and other activities from Pembroke. This can benefit fuel sales while providing an important community benefit to Ontario and Western Quebec and the protection of our natural resources. The Pembroke and Area Airport also supports vital medevac services, like many regional airports of its size. Further, availability of land surrounding the Airport is an asset. We also note that through research on the Airport's website, all hangars are leased, thus there may be potential for unsatisfied demand that Pembroke can capitalize on. Finally, the local communities surrounding the airport are vibrant and active.

1.2 Approach

The approach to this study addresses both the immediate and long term aspects of the Pembroke and Area Airport's road map to the future. This analysis will help the Airport optimize its current circumstances, while undertaking the appropriate investments for the future. The methodology has focused primarily on the key issues facing the Airport. Specifically, the owning municipalities need to determine the Airport's long term role and vision for the future and prioritize investments to promote sustainable economic growth in the region and continue to provide the necessary airport services that support the community's health and well-being.

The project deliverables promote a high level understanding of the Airport's potential that will support long-term decision making. The project team undertook the study in five (5) Phases as shown below:

Phase 1. Project Initiation and Background Review

Phase 2. Strategic Plan including Stakeholder Consultations

Phase 3. Business Case(s) Development

Phase 4. Communication Plan and Advocacy Strategy

Phase 5. Report and Presentation

1.3 Consultation Program

The Pembroke and Area Airport strategic planning process included a consultation program to gather information on Airport users and how utilization of the Airport can be further improved. The opportunity to meet with stakeholders allowed for discussion of the opinions, concerns, requirements and issues considered key to development by stakeholders. Stakeholders contacted included, but were not limited to the airport staff, airport businesses, private airport tenants, and off-airport businesses. Table 1.1 provides a list of stakeholders contacted for the Strategic Plan.

Table 1.1 – Consultation List

Organization	Name	Title
Pembroke and Area Airport	Natalie Tricco	Assistant to the PAAC
	Stephen Gilchrist	Airport Manager
Township of Laurentian Valley	Allan Wren	Chair, Pembroke and Area Airport Commission
Garrison Petawawa (DND)	Isabelle Jean	Garrison Coordinator, 4th Canadian Division
	Nicole Voyer	427 SOAS
	James Ward	Ground Liaison Officer, 3 RCR
	Joan Behnke	Realty Asset Manager
	Dave Beatty	Canadian Special Operations Regiment (CSOR)
	David Schopoff	450 Regiment
Skydive Petawawa	JP Marcoux	President/Owner
AvServe	James Mohns	President/Owner
Pembroke Regional Hospital	John Wren	VP Finance & Corporate Services
	Francois Lemaire	VP Patient Services
Forward Thinking Marketing	Jennifer Layman	President
Town of Deep River	Joan Lougheed	Mayor
	Uditha Senaratne	Nuclear Safety Specialist - Canadian Nuclear Laboratories, and PAAC Member
Canadian Nuclear Laboratories	Brian Mumford	Director, Emergency and Protective Service
County of Renfrew	Alastair Baird	Manager Economic Development and Tourism
COPA Flight 178	Alan Hepburn	President
Town of Petawawa	Robert Sweet	Mayor
	Dan Scissons	CAO/Clerk

The project team conducted consultations in person and by telephone. The consultations provided insight into the daily operations of airport businesses and allowed for the assessment of potential operational restrictions.

In addition to the above, members of the Pembroke and Area Airport Commission have been formally consulted through meeting updates and presentations.

2.0 EXISTING AIRPORT AND MARKET CONDITIONS

2.1 Community Profile

The Pembroke and Area Airport principally provides aviation support and services to six (6) municipalities located within the County of Renfrew who own and operate the Airport through the Pembroke and Area Airport Commission (PAAC). The owner municipalities include:

- City of Pembroke
- Town of Petawawa
- Town of Deep River
- Town of Laurentian Hills
- Township of Laurentian Valley
- Township of Whitewater Region

The key industries established in the County of Renfrew include, but are not limited to: manufacturing, agri-business, forestry and wood processing, tourism, and military.

2.2 Airport Ownership and Governance

The Pembroke and Area Airport is owned by the six municipalities and governed by the Pembroke and Area Airport Commission. This PAAC is made up of the six owner municipalities who share the costs, decision making, and operational responsibilities associated with the airport. Airport ownership and governance is further examined in Chapter 5.

2.3 Land Uses

The land uses of an airport can typically be categorized into the following groups:

Airfield – fixed and rotary wing manoeuvring areas, taxiways, aprons, and navigational aids at an airport.

Air Terminal and Operations – air terminal building, maintenance garage, security, fuel facilities, utilities, public facilities, terminal road system, and public parking.

Airside Commercial – general aviation facilities and aviation support functions on land requiring airside access, including air cargo, aircraft maintenance, and helicopter facilities.

Groundside Commercial – public or private concerns not requiring direct airside access.

Airport Reserve – lands for which it is not practical to designate more specific uses at this time. The lands are held in reserve to meet unforeseen or possible contingency requirements within and beyond the planning horizon.

The Pembroke and Area Airport has well defined airfield and operational areas. The majority of the remaining airport land could be classified as airport reserve, however, much of it could be assigned to airside or groundside commercial lands depending on the demand for un-serviced and serviced commercial lots.

2.4 Airport Facilities

Airport facilities at the Pembroke and Area Airport consist of a single runway oriented in an approximate north-west orientation, a full length parallel taxiway, two aprons, and numerous hangars and buildings. The Airport is currently certified by Transport Canada. The age of the runway, taxiway, apron, and lighting infrastructure varies between 33 to 49 years.

An overview of the airport is provided in Figure 2.1 on the next page.

2.4.1 Runway 17-35

Runway 17-35 is the primary and only runway at the Pembroke and Area Airport. It is certified as a Code 3C Non-Precision Runway under Transport Canada's 4th Edition of *Aerodrome Standards and Recommended Practices*. The runway is capable of handling both visual and instrument flight operations. It has dimensions of 5,000 ft. in length by 100 ft. in width and is comprised of an asphalt surface with a documented Pavement Load Rating (PLR) of 9. The design aircraft is a C-130 Hercules Military Aircraft.

2.4.2 Taxiways

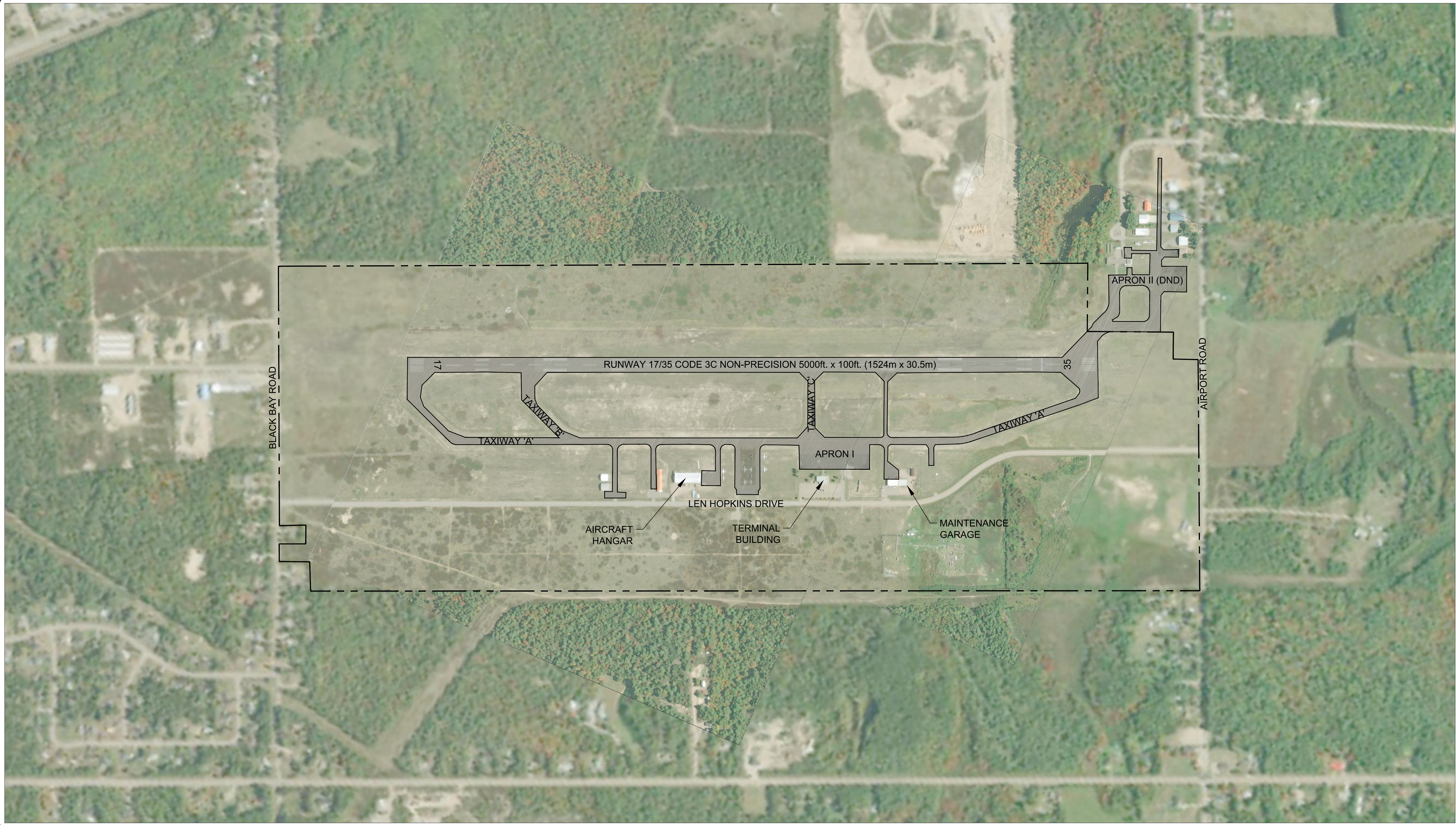
The Pembroke and Area Airport's airside system consists of a full length parallel taxiway as well as intermediate connecting taxiways which serve Runway 17-35. An overview of the taxiway infrastructure is as follows:

Taxiway 'A' is approximately 15 m wide and serves as the primary parallel taxiway providing access/egress points at both runway thresholds. It provides airside access to Apron I, the air terminal building, private hangars, aircraft tie down areas, and maintenance facilities along the western edge of the taxiway.

Taxiway 'B' is a short, 15 m wide taxiway connecting parallel Taxiway 'A' to Runway 17-35. The taxiway allows for intersection takeoffs on Runway 17 as well as an efficient exit for aircraft landing on Runway 35.

Taxiway 'C' is a short, 15 m wide taxiway connecting parallel Taxiway 'A' and Apron I to Runway 17-35 at the runway's approximate midpoint.

Taxiway 'D' is owned by the Department of National Defence (DND) and maintained by Airport staff. It is approximately 15 m in width, with 4 m wide paved shoulders. This taxiway loop provides access to Runway 35 from the DND Airborne Embarkation Centre, which is the military's permanent paratroop staging and training facility on the field. Taxiway D also provides access to private hangars in the south east corner of the airport.



Legend

AIRSIDE SURFACE

PROPERTY BOUNDARY

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Notes

1. DRAWING TO BE USED FOR PLANNING PURPOSES ONLY.

2. AERIAL PHOTOGRAPHY OBTAINED FROM ESRI SEPTEMBER 7th, 2017.

Consultant

Clients

North Arrow

Scale

Scale 1:4000

50

0

25

50

100

200

300

200

0

100

200

400

1000

SCALE BASED ON SHEET SIZE 22" x 34"

Location: PETAWAWA, ONTARIO		
Airport: PEMBROKE AND AREA AIRPORT (CYTA)		
Title: AIRPORT SITE PLAN		
Project No. 171-10107-00	Amendment No. 1	Date Sept. 11, 2017.
EXHIBIT 1		

2.4.3 Aprons

Apron I is approximately 8,600 m² in area and is used primarily for transient aircraft parking, air terminal access, and aircraft fueling. Apron I supports parking and servicing for aircraft with Code C characteristics and smaller.

Apron II, is owned by the military and used to support their activities in association with the Garrison.

2.4.4 Air Navigation

2.4.4.1 Airfield Lighting

Runway 17-35 and accompanying taxiway and apron infrastructure elements are equipped with medium intensity edge lights. Runway threshold identification lights are present on both runway ends and Runway 35 is equipped with low intensity center row approach lighting. Airfield lighting is controlled by the pilot through an ARCAL type K system allowing for three lighting intensity settings.

2.4.4.2 Communications

Air to Air and Air to Ground communications at the Pembroke and Area Airport are conducted through the Airports' Aerodrome Traffic Frequency (ATF). The Airport is uncontrolled, but UNICOM advisory service providing active runway, current wind conditions, and traffic advisory is provided by Airport staff during attended hours.

2.4.4.3 Air Traffic Services (ATS)

Air Traffic Service at the Pembroke and Area Airport is provided by a Peripheral Station (PAL) facilitating communications with Montreal Centre. This service is used primarily for Instrument Flight Rule clearance and flight planning purposes by aircraft operating from or in the vicinity of the Airport.

2.4.4.4 Instrument Flight Procedures

Runway 35 is served by two instrument flight procedures. The GNSS/RNAV LNAV approach to Runway 35 has a Minimum Descent Altitude (MDA) of 412 ft. AGL with a minimum visibility limit of 1.25 nautical miles. The Non-Directional Beacon (NDB) approach to Runway 35 has a MDA of 452 ft. AGL with a higher minimum visibility of 1.5 miles.

2.4.4.5 Air Terminal Building

The air terminal building at the Pembroke and Area Airport is a single story structure designed to accommodate a small commuter-type passenger operation (up to 19 passengers). The building has an approximate floor area of 3,200 ft². The terminal has a passenger seating area, basic check-in counter, administrative offices, boardroom, and washrooms.

The air terminal check-in area is currently vacant as there is no scheduled passenger air service. Passenger pre-boarding screening is not provided at the Pembroke and Area Airport. The airport is not a designated Aerodrome of Entry by the Canada Border Services Agency (CBSA), and customs processing is available to Military flights exclusively.

2.4.4.6 Airport Services

The Pembroke and Area Airport currently offers the following services:

- Aircraft Tie-downs
- Ground power unit (28 volt)
- Aircraft Deicing
- Arrangements for Aircraft Catering or Catering for Meetings
- Taxi Service
- Car Rentals
- Aircraft Grooming/Cleaning
- Terminal Building and Boardroom Rental
- Hangar Storage
- Fueling
- Pilot Lounge
- WiFi

2.5 Airside Infrastructure Assessment and Capital Costs

A detailed airside infrastructure assessment was conducted in 2015 as part of the *Economic Impact and Infrastructure Review Report* by the Loomex Group. A brief overview of the findings from this report are provided below:

- **Airfield Pavement** (Runway, Taxiways, and Aprons) – During a field visit by the project team, the airfield pavement was observed to exhibit signs of severe longitudinal and transverse cracking suggesting structural failure of the subgrade. Pavement bearing tests or geotechnical investigations have not been carried out at the recommended 10-year intervals, with the last major rehabilitation of airfield pavement being in 1984. Airport staff conduct yearly crack sealing maintenance on the pavement surfaces; however, this does not address the underlying structural failure of the subgrade. The airport has been forced to implement seasonal load restrictions on higher weight aircraft such as C-177 Globemaster due to increased risk of Foreign Object Debris (FOD) and to prevent further damage to the pavement. This has **limited** the ability of the Canadian Forces to use heavy aircraft at the Pembroke and Area Airport. The estimated cost stated in the *2015 Infrastructure Review* to rehabilitate airfield pavement was approximately **\$7 million**.

- **Airfield Lighting System** (Runway lights, taxiway lights, guidance signs, and approach lights) – The existing airfield lighting system was installed 30+ years ago. In the winter of 2013-2014, the lighting system failed due to aging cables that had deteriorated beyond repair. Approximately 8,000 ft. (3,050m) of wiring was replaced in the summer of 2014. It is estimated by Airport staff that approximately one quarter of the airfield lighting system has been replaced. It was recommended that the airfield lighting system be upgraded to an LED type system. The estimated cost stated in the *2015 Infrastructure Review* would be approximately **\$110,000 to \$320,000**.
- **Fuel System** (Jet A and 100LL (AvGAS)) – The current fuel dispensing system was installed in 1985. The system consists of 4 underground tanks:
 - 2 – 25,000L 100LL
 - 1 – 45,000L Jet A
 - 1 – 50,000L Jet A

The average lifespan of underground fuel tank systems is approximately 20-30 years. This would suggest that the fuel system is reaching the end of its useful life. The 2015 *Infrastructure Review* recommended that the fuel system be upgraded with two above ground tanks and associated utilities at an estimated cost of **\$350,000**.

- **Air Terminal Building** – The existing air terminal building was built in 1984. It was identified in the 2015 *Infrastructure Review* that the building was in need of renovation. The terminal building currently accommodates the required demand and is expected to do so into the future. In the event that scheduled air service is re-established at the Pembroke and Area Airport, certain modifications in accessibility and security would likely be required. Cost estimates were not provided in the *Infrastructure Review* for the renovation.

However, worth noting in the Loomex Report was the recommendation “that geotechnical testing of the airfield pavement be done prior to undertaking any major rehabilitation in order to determine a more accurate estimate and the scope of work required”. We agree with this recommendation as higher accuracy cost estimates are essential before seeking funding for any improvements.

2.6 Municipal Services

Currently, the Airport functions independent of the Town of Petawawa's municipal water and sewer systems, instead utilizing wells for drinking water and septic systems for sanitary sewage treatment. Heating of structures is done by way of electric heating, propane, geothermal, and wood furnace. Municipal services provided by the Town of Petawawa (natural gas, water and sewer) are currently not available to Airport tenants.

The nearest natural gas and municipal water utilities are located at the intersection of Len Hopkins Drive and Black Bay Road. Further study into the feasibility and cost of bringing municipal utilities to the airport lands could be studied if demand warrants.

2.7 Current Airport Fee Structure

The current airport fee structure at the Pembroke and Area Airport is very simple. There is no fee for light general aviation aircraft. Commercial aircraft are charged a flat rate fee of \$40.00 which is waived if 150L of fuel is purchased. Aircraft movements are only recorded during attended hours at the Airport. Aircraft arrivals after hours or late night are typically not subject to billing. Landing fee rates could be billed based on “dollars per thousand kilograms of Maximum Takeoff Weight (MTOW)”. Those aircraft under a certain weight and/or which operate privately (general aviation) should continue to be exempt from landing fees. Small aircraft (i.e. Cessna 172 and similar) are not typically billed at municipal airports in Canada. Recreational pilots are generally cost-conscious and are known to avoid airports that charge landing fees. For example, Arnprior Airport is 15 minutes flight time and Carp Airport is 25 minutes flight time from the Pembroke and Area Airport and neither charge landing fees. In most cases, an airport will make more money from the sale of fuel and concessions than billing a landing fee and potentially deterring traffic. Special agreements with commercial leaseholders that result in modified fee structures (e.g. major airport tenants may be exempt from landing fees as these costs are covered within the land lease payments) should also be considered.

The challenge is of course tracking flights on a regular basis as the Airport does not have an air traffic control tower and the cost for software-based programs to track flights landing and taking off and ensuing invoicing could be cost-prohibitive.

2.8 Financial Status

The Pembroke and Area Airport currently receives an annual operating subsidy from the six owner municipalities as well as funding from Garrison Petawawa to ensure continual operation of the Airport. Without the subsidy, the Airport would incur an annual deficit when comparing its revenues and expenses. The primary contributors to the Airport’s operating revenues and expenditures are detailed below.

2.8.1 Revenue

The primary sources of operating revenue (2011-2016) beyond the municipal and military user fee include:

- Land Leases
- Fuel Sales (Jet A1 and 100LL);
- Hangar Rentals; and
- Solar Revenue

2.8.2 Expenditures

The primary sources of operating expenses include:

- Repair and maintenance of runway/equipment/lighting
- Fuel Purchase;
- Wages & Salaries; and
- Utilities
- Insurance

Table 2.1 compares the airport's operating revenues and expenditures from 2011 to 2016. In this six-year period, the Airport has realized both operating surpluses and deficits and has produced a modest net operating surplus. While many similar airports experience losses on a yearly basis, there are opportunities for the Airport to pursue alternative revenue streams that could reduce the gap between expenses and revenues, and potentially aid in funding urgently needed capital rehabilitation programs. However, it should be noted that the ability to fund all of the needed capital improvements through operating surpluses is very rare and highly unlikely in this case.

Table 2.1 – Pembroke and Area Airport Operating Financial Performance Summary 2011-2016

Operating	2011	2012	2013	2014	2015	2016
Revenues	\$490,475	\$643,807	\$548,628	\$563,515	\$454,672	\$612,126
Expenditures	\$504,247	\$594,938	\$524,847	\$599,823	\$454,082	\$558,516
Surplus/Deficit	\$-13,772	\$48,869	\$23,781	\$-36,308	\$590	\$53,610

2.8.3 Proposed Capital Projects

The *Economic Impact and Infrastructure Analysis Report* (2015) suggested a number of Capital projects to be undertaken at the Airport. The list of capital projects are as follows:

- Rehabilitation of Runway 17-35, Taxiways 'A', 'B' and 'C', and Aprons I and II;
- Upgrade type-1 VASIS system to a PAPI system;
- Upgrade all sign boards to backlit signs;
- Upgrade airfield lighting system to LED;
- Implement Localizer Precision with Vertical Guidance (LPV) instrument approach (with passenger service);
- Replace underground fuel tanks with above ground equivalents;
- Extend municipal utilities to service airport properties;
- Renovate the Air Terminal Building, with upgrades to allow greater accessibility; and
- Implement a Fleet Replacement Program to replace old airfield maintenance equipment.

Based on consultations with airport stakeholders, including users, WSP has identified airside pavement rehabilitation, lighting, replacement of the aging fuel system, and the implementation of an equipment fleet replacement program as the highest priority action items identified in 2015.

2.9 Business Environment

2.9.1 Airport Businesses

The Pembroke and Area Airport currently supports modest business activity. Businesses currently located on the field support both aviation and non-aviation roles. The following list briefly summarizes the business activity occurring at the Airport.

- **Skydive Petawawa** provides instruction and services to skydivers in Ontario and Quebec. Approved by the Canadian Sport Parachuting Association, Skydive Petawawa provides safe and enjoyable skydiving experiences to members and the general public.
- **Dynamic Parachute Rigging** provides parachute assembly, packing and supplies.
- **13th Monkey Paintball** is located adjacent to the airport maintenance building on Airport property. The paint ball park caters to enthusiasts, youths, and groups.
- **Airport Golf Academy and Driving Range** is located on the south west side corner of the Airport property. The driving range offers training as well as a self-serve ball dispensing for playing after hours. There is a pro shop onsite selling golf equipment and accessories.

2.9.2 Airport Users

The Pembroke and Area Airport supports extensive activity from a number of parties. A list of current Airport users is as follows:

Table 2.2 – Pembroke and Area Airport User & Activity List

Airport user	Industry	Typical Activity
Canadian Forces (Garrison Petawawa)	Government	<ul style="list-style-type: none"> ■ Aircraft movements for C-130, Bell 412, CH147, Skyvan, AOE military customs, transport of high ranking officials/politicians, military charters ■ Para-jumping embarkation (C-130 Hercules) ■ Personnel repositioning and transport ■ Moving target training (helicopter) ■ IFR approach training / Search and rescue ■ Estimated at 25% of total Airport activity ■ Average \$71,837 per year in aviation fuel and service purchases the last three years ■ In addition, 2016 financial subsidy was \$44,167
Bearskin Airlines	Flight Charter	<ul style="list-style-type: none"> ■ School transport for hearing and visually impaired children as well as students requiring support ■ Currently five children are being transported per week to specialized schools in Ontario ■ Without the Airport, opportunities for these students to receive the specialty education they need would be very limited or non-existent ■ Average \$33,232 per year in aviation fuel and service purchases the last three years

Airport user	Industry	Typical Activity
Ontario Ministry of Natural Resources and Forestry	Government	<ul style="list-style-type: none"> ■ Base for forest fire suppression operations ■ Wildlife counts/surveys (Moose, deer and fish) ■ Fish stocking program ■ Surveillance and Patrols of Algonquin Park ■ Average \$27,418 per year in aviation fuel and service purchases the last three years
ORNGE	Medevac	<ul style="list-style-type: none"> ■ Fixed wing and rotary medical transfers ■ Alternative landing for rotary wing (helicopter) medevac ■ Fuel stop for fixed wing and helicopters ■ Average \$14,734 per year in aviation fuel and service purchases the last three years ■ Average 30 arrivals and 30 departures per year between 2013 and 2016, split roughly evenly between fixed and rotary-wing aircraft. See Appendix A for information supplied by ORNGE on their annual arrivals and departures. ■ Without the Airport, additional ambulances would be required, which could increase costs to local residents and impact response or travel times and the overall quality of healthcare. Costs associated with up-staffing an additional ambulance vehicle would be approximately \$1M. Organ donor transfers are also facilitated through ORNGE.
Hydro One	Power Distribution	<ul style="list-style-type: none"> ■ Hydro line inspection and repair ■ Personnel transport
Ontario Provincial Police	Law Enforcement	<ul style="list-style-type: none"> ■ Search and rescue ■ Fugitive search ■ Drug and Traffic Enforcement ■ Executive Transport
Hydro-Quebec	Power Distribution	<ul style="list-style-type: none"> ■ Hydro line inspection and repair ■ Hydroelectric dam inspection and repair ■ Personnel transport
Ottawa Flying Club, Ottawa Aviation Services, Rockcliffe Flying Club, Seneca College, Sault College	Flight Training	<ul style="list-style-type: none"> ■ Cross country and diversion flight training ■ Circuit Practice ■ Fuel purchase

Airport user	Industry	Typical Activity
Ashley Furniture	Furniture Manufacturing	<ul style="list-style-type: none"> Executive Transportation (Lear 45)
Chartright Air Group	Aircraft Charter	<ul style="list-style-type: none"> Executive Charter and Transportation (AW109)
Canadian Helicopters	Helicopter Services	<ul style="list-style-type: none"> Fire suppression Natural resources exploration Heavy aerial lift
TransCanada Pipeline	Oil and Gas	<ul style="list-style-type: none"> Pipeline patrol and surveillance
Heli Express	Helicopter Services	<ul style="list-style-type: none"> Charter for Natural Resources surveys
Air Medic	Air Ambulance	<ul style="list-style-type: none"> Emergency medical support Critical patient transfer
Canadian Nuclear Laboratories	Nuclear Energy and Research	<ul style="list-style-type: none"> Historical use of the airport
Heli Muskoka, Wiskair, Helicopter Transfer Services Canada (HTSC), Gateway Helicopters, Essential Helicopters and Silverline Helicopters	Helicopter Services	<ul style="list-style-type: none"> Forestry, mining and utility support
Various	Hangar Rental	<ul style="list-style-type: none"> Rental of the existing hangar to various private and commercial enterprises Rental fees have averaged \$46,949 per year the last three years

2.9.3 Economic Impact

The 2015 *Economic Impact and Infrastructure Review Report* concluded that the economic impact of the Pembroke and Area Airport to Renfrew County is estimated to be just under **\$1 million** per year with 10 Full Time Equivalents (FTEs). A review of this report revealed that the author likely succeeded in calculating direct economic impact but may not have included indirect and induced benefits.

- Direct:** These impacts occur on the site of the facility being studied, in this case the Pembroke and Area Airport. These effects are generated immediately through aviation activity. There are no intermediate steps between aviation activity and the calculated benefits.
- Indirect:** Indirect effects occur off-site. The aviation entities on the airport must purchase goods and services from suppliers located off the airport. These purchases support additional GDP, employment, and labour income among the suppliers.

- **Induced:** The employees of on-airport firms and off-airport suppliers receive wages and salaries. They spend these funds in the community to purchase a wide range of other goods and services. These expenditures support further employment, GDP, and labour income. The process continues indefinitely, with each further round being smaller than the one immediately before it. This disparity results from “leakages” such as household savings and expenditures to areas outside of the community. The total impact of every successive round can be expressed as a multiple of the initial direct stimulus. The induced impacts are frequently referred to as “multiplier effects.” The Statistics Canada input-output model provides multipliers for each province, using detailed information on business expenditures.

Based only on the use of the Airport by Garrison Petawawa for both helicopter and parachute training operations, it is likely that economic impact generated by the Pembroke and Area Airport exceeds the value presented in the 2015 study. This present report has not re-evaluated the economic impact of the Airport; however determining the direct, indirect and induced economic impacts at the Pembroke and Area Airport may contribute to the future success in securing capital funding through provincial and/or federal programs and providing further understanding to the public of the value of the Airport to the community and its contribution to the overall economic health of the region.

3.0 BASELINE AIRPORTS COMPARISON

3.1 Pembroke and Area Airport

The Pembroke and Area Airport has witnessed significant changes over the last 20 years. From 1968 to 1996, although not owned by Transport Canada, the Airport received financial support from Transport Canada. However, as a result of the 1994 *National Airports Policy*, Transport Canada began transferring ownership and responsibility of airports to local entities, and in Pembroke's case, this meant the elimination of the subsidy in 1996. A lump sum payment was provided to airports, including Pembroke, to offset the elimination of the annual subsidy, but the lump sum payment was not enough to pay for ongoing operations and capital requirements of the Airport over the long term. The Airport has done an excellent job managing the lump sum payment as the current balance of funds available from the transfer is \$325,371. The Airport is managed by the Pembroke and Area Airport Commission (PAAC) comprised of 6 owning municipalities.

In the past 15 years, the County of Renfrew's population has increased from approximately 95,000 in 2001 to 107,169 in 2016, an increase of 13% while the annual passenger movements have decreased to zero. Aircraft movements, while not formally reported are estimated to have decreased with the loss of the scheduled passenger air service. Aircraft movements in 2015 were estimated at 4,300 per annum. This decline in passenger service at the Airport is primarily due to the discontinuation of Pem-Air's primary route to Toronto Pearson Airport. Due to the region's close proximity to the Ottawa area, the remaining passenger demand has largely leaked to the Ottawa Airport.

With the exception of required unscheduled maintenance undertaken, the Pembroke and Area Airport facilities have remained essentially unchanged for the past ~35 years, with the exception of the replacement of 25% of the underground cabling for the airfield lighting system 2015.

The six owner municipalities provide the Airport with an annual subsidy now totalling \$73,302. This corresponds to an average \$1.34 subsidy to the airport per capita. However, three of the last six years the Airport has operated at a financial deficit. When taking into account required capital to rehabilitate the aging infrastructure, the Airport is far from approaching complete financial sustainability, which is the desire of the owner municipalities. Table 3.1 below provides a summary of key information related to the Pembroke and Area Airport.



Table 3.1 – Pembroke and Area Airport Profile

Airport Characteristics	2016
Population	54,535 (owning municipality conglomerate)
Operator	Pembroke and Area Airport Commission
Governance Model	Municipally Owned and Operated with Airport Committee
Longest Runway (ft.)	5,000
Scheduled Passenger Carriers	0
Largest Scheduled Aircraft (seats)	None
Passenger Movements	0
Aircraft Movements	4,300
Municipal Subsidy	\$73,302
Subsidy per Capita	\$1.34

3.2 Comparative Airport Selection and Analysis

Five airports have been selected for comparison to the Pembroke and Area Airport. Tables 3.2 to 3.6 illustrate the relationship between community population, aviation traffic, and governance model at a series of Canadian airports. The airports selected for comparison with the Pembroke and Area Airport are highlighted in the sections below.

3.2.1 Comparative Analysis

The five airports selected for comparison with the Pembroke and Area Airport based on a number of criteria, including but not limited to:

- Community population;
- Passenger traffic;
- Governance model;
- Airport facilities.

The airports selected were: Peterborough Airport, Brantford Airport, Lake Simcoe Regional Airport (Barrie), North Bay Airport and Arnprior Airport.

3.2.2 Peterborough Airport

Table 3.2 – Pembroke – Peterborough Comparison 2015

Airport Characteristics	Pembroke	Peterborough
Community Population	54,535	78,700
Operator	Pembroke and Area Airport Commission	The Loomex Group
Governance Model	Municipally Owned and Operated with Airport Committee	Municipally Owned, Contracted Operations
Longest Runway (ft.)	5,000	7,000
Scheduled Passenger Carriers	0	0
Largest Scheduled Aircraft (seats)	None	None
Passenger Movements	0	0
Aircraft Movements	4,300	53,380*
Municipal Subsidy	\$73,302	\$760,850
Subsidy per Capita	\$1.34	\$9.67

* TP577 for the year 2014

Peterborough Airport was in a comparable position to the Pembroke and Area Airport in the mid 2000's. Like the Pembroke and Area Airport, Peterborough Airport had lost its scheduled service, and had infrastructure nearing the end of its useful life. The community profiles of Peterborough and Renfrew County are not all that different either. Both communities boast low cost of living, but a highly skilled workforce. Peterborough also competed with nearby airports such as Toronto Pearson, Billy Bishop, Oshawa and Buttonville Airports all within 2 hours drive of Peterborough; much like Pembroke is close to Ottawa.

Peterborough Airport was in poor condition in 2007. The airport had an established aircraft maintenance and refurbishing business specializing in corporate jets. The City was convinced that investment in the airport would, in fact, generate economic impact and jobs related to its activity. By strictly adhering to recommendations, revisiting its governance, contracting out its operations and having an "open for business" attitude, the Peterborough Airport is now an industrial aerospace economic power house that employs nearly 800 persons. The airport still operates at a "loss" to the city, but the economic impact of its activities to the local community is nearly \$100 million per year. This economic impact well exceeds the initial capital investment and yearly operational cost of the airport.

The City of Peterborough currently pays \$760,850 per year to operate the airport excluding capital expenses. This corresponds to an average \$9.66 subsidy to the airport per capita, nearly 8x the subsidy provided to the Pembroke and Area Airport.

3.2.4 Brantford Airport

Table 3.3 – Pembroke – Brantford Comparison 2015

Airport Characteristics	Pembroke	Brantford
Community Population	54,535	97,862
Operator	Pembroke and Area Airport Commission	Brantford Flying Club
Governance Model	Municipally Owned and Operated with Airport Committee	Municipally Owned with Contracted Operations
Longest Runway (ft.)	5,000	5,000
Scheduled Passenger Carriers	0	0
Largest Scheduled Aircraft (seats)	None	None
Passenger Movements	0	0
Aircraft Movements	4,300	24,000 est
Municipal Subsidy	\$73,302	\$625,840
Subsidy per Capita	\$1.34	\$6.40

* TP577 for the year 2014

Brantford Airport serves a similar community profile as the Pembroke and Area Airport. The airport is within a one hour drive of three major passenger serving airports; Toronto Pearson, Hamilton, and Waterloo International Airports. In fact, the City of Brantford was considering closing the airport due to its operating costs. The City held numerous public consultations to determine whether the airport was an essential service for the city. After hearing the airport users' opinions, city council unanimously voted to keep the airport open and to invest \$2.3 million in rehabilitating the primary and secondary runways. The rationale behind the investment was that growing cities require airports as part of their fundamental infrastructure to attract and retain corporate investments.

The airport has proactively developed numerous T-Hangars which are owned by the city and leased to aircraft owners as a means of generating revenue. As well, groundside land is occupied by numerous non aeronautical business users such as industrial manufacturing and storage.

Brantford Airport is also a stop for the same school charter for deaf and blind students like the Pembroke and Area Airport.

The City of Brantford currently pays \$625,840 per year to operate the airport. This corresponds to an average \$6.40 subsidy to the airport per capita, nearly 5x the subsidy provided to the Pembroke and Area Airport.

3.2.5 Lake Simcoe Regional Airport

Table 3.4 – Pembroke – Lake Simcoe Regional Comparison 2015

Airport Characteristics	Pembroke	Lake Simcoe
Community Population	54,535	162,470
Operator	Pembroke and Area Airport Commission	City of Barrie
Governance Model	Municipally Owned and Operated with Airport Committee	Municipally Owned and Operated
Longest Runway (ft.)	5,000	6,000
Scheduled Passenger Carriers	0	0
Largest Scheduled Aircraft (seats)	None	None
Passenger Movements	0	0
Aircraft Movements	4,300	15,593
Municipal Subsidy	\$73,302	\$751,429
Subsidy per Capita	\$1.34	\$4.63

Lake Simcoe Airport is the newest of the airports in this comparison. The airport was built in 1991 due to a foreseen deficiency in air access in the Barrie Region. Since its inception, the airport has received continual investment from the City of Barrie and the Township of Oro-Medonte. Lake Simcoe Regional Airport is not a certified aerodrome, yet receives extensive high end corporate activity.

Like the Pembroke and Area Airport, Lake Simcoe Regional Airport is located relatively close to a major Canadian military establishment, CFB Borden. Although not as active at Lake Simcoe Regional Airport, the military continues to use the facility for training and public engagement. Its up-to-date infrastructure, which was fully rehabilitated and expanded in 2012, allows for the most demanding turbo prop and turbine military aircraft to utilize the airport without restriction. Lake Simcoe Regional Airport holds the festivities for Canadian Forces Day, showcasing military aircraft and the importance of the airport to the public.

Tenants present at Lake Simcoe Regional Airport include Hydro One, G&G Jet Centre, the OPP, and flight training organizations.

The City of Barrie, Township of Oro-Medonte and the County of Lake Simcoe currently pay \$751,429 per year to operate the airport. This corresponds to an average \$4.63 subsidy to the airport per capita, 3.5x the subsidy provided to the Pembroke and Area Airport.



3.2.6 North Bay Airport

Table 3.5 – Pembroke – North Bay Comparison

Airport Characteristics	Pembroke	North Bay
Community Population	54,535	70,378
Operator	Pembroke and Area Airport Commission	North Bay Jack Garland Airport Corporation
Governance Model	Municipally Owned and Operated with Airport Committee	Municipally Owned with contracted operations
Longest Runway (ft.)	5,000	10,000
Scheduled Passenger Carriers	0	3
Largest Scheduled Aircraft (seats)	None	74
Passenger Movements	0	72,035
Aircraft Movements	4,300	37,584
Municipal Subsidy	\$73,302	\$369,588
Subsidy per Capita	\$1.34	\$5.25

North Bay Airport is located approximately 2 hours' drive north-west of the Pembroke and Area Airport. The airport is historically a military airfield, housing NORAD's operations, multiple fighter squadrons and Canada's BOMARC missiles. With the end of the Cold War in 1991, military aircraft operations were moved away from the airport leaving only surveillance squadrons and NORAD operating in the area. 22 Wing North Bay still operates near the airport, and as a result generates approximately 475 military aircraft movements per year.

The airport was divested to the City of North Bay in 1998 and has been operated by the North Bay Jack Garland Airport Corporation ever since. The purpose of comparing this airport with the Pembroke and Area Airport is to see the effects that scheduled service has on an airport. It is commonly referenced that attracting a scheduled service to a small airport is the key to financial sustainability and profitability. North Bay Airport has three established air carriers and processes 72,000 passengers per year. North Bay Airport does turn a profit at the end of the year; however, this profit is still insufficient to afford any capital investment on its own over a 20 year horizon. In fact, this airport still received a subsidy of \$369,588 from the City of North Bay in 2015. This corresponds to an average \$5.25 subsidy to the airport per capita, nearly 4x the subsidy provided to the Pembroke and Area Airport.

3.2.7 Arnprior Airport

Table 3.6 – Pembroke – Arnprior Comparison

Airport Characteristics	Pembroke	Arnprior
Community Population	54,535	8,795
Operator	Pembroke and Area Airport Commission	Town of Arnprior
Governance Model	Municipally Owned and Operated with Airport Committee	Municipally Owned and Operated
Longest Runway (ft.)	5,000	3,937
Scheduled Passenger Carriers	0	0
Largest Scheduled Aircraft (seats)	None	None
Passenger Movements	0	0
Aircraft Movements	4,300	10,000
Municipal Subsidy	\$73,302	\$59,282
Subsidy per Capita	\$1.34	\$6.74

Arnprior Airport was selected due to its close proximity to Pembroke and that it is also in the County of Renfrew. Arnprior Airport sells lots for hangar development. This is very attractive for individuals who are wishing to build hangars, as sourcing financing on owned land is much easier than on leased land. The airport currently has 42 aircraft hangars and a vibrant general aviation community. The airport provides similar services as the Pembroke and Area Airport such as aircraft maintenance, and fuel sales. The airport also offers flight training. In the past the airport offered skydiving, but since August 2015 this business no longer operates. The airport generated an annual surplus of \$98,126 from property tax revenues generated from lot owners. Lots were sold at a reasonably low price, often ranging from \$12,000 to \$14,000, and generate tax revenue paid directly to the town treasury.

The Town of Arnprior independently owns the airport and currently pays \$59,282 (2016) per year to operate the airport. This corresponds to an average \$6.74 subsidy to the airport per capita, 5x the subsidy provided to the Pembroke and Area Airport.

3.3 Municipal Funding - Lessons Learned

Through the study of airports comparable to the Pembroke and Area Airport it was found that the Airport is in a unique situation. The extensive use of a wholly owned civilian airport by military aircraft is unprecedented elsewhere in Canada. The use of the Airport by the military, with its 7,000 employees, is disproportionately higher than any of the other airports studied in this report. The use of the Airport by the military should not be taken lightly. With infrastructure improvements, military use could increase substantially as they have deemed the Airport to be critical infrastructure to support military aviation operations.

Municipal and regional airports throughout Canada struggle to maintain financial sustainability without obtaining funding from outside sources such as the local municipality, private industry, or provincial or federal governments. Many of the programs that exist today are not aimed at supporting municipal and regional airports without scheduled passenger service. As such, the much needed funding to cover the annual deficits and maintain safe and reliable infrastructure is not available to all airports.

As seen in the comparative airports, all airports, even those that have scheduled passenger service, require continued support from their respective municipalities. Airports that are open for business and are invested in by the owners often reap significant economic benefits, typically much larger than the initial investments made. The Airport should be viewed as a piece of infrastructure providing benefit to the workforce and service to the community rather than a business with the purpose of generating income. Airports should be considered as 'loss leaders' by airport owners as they can provide significant economic benefits to the surrounding region.

As seen in Table 3.7, it is clear that the Pembroke and Area Airport is underfunded when compared to the five airports studied in this chapter. The comparative airports on average provide an annual subsidy of \$6.54 per capita, which is on average 386% greater than the subsidy provided to the Pembroke and Area Airport at \$1.34 per capita. These airports are all extremely successful and flourishing with business and activity.

Table 3.7 – Municipal Operating Subsidy for Comparable Airports

Airport	Total Municipal Subsidy	Subsidy per Capita	Percentage increase from Pembroke
Pembroke and Area Airport	\$73,302	\$1.34	-
Peterborough Airport	\$760,850 ¹	\$9.67	+619%
Brantford Airport	\$625,840 ²	\$6.40	+376%
Lake Simcoe Airport	\$751,429 ^{3,4,5}	\$4.63	+244%
North Bay Airport	\$369,588 ⁶	\$5.25	+291%
Arnprior Airport	\$59,282 ⁷	\$6.74	+401%
	Average	\$6.54	+386%

¹ City of Peterborough, 2015 Consolidated Financial Statements, Page 99, Schedule 80, Section 7 Alternate service delivery arrangements, Line 1605.

² City of Brantford, 2016 Operating and Capital Budget, Appendix H, Page 45, Expense, Item 152603.

³ County of Simcoe, 2015 Budget, Page 50.

⁴ Township of Oro-Medonte, 2016 Budget, Lake Simcoe Regional Airport, Page 3, "Airport Levy".

⁵ City of Barrie, 2015 Business Plan, Budget and Financial Overview, Page 22, Expenses, Lake Simcoe Regional Airport.

⁶ North Bay Jack Garland Airport 2015 Annual Report, Page 17, Capital Program.

⁷ Town of Arnprior, email dated December 7, 2017.

3.4 Municipal Funding – Future Considerations

In the event that existing funding programs remained unchanged, the Airport may realize the following:

- Continual infrastructure decay to a point at which the airfield would become unsafe and ultimately unserviceable. This may result in loss of certification and closure of the airport.
- Financial opportunities will not be realized.
- Annual operating losses will continue to grow.
- Annual capital reserve contributions will continue to be non-existent.
- Investment in further business development/marketing will not happen.

Once an airport becomes unserviceable as a result of deteriorating infrastructure, local communities will lose immediate access to medevac, fire suppression, wildlife and environmental monitoring, fish re-stocking, and timely law enforcement capability.

A runway is no different than a one mile stretch of road. In of itself, the road does not generate revenue (unless tolled), yet it degrades with time and requires expensive maintenance and eventual replacement. However, its ability to transport goods and support economic growth is never questioned.

Many of the comparative airports were recently in a similar situation as the Pembroke and Area Airport, facing a crossroads of degrading infrastructure, necessitating expensive capital projects. The owners of these airports decided to view the airport as a piece of critical infrastructure providing services to the community and consciously made investments. While many are operating at an administrative loss, they are highly active, generate jobs, and economic growth within their communities.

4.0 AIRPORT VISION AND MISSION

4.1 Strategic Planning

A Strategic Plan provides an organization with a roadmap to the future. It does so by looking ahead, typically over a twenty-year time frame, to define aspirational goals and directions for the organization. A well-defined strategy enables an organization to clearly define its purpose, to translate its policies into coordinated actions and to leverage its strengths effectively to realize new growth and development opportunities. An airport strategic plan provides a foundation for the airport's master plan, business plans and marketing/communications plans and positions them within a logical implementation framework.

4.2 The Strategic Context

The Pembroke and Area Airport is an important transportation facility and a key asset for the current economic/social well-being and future development of the six municipalities it serves as well as the greater Renfrew County. Serving a number of local communities, Garrison Petawawa and Canadian Nuclear Laboratories, the Airport can serve as a catalyst to attract new enterprises to the area. The Airport may realize new tourism and recreation opportunities in nearby Algonquin Park and the Ottawa River. To effectively act in this role (and others) as an economic catalyst, the Pembroke and Area Airport must not only operate the Airport in a safe and efficient manner but also develop its facilities to meet the needs of current and prospective users.

4.3 Airport Vision

An **Airport Vision** should outline *what we aspire to be* in terms of the Airports purpose as a service and what it can provide to its customers and the community.

With this in mind, the proposed Vision is:

An air transportation facility critical to the economic and social prosperity of the six municipalities it serves.

4.4 Airport Mission

A **Mission** provides direction on *what our business is* and helps shape future strategy.

The provision of safe, secure and viable airport facilities and services which meet user needs and support the community's economic development goals.

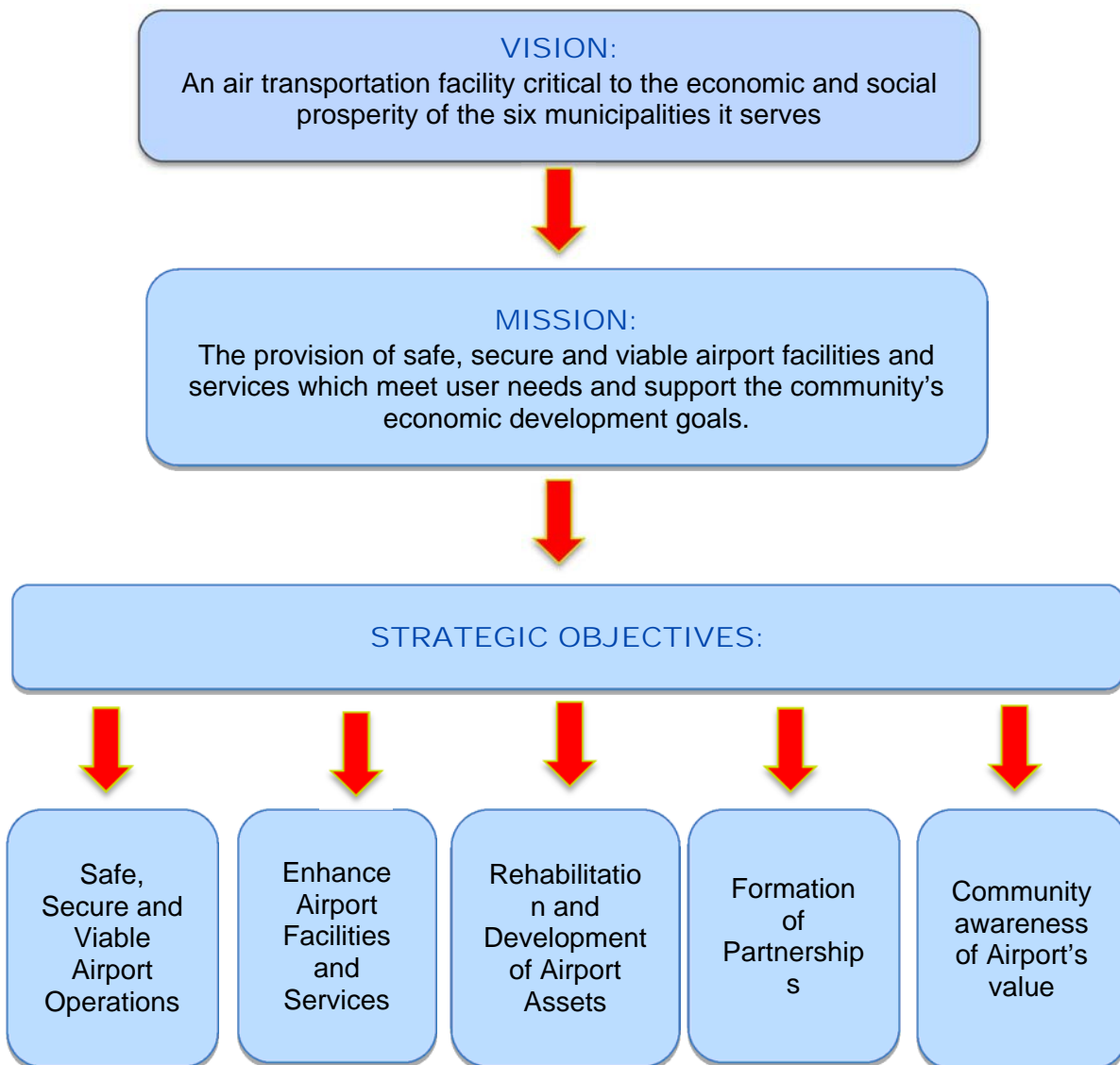
4.5 Strategic Objectives

Strategic Objectives are more focused and specific in terms of **how we will achieve our vision and fulfill our mission**. Therefore, drawing on information collected to date, the proposed strategic objectives are:

1. To operate and maintain the Airport in a safe, secure and efficient manner and in compliance with all regulatory requirements.
2. To provide and enhance airport services and facilities to meet user needs and augment the Airport's financial viability.
3. To develop and leverage the Airport's assets in support of area economic development initiatives.
4. To form partnerships and cooperative arrangements to ensure the long term sustainability of the Airport.
5. To foster awareness and understanding of the value of the Airport to the community's well-being.

Below is a summary of the proposed Vision, Mission and Strategic Objectives:

Figure 4.1 – Airport Vision, Mission and Strategic Objectives



5.0 AIRPORT GOVERNANCE

5.1 Background

Airport governance in Canada has changed a great deal over the years. The National Airports Policy published in 1994 has had the greatest impact on the airport governance landscape. The selection of a governance model has significant impacts on any given airport. Listed below is a sample of variable impacts that can result from the governance model selected:

- Financial Responsibility;
- Regulatory Responsibility (Canadian Aviation Regulations) and Operational Responsibility;
- Staffing Considerations;
- Measuring Success;
- Capital Asset Management; and
- Influence on Airport Development.

5.2 Current Governance Model

The Pembroke and Area Airport Commission (PAAC) holds financial and operational responsibility for the Airport facility. In 1996, there were representatives from 11 municipalities that made up the commission. The owner municipality roster was further reduced with the Ontario government's municipal restructuring in 2000, leaving six owner municipalities on the PAAC. Each PAAC member is an appointed official from one of the area municipalities. The PAAC is made up of eight voting members, representing their respective municipalities as well as one non-voting representative from Garrison Petawawa. Table 5.1 identifies each municipality, the number of voting members and annual financial contribution to the subsidy.

Table 5.1 – Pembroke and Area Airport Commission Voting and Funding Structure

Municipality	Voting Members	Participation	Annual Subsidy (2016)
City of Pembroke	2	21.8%	\$15,936.00
Town of Petawawa	2	29.8%	\$21,858.00
Town of Deep River	1	8.3%	\$6,088.00
Town of Laurentian Hills	1	6.7%	\$4,933.00
Township of Laurentian Valley	1	19.2%	\$14,102.00
Township of Whitewater Region	1	14.2%	\$10,385.00
Total Municipal Contribution			\$73,302.00
Garrison Petawawa	1 (non-voting)	-	\$44,167.00
Total Municipal and Military Contribution			\$117,469.00

5.3 Airport Governance Approaches

There are a range of governance approaches that are utilized by airports across Canada. The relevance of these governance approaches varies by size, role and type of activity occurring at the airport. The spectrum of options available to an airport owner can range from closing an airport, up to airport authorities that generally require a large amount of scheduled passenger service to be effective. For each option there can be different operating arrangements.

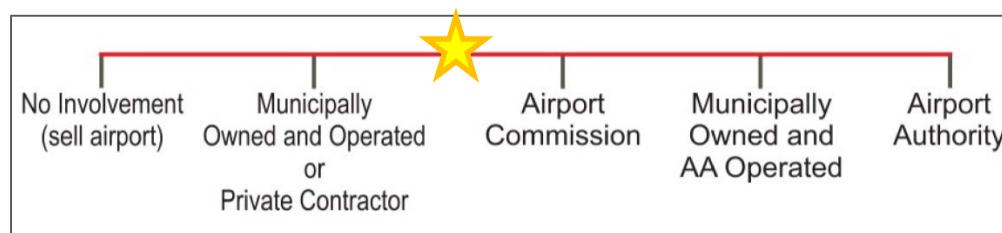
Airports can be run by municipal or provincial employees, operations can be contracted to a third party who reports to an employee of the airport owner, or a system could be put in place where a contractor would be responsible for reporting to an Airport Commission or Committee. It should also be noted that some provinces / territories operate multiple airports with local staff and centralized shared resources, typically in northern and/or remote areas. The three (3) territories, Manitoba, Saskatchewan, Ontario, Newfoundland & Labrador, and Québec are examples where some municipal and regional airports are owned and operated by government. Transport Canada also owns and operates 18 regional and remote airports throughout Canada. The governance structures of these organizations are different from those which are locally based and focused on a single airport.

An airport governance structure is not dictated by who operates the airport, but by how decisions affecting the operations, planning, marketing and development of the airport will be made and executed. The range of governance approaches is illustrated in Figure 5.1. Since this represents a spectrum of governance it is possible for an airport to fall in between the five governance models listed below (i.e. an airport could sit in between an Airport Commission and Municipally Owned and Operated).

Using the criteria below, the Pembroke and Area Airport is currently governed under a model that lies between the “Municipally Owned and Operated” model and the “Airport Commission” model on the spectrum; primarily due to the fact that six of the eight voting PAAC members are elected officials, limiting the ability for PAAC members to make independent decisions that are in the best interests of the Airport. In order to move towards a true ‘Commission’ model, increased independence would be required amongst the Commission members which could include fewer elected officials.

The significant features of each governance option are summarized in the following sections.

Figure 5.1 – Airport Governance Structure Spectrum



5.3.1 Sale of Airport (No involvement)

The option to sell the airport could be very expensive as there may be obligations to be met by the owner. If the airport is to be sold, all the risks and obligations will need to be evaluated and represented as part of the sale price. In most cases, the cost to immediately bring the airport into a simplified sale condition will far outweigh the price a potential buyer may be willing to pay for the airport.

If the airport is sold to a third party, the previous owner (typically a municipality or county) will have little control over the activity that may take place on the airport property, reducing the ability to position the airport as an economic driver within the community. It is also possible that the new airport owner could decide to use the lands for another purpose (i.e. housing subdivision, industrial lands) and no longer support the operation of the aerodrome. The community would experience a significant reduction in their current level of social services (medevac, fire protection and law enforcement).

There are also some advantages to selling an airport which include:

- No financial obligation to operate and maintain the facility.
- No long term liability.
- No safety responsibility.

The sale of the airport has advantages and disadvantages for the current owner. If the community feels there is no need for the airport to exist, this is an option. There could be an option to sell the airport to an appropriate buyer who will keep it, maintain it, and run it as an airport. However, it may be difficult to have any control over the facility without ownership. There may also be local legal restrictions or those with the federal or provincial governments, which may prevent its sale.

5.3.2 Municipally Owned and Operated

In this governance model, the airport is operated by the municipality and managed by an Airport Committee comprised of nominated councillors.

Elected officials who are appointed to airport committees have the benefit of being a direct line back to the municipality or municipalities to make decisions. However, the appointment period can in some cases be short, leading to frequent turnover which can impact long term decision making. There may be variable levels of skills to plan, develop, and operate the airport on an ongoing basis. As elected councillors, Committee members may have conflicting priorities or demands on their time when trying to decide what is best for their constituents and the airport. There may be times when the priorities of one may be in conflict with the priorities of the other.

The airport owner has the responsibility to hire and manage the staff at the airport and ensure appropriate staff support activities (i.e. training, licensing, and benefits) are offered to be compliant with regulations. This adds to the administrative burden for the airport owner and elected officials on the committee. Airport committee members generally have many other responsibilities making it difficult to allocate sufficient time to airport planning, marketing and development matters. The owning municipality (or municipalities in the case of the Pembroke and Area Airport) has direct control over airport planning and operations and also carries any liabilities for legal and regulatory obligations.

The advantages to a municipally owned and operated approach to governance would include:

- Ability to control and ensure development of the airport is consistent with other modes of transportation and the community's overall transportation master plan.
- Ability to take advantage of opportunities as they become available to create economic benefit.
- Ability to market the airport to outside businesses looking to relocate, as industry may see an airport as an advantage if it can accommodate small corporate aircraft.
- Opportunities for resource sharing between the municipalities and the airport (e.g. staff, equipment, economic development agencies, etc.)

5.3.3 Municipally Owned with Contracted Operations

This option is similar to the municipally owned and operated option, with the exception that a private entity would operate the airport under a contractual agreement. The contract conditions typically have a company operate the airport for a predetermined fee. This eliminates the day-to-day operational obligation, but there are costs associated with this model. The cost usually includes a profit for the company that is operating the airport. The contractor is not focused on cost efficiency or additional revenue generation unless they share in the gain. There is little incentive for the private operator to promote the airport unless there is some form of compensation for time and costs incurred. The private operator could assist airport administration activities, but this would normally be in addition to the baseline fee.

Under this governance model, the owner of the airport would carry legal and regulatory obligations. The overall integration of the airport in regional plans and site planning would remain with the airport owner. In general, the main benefit of this option is that day-to-day operations are removed from the direct responsibility of the owner. The main concern is that this option is usually more costly than the municipally owned and operated approach, unless a benevolent group is prepared to operate the airport at minimal cost.

The advantages to a municipally owned and contracted operations approach to governance is similar to municipally owned and operated in that the owner can control the development of the facility and ensure growth contributes to the overall economic health of the region and is consistent with the municipality's overall transportation master plan.

5.3.4 Higher Level of Government Owned and Operated

There is little doubt that over the past two decades there has been a push to download responsibilities for airports to local (often municipal) representatives. Despite this, during stakeholder consultations it became evident that there remains an important subset of airports that continue to be owned and/or operated by the two senior levels of government, i.e. federal and provincial / territorial governments.

The airports that remain with senior levels of government tend to be located in areas that are considered northern and/or remote. In many cases, the areas served by these airports have no all-weather road access. As such, the airport provides a critical link for essential services such as health care.

While many of the senior levels of government may own and/or operate upwards of 20 airports, their geographic dispersion precludes cost control optimization with the exception of some services which can be provided by “head office”. These include human resources, payroll and some project / construction management activities. Due to the nature of the communities they serve, few, if any, of these airports are financially sustainable. Rather, funds from general revenue accounts are used to support airport operations, and capital budgets are prepared based on individual airport requirements. It is worth noting that if other eligibility requirements are met, ownership by a province or territory does not necessarily preclude an airport from accessing funding programs. Ultimately, these airports are operated in a similar way as their municipal cousins, albeit by entities with greater financial resources and legislative power.

5.3.5 Airport Commission

An Airport Commission is a group of appointed individuals with the expertise and time to focus on the planning, management, development, and promotion of the airport. An Airport Commission brings a more business-like focus to airport operations to reduce the cost-revenue gap. Commission members are responsible for the oversight of the day-to-day operations, relieving the Airport Committee of this task.

Based on extensive consultation with those individuals tasked with the governance of Pembroke and Area Airport, it appears that the governance model associated with the Airport falls somewhere between “Municipally Owned and Operated” and a true “Commission” model, within the governance spectrum. In the case of Pembroke and Area Airport, representation on the PAAC is comprised of both elected councillors from the contributing municipalities, and non-elected officials. Given elected officials make up the majority of the voting members of the PAAC (six of eight voting members are elected) the PAAC as a whole is not able to independently make decisions that are in the best interest of the Airport, without being conflicted in considering other municipal requirements. For example, a PAAC member may not want to invest funds to rehabilitate the Airport’s runway if it takes away from funds to support development of the local recreation centre – something their constituent’s feel they could get much more “value” from and/or be more popular.

When compared to an Airport Committee, an Airport Commission would have fewer elected officials and more consistency of membership as their appointment could be for a longer term than each municipal election or overlap election cycles. Under a true Commission model, the individuals would bring the skills that are important to develop the airport and would fuse their knowledge and experience to help guide the future development of the airport. Thus, the nomination process would identify skills needed for the airport/Commission and use that as the basis for the appointment. These skills could come from elected or non-elected officials, just as long as the skill-set mix is correct to help advance the airport’s interests. Commission members often use their local contacts to promote and encourage airport funding.

The presence of a commission of qualified persons assists in creating further credibility when approaching governments and industry for participation in the development of the airport.

The Airport Commission would develop plans for the airport in coordination with the regional plans developed by the local municipality and the region. The owner of the airport would continue to own the land and carry the legal and regulatory obligations. There would likely be a continuing need for a contribution from the municipality/county for operational funding.

This governance model has the potential to relieve the municipal councillors of the additional work load, provide a dedicated effort to develop and promote the airport, and bring enhanced credibility to the marketing of the airport direct to business and governments whom would be members of the commission.

5.3.6 Municipally Owned and Airport Authority Operated

This option is appropriate if a large Airport Authority wishes to have a smaller airport to enhance their network of services or as a competitive advantage to other airports. This model is highly dependent on an Airport Authority needing a reliever or satellite airport to achieve its objectives.

Most satellite airports for large Airport Authorities were part of the original transfer from the federal government. In this model, the Airport Authority becomes the tenant leasing the airport and the owner becomes the landlord. Depending on the arrangement, operational responsibilities and liabilities can be removed completely from the owner.

The Airport Authority makes and carries out all decisions concerning airport planning, funding, construction, customer relations, and meeting all applicable laws and regulations. Current airport employees become employees of the Airport Authority in the initial stages, after which collective bargaining processes affect the future hiring and compensation for airport employees.

Airport Authorities are created under provincial legislation. If an arrangement is made with an Airport Authority outside the province, there may be legal difficulties. This model assumes that the Airport Authority will always make decisions concerning the airport in the best interest of the people using the airport.

That being said, an Airport Authority will run the airport consistent with their larger goals which may not always be consistent with the interests of the municipal airport's community. While Airport Authorities are not-for-profit entities, they are not conceived to lose money. Fiscal responsibility is paramount for Airport Authorities and so significant financial due diligence would be carried out before acquiring any additional airport assets.

An example of such an arrangement can be found in the Edmonton Regional Airports Authority's (ERAA) beginnings. In addition to the Edmonton International Airport, ERAA managed the Edmonton City Centre Airport through a lease with the city owner as well as having varying roles in two other airports in the region (Villeneuve and Cooking Lake).

5.3.7 Airport Authority (Federally Owned Airports)

The Airport Authority form of governance is most applicable for very large airports with high volumes of commercial and private aircraft operations. The Authority has full power to plan, develop and operate the airport. This model is expensive to operate and is generally not applicable to smaller municipal and regional airports. In Canada, this governance was developed with the National Airport Plan specifically for airports designated as part of the National Airport System (NAS) by Transport Canada. At the time of transfer, Airport Authorities were centered on a NAS airport and possibly one or more satellite airports.

In the case of the NAS airports, the Government of Canada remains the airport owner and the Airport Authority operates the airport as governed by the negotiated ground lease. Airport Authorities are financially independent, not-for-profit, non-share corporations as defined by their provincial legislation.

5.3.8 Summary of Governance Models

In general, there are many differing approaches to the governance of airports. It is critical that municipal and regional airports select the most appropriate governance model to position themselves to reduce cost, increase revenue and provide the maximum economic and social benefit to the communities they serve.

The selection of an appropriate governance model will:

- Allow the airport to expedite the decision-making process through establishing the proper channels of decision-making and responsibility.
- Allow the airport to have a team of individuals that have the proper aviation/airport operational planning experience required to run the airport by the most effective means possible.
- Allow the commission to be comprised of appointed individuals with more time to dedicate to airport related matters when compared to a municipally-elected official.
- Allow the airport to engage in special events that will drive investment into the facility through alternative revenue generating activities (i.e. air show, fly in's, drag racing and pancake breakfasts etc.).
- Present an opportunity to better manage the cost and revenue balance.
- Maximization of the relevant aeronautical and non-aeronautical revenue opportunities.
- Long term financial planning.
- Reduce potential conflicts.
- Provide the airport with access to individuals with the knowledge and expertise to apply for government capital funding programs.
- Provide open channels of communication with the local business community by providing local representation on the commission.

The need for an appropriate governance model is essential and forms the basis for the relationship between the owner and the operator of the facility.

5.3.9 Preliminary Governance Recommendation

Overall it has been determined that the PAAC and airport staff are effective at fulfilling their role in operating the Airport. The Airport delivers key services to important clients like the Garrison (employer of 7,000 people in) and provides vital community services through facilitating operations of ORNGE, OMNF, OPP, etc; all with funding far below that of comparable airports. The PAAC has also shown fiscal prudence by keeping a portion of the federal transfer funds still in reserve, which is a rarity at municipal airports.

Some PAAC members and support personnel are strong Airport advocates, promoting the Airport and meeting with many community groups and the public to foster understanding of the Airport's importance to the six owner municipalities and County of Renfrew as a whole.

Recent examples of this promotion are the Canada 150 Fly-In Event and the “Project Runway” Fundraising campaign, together with a number of meetings with groups that support economic development in the region such as the Pembroke and Area Economic Development Committee (see section 6.5 and **Appendix G**). These efforts have resulted in Skydive Petawawa opening and potentially expanding at the Airport, and funds have been raised from the Project Runway program; all are indications that the message, to both the business community and the public, is getting out about the Airport’s importance.

However, through the completion of this study, including feedback from the PAAC during the First Inception Report Meeting and from the first draft of this report, we have identified that the current PAAC and/or supporting municipalities have difficulty coming to unified agreement on matters related to the future ownership, municipal funding, and future direction of the Pembroke and Area Airport. This is likely a symptom of having a commission that is comprised primarily of elected officials that may not have the ability to make independent decisions that are in the best interests of the Airport, thus negating the independence that is required to successfully govern an airport.

Based on this, it is recommended that a governance review be undertaken to ensure the structure, operating agreement, PAAC member nomination process, and funding is appropriate to be a true Airport Commission. This could add new or variable skillsets and experience to the PAAC and help build further ties to the business community and public to recognize the importance of the Airport to the community and provide further advocates. Many organizations undertake this type of governance review on a semi-regular basis to determine if enhancements are required, and it should not be considered as a punitive measure or in any way should be construed as implying there are leadership issues or the PAAC is not fulfilling its role. Instead, this can be seen as a “checkup” to ensure the legal structure of the PAAC, PAAC member nomination process, funding, and voting process allows for the advancement of the interests of the Airport. Especially challenging given that under the present agreement, any new municipal funding for the Airport, and/or some federal or provincial funding applications, would require unanimous approval of all six owner municipalities in order to proceed.

Further, through feedback and discussion, some PAAC members noted that the Garrison’s contribution should change from the current \$44,167 to a value which provides for further investment in the maintenance and capital requirements of the Airport. Preliminary discussion even indicated a willingness to provide the Garrison with formal voting rights in exchange for an enhanced financial contribution to the Airport. This could be a topic of the governance review with the Garrison -- the most important user of the Airport and a significant financial contributor.

A review of the Garrison’s contribution could also be tied to assessing the financial contributions from the six municipalities; as noted earlier this contribution is far below that of comparable airports. Municipalities increasing their contribution would demonstrate to the Garrison, if it’s being asked for additional funds, and to potential new airport tenants, that the municipalities also see the importance of the Airport to the region and are willing to invest in its long term success.

New funding could also help support a portion of the much needed Airport infrastructure rehabilitation and help fulfill some of the business opportunities and recommendations noted in this report.

A governance review could include a workshop facilitated by an outside party followed by a recommended new governance structure, if required. Depending on the results of the review, an implementation plan to transition to a true Airport Commission model could be prepared.

Overall, a governance review will likely assist the PAAC in further achieving its objectives, allow for enhanced funding, and would further fulfill the key items for successful governance noted in Section 5.3.8.

6.0 SWOTCH ANALYSIS

The internal and external strategic factors affecting the Pembroke and Area Airport are categorized into the five groups below.

6.1 Strengths

- Transport Canada certification
 - Certification allows for the establishment of a scheduled passenger service.
 - Some users may prefer, or are required by their insurance companies, to fly into certified airports only.
 - Airspace around airport is protected by Airport Zoning Regulations which will be lost if certification is dropped.
- Airside infrastructure
 - Comprehensive runway and taxiway system.
 - Ample aircraft movement capacity, capable of increased activity without airside delays or congestion.
 - 5,000 ft. long runway capable of handling most military transport and light turbine aircraft.
- Location relative to Garrison Petawawa
 - 7,000+ personnel working at Garrison Petawawa and 6,000+ dependants of personnel.
 - Largest permanent job creator in the region.
 - Extensive military aviation operations associated with Garrison Petawawa.
 - Availability of Airport facilities for Garrison Petawawa and other Department of National Defence use.
- Airport staff
 - Competent and effective airport staff, who operate the airport efficiently with limited financial resources.
 - Staff received strong compliments from the Garrison.
- Availability of developable land
 - Airside and groundside land available for commercial and/or private use.
 - Close proximity to Trans-Canada Highway provides fast and easy access to trucking network/transportation/tourism.
- Operational freedom and flexibility
 - Uncontrolled airport and airspace.
 - Absence of noise and time based flight restrictions.
 - Located near the Algonquin Low Level Tactical Air Transport Exercises Area (DND).
 - Available land would allow for a runway extension.

- Socio-Economic profile
 - Low cost of living in the Ottawa Valley and skilled labour force and aviation skills/expertise at Garrison.
 - Proximity to Algonquin Park could bring tourism opportunities.
- Fundraiser and Promotions
 - Airport has initiated a community fundraising campaign, “Project Runway” to raise funds for the runway pavement rehabilitation by offering to “purchase” a foot of runway for \$250. We commend the PAAC for this initiative, it not only offers a means to promote the Airport and its importance to the area, but will demonstrate community support which could be beneficial in any federal or provincial government funding application.
 - Recent (September 2017) Canada 150 Fly-In Event was very successful, attracting 77 aircraft with 1,500 guests attending.
 - Active in meeting with and being a member of various community groups that can support the airport such as the County of Renfrew Economic Development Group, Upper Ottawa Valley Chamber of Commerce together with partnerships with the City of Pembroke Economic Development Advisory Committee and Pembroke Business Improvement Area.
 - Active Facebook page with stories and regular news updates.

6.2 Weaknesses

- Condition of airport facilities and infrastructure
 - Little capital investment over the past 30 years has resulted in most pavement surfaces being in a state of disrepair.
 - Significant capital investment will be required in the immediate future to ensure full operational availability and safety.
 - Inability to handle heavy transport aircraft or turbine aircraft due to concerns over foreign object debris (FOD) and pavement load rating.
- Lack of municipal services
 - Future large scale land development will require municipal servicing (Hydro, Water, Gas).
 - Significant capital investment required to bring municipal servicing to the airport.
- Limited access to funding
 - Airport is not eligible under the Airports Capital Assistance Program (ACAP) due to lack of scheduled passenger service.
 - Other funding programs provided by provincial and federal governments are typically prioritized to other projects in the owning municipalities.
 - Lack of defined capital plan for infrastructure rehabilitation.
 - Low per-capita municipal contributions at the Pembroke and Area Airport compared to similar airports.

- Age of equipment
 - Average age of the maintenance equipment at the Airport is over 30 years old.
 - Airport employees are often taken off of regular airfield maintenance activities to conduct emergency maintenance on unserviceable equipment or are required to use equipment not adequate for airport use.
 - Parts availability on older equipment is scarce and more costly.
 - Downtime of critical equipment (e.g. snow plow in winter) can result in lost revenues due to potential airport closure.
- Business Focus
 - Lack of standardized lease and business agreements.
 - No single economic development agency that covers all six municipalities which could lead to challenges with cross-promotion with other municipal or County of Renfrew economic development groups.
 - Due to limited Airport funding, no one person devoted to business development at the Airport, although present staff and support specialists undertake this as a shared responsibility with recent success (Skydive Petawawa).
 - Limited funding could prove a hindrance to expanding into new business or further promoting the Airport.
- Governance
 - Differing opinions on importance of Airport to the community and need to invest.
 - Lack of a fully effective governance structure allowing for timely decision making and unified advocacy to promote the interests of the Airport.
- Airport Certification
 - Airport certification requires ongoing regulatory compliance.

6.3 Opportunities

- Increased military activity related to Canadian Forces.
 - Opportunity to accommodate heavy military transport aircraft (without restrictions) such as CC-177 Globemaster and CC-130J type aircraft.
 - Canadian Forces have desire to be “Mission Ready” allowing for rapid deployment of troops based at Garrison Petawawa from the Pembroke and Area Airport. This presents potential opportunities for developments of a mixed-use passenger facility.
 - Potential opportunities in training missions with Discovery Air Defence Dornier Alpha Jets because the Pembroke and Area Airport is located near the Algonquin Low Level Tactical Air Transport Exercises Area. Potential for allied forces to conduct joint training in the area.
 - Increased paratroop training activity.

- Increased aviation fuel sales.
 - Fuel sales are already the largest source of aeronautical revenues, which could be substantially increased as some of the Canadian Forces opportunities are realized.
 - Implementing a self-serve “card lock” type system could further increase revenues and decrease operational costs by allowing fuel to be pumped 24/7 vs current operational hours. This provided for increased flexibility for transient aircraft heading north, east or beyond.
- Expansion of established aviation related business
 - Continue to create a pro-business environment to grow existing airport businesses and foster relationships with new businesses.
- Aviation Hangar Development
 - Existing hangar is presently fully leased.
 - Proactive preparation of lots and taxiway infrastructure to support either leased or sold hangar lots.
- Full service Fixed Based Operator (FBO)
 - Full service FBO to process transient aircraft. Possibility of attracting more corporate traffic for businesses in Renfrew County. Corporate users seek airports where they can hangar aircraft temporarily, especially during winter months.
 - Airport currently offers services similar to an FBO; these services could be consolidated and advertised as such.
- Tourism – Algonquin Park & Whitewater Region
 - Potential for small niche type tourist flights from major cities for high end tours in the region.
- Additional staff to support Business Development
 - Create a new position at the Airport devoted to business development.
 - Focus would be promoting the Airport to the public and local business, and also seeking out new customers.
 - They would lead many of the business development opportunities noted in the report, without getting distracted by day-to-day airport operational activities.
- Skydive Petawawa
 - Further expand business with more clients or new services.
- Marketing and Promotion
 - Build upon current marketing material such as the brochure, banner, Health Matters Magazine articles, and professional advertising in regional magazines and business publications (if funding for the Airport was increased, could do even more).
 - Continue with partnerships with local marketing agency.

- Present marketing efforts helped attract Skydive Petawawa to the facility.
- Continue with fundraising materials, speaking engagements, community talks done by current members of PAAC, Airport staff and marketing support personnel.
- Based on success of the Canada 150 Fly-In Event, consider holding this event annually.

6.4 Threats

- Arnprior Airport
 - Offers some similar services as the Pembroke and Area Airport.
 - Could potentially compete with the Pembroke and Area Airport for County funding support for capital projects. Also limits funding directly from Renfrew County for either airport.
 - Arnprior Airport has readily developable land for sale and lease for hangar construction.
 - Closer to Ottawa, more likely to draw general aviation users from that area.
 - Higher funding/subsidy per capita than Pembroke.
- Land Uses in vicinity that are incompatible with airport
 - Residential dwellings as close as 800m from runway thresholds could yield significant noise complaints should flight activity increase substantially.
 - Current certification keeps the Airport Zoning Regulations in place which help protect the airspace around the Airport and in turn protects usability of the Airport.
- Price of oil
 - Increase in price of oil could reduce overall aviation activity, particularly in the general aviation sector.
 - Users may seek alternative, more cost-effective modes of transportation should prices increase significantly.
- Socio-political climate
 - Many municipal residents are unaware of the valuable activities taking place at the Pembroke and Area Airport.
 - Airport is a yearly expense on each owner municipality's budget and must compete with other capital projects.
 - Negative sentiment or limited knowledge about the Airport benefits could be a barrier to future capital investment and municipal support.

6.5 Challenges

- Passenger leakage to Ottawa and North Bay Airports
 - Both airports support scheduled service and are within 2 hours' drive of the Pembroke and Area Airport.

■ Scheduled Aircraft Slots

- Any scheduled service start-up to Toronto would likely fly to Billy Bishop Toronto City Airport.
- Increased activity and high costs at Toronto Pearson Airport is prohibitive to small scale start-up scheduled service.
- Negotiating landing slots and terminal area for a small commuter type service at Billy Bishop Toronto City Airport would be a challenge.

■ Governance Model Change

- Agreement of all contributing municipalities to move to an official “Airport Commission” model.
- Needs to be planned and executed in a timely manner to be most effective.
- Appropriate knowledge and expertise is often required to plan and implement a new governance model.

■ Increasing Per-Capita Financial Contributions

- Resistance from some municipalities.
- Some not aware or don’t understand the social and economic benefits of the Airport and don’t want to increase the subsidy.

■ Public Perception of Airport

- General public not fully aware of the value of the Airport.
- With a number of different groups that support business and economic development in the region, it could prove to be a challenge in getting all of these types of groups to feature the Airport prominently in local economic development groups’ information as a benefit to local or new businesses.
- We do note that the Airport has been undertaking a number of recent presentations to local business groups to promote and demonstrate the benefits of the Airport to the local business community and public, which have had positive results.
- An example of recent success in these presentations can be found in **Appendix G** in a letter provided from the Pembroke Economic Development Advisory Committee (PEDAC) on August 21, 2017 to the Airport that included the following comment:

“PEDAC would like to take this opportunity to express how vital the Pembroke & Area Airport is to the economic growth and success in the Ottawa Valley. The information we have received to date through the Business Retention and Expansion project indicated that of the large employers and manufactures who have been interviewed, 80% of businesses have positively rated the Pembroke & Area Airport and indicated that its presence and services benefit their business and related businesses..... the Pembroke & Area Airport is an essential component to attracting new business to our area.”

7.0 BUSINESS OPPORTUNITIES

The project team has identified six potential business opportunities for the Pembroke and Area Airport. Each of the opportunities are described in the following sections.

7.1 Card Lock Fuel System

The aviation fueling system at the Pembroke and Area Airport is reaching the end of its useful life. Currently, fuelling and monetary transactions are handled by airport staff during operational hours. Outside of operational hours, pilots either pay a call out charge, or go elsewhere to purchase fuel. Coincidentally, most recreational pilots only have time to fly in the evenings, weekends and holidays, often outside attended hours. Along with the replacement of the fuel tanks, an after-hours self-serve fuel system could be installed to generate additional revenue for the airport. There are several benefits to a card lock system:

- Open 24/7, regardless of attended hours of airport staff. Increased flexibility for both local and transient pilots.
- Reduce workload on airport staff, monetary transactions are handled at the pump by the customer.
- Increased margins on fuel sales, reduce expenses related to personnel cost.
- Improved tracking and monitoring of fuel transactions, decreased risk of miscalculations or theft.
- Allows for special pricing for certain customers with fuelling agreements.

Card lock systems are often attractive during the flight planning phase for pilots. They provide extra assurance that they will be able to purchase fuel during a stop even in events of delays or issues without having to face call out charges. In addition, Pembroke is in an excellent position as a stopping point for transient aircraft travelling to/from Northern Ontario and beyond. With a card lock fuelling system, it would further increase its attractiveness as a popular fuel stop before long distance flight segments over remote terrain especially for rotary wing aircraft.

Figure 7.1 – Card Lock Fuel System



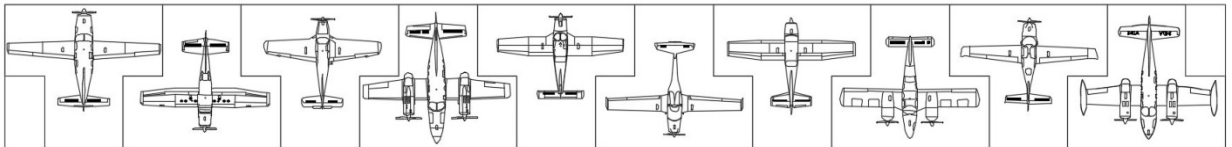
7.2 T-Hangar Construction

- Easy access to individual aircraft.
- Privacy, reduces possible conflict between aircraft owners or businesses using the same hangar.
- Space efficiencies.
- Low construction cost.
- Less expensive to users than alternative aircraft storage solutions; affordable for pilots who may not be able to afford construction of a private hangar.
- In demand, popular in the industry.

Figure 7.2 – Representative T-Hangar Layout



Figure 7.3 - Typical T-Hangar Footprint Efficiency



7.3 Increased Military Training Activity

- Current training generates significant economic impact in the region.
- The addition of private training would increase fuel sales and spending in the community.
- Could be facilitated by infrastructure improvements/rehabilitation already needed.
- Consultation with Garrison Petawawa suggests Alpha Jets (Discovery Air - private training contractor) past avoidance of the Airport is driven more by pavement condition than runway length.

7.4 FBO Operation

- Opportunity to increase aeronautical revenue by offering or promoting Fixed Base Operator (FBO) services.
- Airport currently offers some similar services to a FBO, these services could be expanded and advertised as such:
 - Aircraft hangarage
 - Aircraft fueling
 - Logistics coordination
 - Pilot lounges
 - Catering
 - Baggage handling
 - Ground Support Equipment (GPU, lavatory, de-icing, etc.)
- Requires agreement with FBO operator or increase in municipal funding to expand services and invest in promotions.

7.5 Landing Fee Optimization

- Commercial aircraft are charged a flat rate fee of \$40.00, but this is only recorded and billed during attended hours at the Airport.
- Potential to implement a landing fee system to capture after-hours landings could be investigated.
- However, given current revenue (2016) from landing fees is \$4,200, the cost/benefit of investing in this system would require careful study and likely not worthwhile.

7.6 Algonquin Park and WhiteWater Tourism

- Potential for a high end niche type tourism service using 9 to 19 seat commuter aircraft for wilderness and white-water rafting tours from major urban centres.

8.0 BUSINESSES CASES

As recommended during the First Inception Report Meeting and supported by members of the Pembroke and Area Airport Commission, of the business opportunities noted in Section 7, three opportunities were identified as the most promising and have been selected for business case development. These three opportunities are:

1. Cardlock Fuel System
2. T-Hangar Construction
3. Private Contracted Military Training Activity

Status Quo of present activities are also included below as a comparison to the business opportunities.

The business opportunities assumptions, capital requirements and a summary of the business opportunities are detailed below. Pro forma financial forecasts statements can be found within Appendices B to E.

8.1 Status Quo

8.1.1 Assumptions

- 2017 values were calculated using a 6 year average (2011-2016).
- All revenues and expenditures will grow at the rate of inflation (1.5%), with the exception of the municipal subsidy, which will increase at 5% per year.
- There are no new or enhanced revenue streams.
- There will be no investment in capital projects to improve airport facilities.

8.1.2 Capital Expenses

There will be no investment in capital projects to improve airport facilities within the 20-year planning horizon for the Status Quo scenario.

8.1.3 Summary - Status Quo

To continue operating the Airport as it is currently operated is an option. The Airport does generate modest operating surplus year-after-year, however, these surpluses are insufficient to offset the cost of necessary capital improvement programs. After years of implementing this strategy, deferring investment in infrastructure rehabilitation should no longer be considered a viable option in the medium or long-term.

Please see **Appendix B** for the pro forma for the Status Quo scenario.

8.2 Option 1: Cardlock Fuel System

8.2.1 Assumptions

- A Card Lock fuel system (100LL) will be installed in 2018 and includes the installation of new Jet A and 100LL tanks.
- The cost of removing the existing subterranean tanks and any associated soil remediation is unknown and has not been estimated.
- Card Lock will only apply to 100LL sales, Jet A will continue to be pumped by Airport staff only.
- The Card Lock system will result in a 10% increase in 100LL sales in first year, then will grow with annual inflation (1.5%).
- The Card Lock system will have no impact on Jet A sales.
- Call outs for Jet A will continue and are assumed to be 100% of current call outs.
- The Card Lock system is assumed to require \$1,000 per year in maintenance and will grow with annual inflation (1.5%).
- It is assumed that the entire project cost will be borrowed, will be paid back at 10% per year, and will be subject to a 3% annual interest rate. The cost of borrowing includes payment and the principal.
- The Airport will continue to make ad hoc repairs to airfield pavement and lighting without any major infrastructure rehabilitation projects being undertaken.

8.2.2 Capital Expenses

- The replacement of the existing 100LL and Jet A fuel systems and installation of a Cardlock system is estimated to be \$350,000 (the card locks system itself is \$20,000 and is included in the \$350,000 estimate).
- The cost of removing the existing subterranean tanks and any associated soil remediation may range significantly and has not been estimated. Further study is recommended to determine costs associated with removing these tanks.

8.2.3 Summary – Option 1: Card Lock

The existing aviation fuel facilities at the Pembroke and Area Airport have reached the end of their life cycle and replacement of both the 100LL and Jet A systems should be considered in the immediate term. In addition to replacing the tanks and pumps, the Airport could consider a card lock system to allow users needing 100LL fuel to pump and pay for their own fuel without using limited Airport resources. It is estimated that including the card lock system could result in an operating surplus of approximately \$806,562 over the next 20 years. The estimated cost to replace the fuel system including the card lock is estimated at approximately \$350,000, resulting in a 20-year net surplus of approximately \$456,562.

We note that replacing the existing fuel system with a modern equivalent may be considered a necessity, given the current age of the in-ground tanks. This measure may be necessary to preserve the current revenue from fuel sales which was \$291,000 in 2016, plus provide for the projected increase in sales that could come from using a card lock system.

Please see **Appendix C** for the pro forma for the Cardlock Fuel System.

8.3 Option 2: T-Hangar Construction

8.3.1 Assumptions

- 10 Unit T-Hangar will be constructed.
- Each T-Hangar unit will produce \$425/month in lease revenue, which will increase 1.5% annually with inflation.
- All 10 units will be constructed in 2018. Two (2) units will be leased in 2019, three (3) in 2020, and the final five (5) leased in 2021.
- Increase in activity from construction and lease of T-Hangars will result in a 5% increase in the sale of 100LL in the first year and will increase 1.5% annually.
- It is assumed that the entire project cost will be borrowed, will be paid back at 10% per year, and will be subject to a 3% annual interest rate. The cost of borrowing includes payment and the principal.
- The Airport will continue to make ad hoc repairs to airfield pavement and lighting without any major infrastructure rehabilitation projects being undertaken.

8.3.2 Capital Expenses

- Cost of construction is \$35,000 per unit and a 10 unit T-Hangar will cost \$350,000 to construct.

8.3.3 Summary – Option 2: T-Hangar Construction

The construction of T-Hangars for the purpose of generating aeronautical revenue will yield the highest net surplus of the three business case options considered. It is anticipated that constructing a 10-unit building could result in an operating surplus of approximately \$954,661 over the next 20 years. It is estimated that construction cost will be approximately \$350,000, resulting in a 20-year surplus of approximately \$604,661.

Please see **Appendix D** for the pro forma for the T-Hangar Construction.

8.4 Option 3: Private Contracted Military Training Activity

8.4.1 Assumptions

- 25% of the current traffic at the Pembroke and Area Airport is military generated.
- The establishment of private contract military training at the Airport would result a 50% increase over current military activity, a 12% increase overall.
- This will result in a 12% increase in landing fees, Jet A sales, call out fees, terminal building rental, ground power unit, and deicing fees in the first year (2018) followed by a 1.5% increase annually.
- The contractor will lease a commercial lot for \$1000/month.
- Assumed a \$150,000 allowance to the terminal building waiting room for renovations for classroom/meeting space.

8.4.2 Capital Expenses

- The cost of pavement rehabilitation is unknown and will require a detailed geotechnical investigation to determine. Previous studies suggest the rehabilitation could be approximately \$7.3 million. It should be noted that this price is a rough order-of-magnitude estimate and could increase based on the results of a geotechnical investigation.

8.4.3 Summary - Option 3: Private Contracted Military Training Activity

Increased military training through the attraction of a private contracted military training would have the potential to generate the greatest 20-year operating surplus. It is anticipated that the operations of a private training business could generate approximately \$1,562,654 in operating surplus, however, to attract an operation of this nature is anticipated to require significant airfield infrastructure rehabilitation. As was indicated in the Loomex report, the cost of rehabilitating the facilities may be in the order of \$7,300,000 which would result in a 20-year deficit of approximately \$5,737,346.

Please see **Appendix E** for the pro forma statement for the Private Contracted Military Activity.

8.5 Business Case Option Comparison

Table 8.1 presents the 20-year operating surplus that each of the three business case options could generate in comparison to the associated estimated capital cost.

Table 8.1 – Summary of Pro Forma Statements

Summary	Status Quo	Option 1	Option 2	Option 3
		Fuel System	T-Hangar	Military Training
20 Year Total Revenue	\$14,443,094	\$14,700,230	\$14,720,556	\$15,226,319
20 Year Total Expense	\$13,249,616	\$13,893,668	\$13,765,895	\$13,663,665
20 Year Operating Surplus	\$1,193,478	\$806,562	\$954,661	\$1,562,654
Capital Cost	N/A	\$350,000	\$350,000	\$7,300,000
Net Surplus / Deficits	N/A	\$456,562	\$604,661	-\$5,737,346

8.6 Summary

Based on the assessment, the most viable option is T-Hangar construction, followed by a Card Lock Fuel System, with the last being Private Military Contracted Training Activity.

Should one omit the cost for the rehabilitation of the runway for Option 3 – Private Contracted Military Training Activity, this opportunity could be the most attractive. Again, it could be argued that the cost of the rehabilitation is required not only to secure new business, but protect and provide a safe operating environment for current operations at the Airport.

9.0 AVAILABLE AIRPORT FUNDING PROGRAMS

9.0 General

This chapter includes a detailed review of the current and past forms of funding available to municipal and regional airports in Canada by federal and provincial agencies. Airport funding structures, including how funding amounts are determined, are examined (i.e. flat-rate contributions or activity/performance-based contributions such as per resident, per passenger, etc.). Requirements to ensure eligibility for federal and provincial funding programs are also presented and discussed.

The impact of municipal contributions to municipal and regional airports is examined, and examples where private investment could contribute to operational and/or capital funding are described.

9.1 Capital Funding Programs

The capital funding programs identified are intended for large one-time expenditures to expand or rehabilitate current infrastructure, or to improve or replace equipment. Capital funding is not intended to be used for day-to-day operations of the airport nor for routine maintenance. Capital projects can be both small and large ranging from tens of thousands of dollars to millions of dollars. Examples of capital projects include but are not limited to:

- Airport maintenance equipment purchase or replacement;
- Airport fencing and security;
- Runway, taxiway and apron resurfacing, reconstruction or extensions;
- Air terminal construction, renovation and expansion;
- Site servicing (water, sewer, electricity, telecommunications, etc.); and
- Development lot preparation.

Many municipal and regional airports operate with a budgetary deficit, often receiving an annual operating subsidy from the owner or local government. It is often difficult for these airports to save sufficient funds from day to day operations for major improvements of their facilities or keeping facilities up to current standards. As such, capital funding programs typically provide one time influxes of capital to facilitate these improvements. The following sections briefly summarize several capital funding programs that are currently active, the fund's purpose, applicant eligibility, funding structure, program value & longevity, and the funding application process are described in detail.

9.2 2014 Building Canada Fund

The 2014 New Building Canada Fund (NBCF) is a fund provided by the federal government under the New Build Canada Plan (NBCP) to support significant federal, provincial or municipal projects that promote economic growth, job creation and productivity. The fund is split into two major components:

- The National Infrastructure Component (NIC): Provides funding for projects of national significance, with a focus on projects that have broad public benefits and contribute to long-term prosperity and economic growth.

- The Provincial-Territorial Infrastructure Components (PTIC): Supports infrastructure projects at all levels of significance that contribute to economic growth, clean environment and strengthening communities. The PTIC is further split into two sub components:
 - National and Regional Projects (PTIC-NRP); and
 - Small Communities Fund (PTIC-SCF). The Small Communities Fund is allocated for communities of fewer than 100,000 residents.

9.2.1 Eligibility

Unlike ACAP, the NBCF is not exclusive to airports and many infrastructure projects compete for funding under this program. Moreover, municipalities are only permitted to submit a limited number of projects for funding consideration under this program. The fund is set up to assist in all facets of infrastructure development. The NBCF does, however, have certain eligibility requirements for airports looking to participate. The eligibility requirements are as follows:

- Municipal and regional airports are identified under the NBCF for new construction, adding capacity and rehabilitation to aeronautical and or non-aeronautical infrastructure. Aeronautical infrastructure includes:
 - Runways, taxiway and aprons;
 - Aerodrome lighting and nav aids;
 - Airside mobile equipment and storage; and
 - Air terminal buildings.
- Non-aeronautical infrastructure includes:
 - Groundside access roads;
 - Parking Facilities; and
 - Intelligent transportation systems in support of municipal and regional airports.
- To be considered for this type of funding, the following must be met as an airport:
 - Airport **must** have scheduled passenger service;
 - Airport must not be located in a provincial or territorial capital;
 - Airport must not be federally owned or hold federal assets;
 - Safety and security projects that are eligible for funding under Transport Canada's ACAP are not eligible for funding under NBCF.

9.2.2 Funding Structure

Generally, projects approved by their respective province or territory will be federally cost-shared on a one-third (33%) basis between the airport owner, the province, and the federal government.

The following exceptions apply:

- The maximum share for private sector for-profit projects is 25% of total eligible costs.
- The maximum share for provincial projects such as highways, major roads and public transit projects is up to 50% of total eligible costs.
- The maximum share for projects in the Northwest Territories, Yukon and Nunavut is up to 75% of total eligible costs.

9.2.3 Program Value and Longevity

In total, the NBCP has a value of \$14-Billion. These funds are allocated to the two components (NIC and PTIC) as follows:

- National Infrastructure Component = \$4-Billion
- Provincial-Territorial Infrastructure Component = \$10-Billion
 - National and Regional Projects = \$9-Billion
 - Small Communities Fund = \$1 Billion

Under the PTIC each province and territory will receive at least \$250 million in addition to a per capita allocation to complete the \$10-Billion fund.

The NBCP is a one-time program lasting for 10 years. All provincial and territorial funding allocations are to be completed and prioritized by April 1st 2018.

9.2.4 Funding Application Process

Applications for NBCF project funding are conducted through each provincial or territorial infrastructure ministry. Since the total amount of the funds are already allotted to each province/territory based on a per capita allocation, it is the responsibility of the province/territory to prioritize and distribute funds to successful infrastructure projects. As a result, provinces/territories set the process for delivering business cases and deadlines to obtain funding. In the context of airports, the proposed project must demonstrate how it will benefit local economic development and must support one or more of the following outcomes:

- Improve efficiency and capacity;
- Improve safety;
- Extend the life of existing assets;
- Improve accessibility of municipal and regional airports;
- Facilitate regional and local economic development at the airport through increased air service, aviation related business and increase in trade activity; and
- Project must not negatively impact other airports in their vicinity and the overall provision of air transport services in the region.

9.2.5 Applicability to Pembroke and Area Airport

Unfortunately, the Pembroke and Area Airport does not qualify for NBCF funding. The airport requires a scheduled service to qualify for this program.

9.3 Gas Tax Fund

The Gas Tax Fund (GTF) is a fund provided by the federal government under the NBGP which provides over \$32 billion during the period of 2014-2024 to provinces and territories for projects such as road, public transit, airports, and other community infrastructure. The administration of the program is entirely the responsibility of the province or territory.

9.3.1 Eligibility

Similar to the BCF, the GTF is not exclusive to airports and many infrastructure projects compete for funding under this fund as the program is set up to assist in all facets of municipal infrastructure development. Each province and territory has its own eligibility requirements for application.

As an example of the eligibility requirements under the Gas Tax program, municipal and regional airports are identified and include construction projects such as:

- Primary runway, cross-wind runways, secondary runways and taxiways, and runway extensions.
- Aprons and primary taxiway from main/terminal apron to runway.
- Airport buildings, including terminal and storage areas/shed.
- Development areas, access road, fencing and drainage.
- Lighting and navigation equipment.

It should be noted that airports in the National Airport System (NAS) are not eligible for funding under the Gas Tax program.

9.3.2 Funding Structure

Allocations to provinces and territories over the first five years of the GTF (2014-2019) are based on the census data from 2011 and are shown in Table 9.1. Allocations for 2019-2014 will be based on the census data from 2016.

Table 9.1 – GTF Allocation per Jurisdiction

Jurisdiction	GTF Allocation
Newfoundland and Labrador	\$155,298,305
Prince Edward Island	\$78,000,000
Nova Scotia	90%
New Brunswick	\$225,275,924
Quebec	\$2,382,738,448
Ontario	\$3,873,734,778
Manitoba	\$340,447,890
Saskatchewan	\$292,707,395
Alberta	\$1,084,982,788
British Columbia	\$1,317,039,837
Yukon	\$78,000,000
Northwest Territories	\$78,000,000
Nunavut	\$78,000,000
First Nations	\$138,998,953
Canada	\$10,400,000,000

9.3.3 Program Value and Longevity

To date, the Federal GTF has provided \$17 billion to provinces and territories and will continue to provide approximately \$2 billion annually for municipal infrastructure funding. The GTF is indexed at two per cent per year, to be applied in 100 million increments which means that it will grow by \$1.8 billion over the next decade from 2014-2024.

From 2014-2014 the federal government will have provided \$32 billion in infrastructure funding across Canada.

9.3.4 Funding Application Process

The application process for the GTF funding varies by jurisdiction. In Ontario, the municipality must submit a project profile for each project proposed under the GTF program. The objective of the project profile is to provide basic information regarding the proposed project such as location, primary accomplishment, an estimate of the total cost, estimate of annual GTF funding to be used, and anticipated project start date.

9.3.5 Applicability to Pembroke and Area Airport

The Pembroke and Area Airport qualifies for Federal Gas Tax funding. Renfrew County and the owning municipalities receive annual allocations of the Federal Gas Tax fund. The breakdown of these allocations is as follows in Table 9.2.

Table 9.2 – Gas Tax Fund Allocations to Renfrew County and 6 airport owner municipalities

	2017	2018
Renfrew County	\$2,630,909.16	\$ 2,756,190.55
Laurentian Hills	\$ 85,436.35	\$ 89,533.03
Laurentian Valley	\$ 293,603.55	\$ 307,584.67
Petawawa	\$ 486,086.11	\$ 509,233.07
Pembroke	\$ 873,179.46	\$ 914,759.43
Whitewater Region	\$ 210,430.44	\$ 220,440.46
Deep River	\$ 127,480.55	\$ 133,551.05
Total	\$4,707,125.62	\$ 4,931,292.26

9.4 Airport Capital Assistance Program

The Airport Capital Assistance Program (ACAP) provides funds to airports to make improvements in airside infrastructure, airport maintenance equipment, air terminal facilities, and other airport projects. The program was initiated in 1995 by Transport Canada along with the rollout of the National Airports Policy. The National Airports Policy saw the divestiture of many municipal and regional airports to municipalities, counties or provinces. Transport Canada anticipated that many of these operators would have difficulty obtaining the necessary capital to fund major projects at their respective airports. ACAP funding assists airports by funding projects that improve airport safety, protect airport assets, and enable efficiencies thus reducing operating costs.

9.4.1 Eligibility

To be eligible for ACAP funding, an airport must meet the following requirements:

- The airport must not be owned or operated by Transport Canada.
- The airport must be a Transport Canada certified facility.
- The airport must offer year-round regularly scheduled passenger service with an average of 1000 passengers per year.

Project eligibility is prioritized based on safety related issues. While many airport projects are deemed as “nice to have”, ACAP prioritizes their funding distribution based on the most critical projects to improve aviation safety. The ACAP program prioritizes project eligibility into the following categories:

- Priority 1 - Safety-related airside projects.
- Priority 2 – Safety-related Heavy airside mobile equipment.
- Priority 3 – Safety-related Air terminal building/groundside.

Due to ACAP's funding being provided for mainly airport safety improvement projects, the program does not fund the following:

- Land purchases;
- Feasibility, planning or zoning studies; or
- Projects which have already been initiated or completed.

9.4.2 Funding Structure

The proportion of funding received for a successful ACAP application is dependent on the activity of the given airport. Airports with higher year-round regularly scheduled passenger service volumes will receive less funding than airports with lower passenger volumes. The rationale behind this calculation is that greater revenue is generated through airport improvements fees (AIFs) with greater passenger activity. Priority 1 and 3 projects (excluding aircraft firefighting services which are reimbursed 100%) are allocated funds.

9.4.3 Program Value and Longevity

The ACAP program is reviewed and renewed every 5 years. The most current ACAP review was in the 2014/2015 federal government fiscal year and the program is valued at \$190,000,000 over the subsequent 5 years.

9.4.4 Funding Application Process

The process for applying for ACAP funding is quite rigorous. Transport Canada recommends discussing the funding request put forth with regional officials before formally submitting the application. This will assist with ensuring eligibility for funding.

9.4.5 Applicability to Pembroke and Area Airport

The Pembroke and Area Airport does not qualify for ACAP funding. The airport requires a scheduled service supporting at least 1,000 annual passengers to qualify for this program.

9.5 National Trade Corridors Fund

The National Trade Corridors Fund (NTCF) is a new (July 2017) funding program managed by Transport Canada to support infrastructure and transportation projects. A technical briefing of the NTCF is included in **Appendix F**. A brief summary of the program and its potential applicability to the Pembroke and Area Airport is included below.

The goals of the NTFC program as described in the Technical Briefing are to:

- Support the fluidity of Canadian trade to improve supply chain performance.
- Increase the resilience of the Canadian transportation system in a changing climate and ensure it adapts to new technologies and future innovation.
- Address unique and urgent needs in Canada's Territorial North related to transportation safety and economic and social development.
- Leverage investments from multiple partners such as provinces, territories, municipalities and the private sector.

9.5.1 Eligibility

Eligible recipients of the NTCF include:

- Provinces and territories, municipalities and local, regional, provincial and territorial entities
- Indigenous governments
- Public sector organizations
- Federal crown corporations or agencies
- Canada port authorities
- National Airport Systems airport authorities
- Universities and colleges

Eligible activities:

- Prepare, construct, rehabilitate and improve infrastructure assets related to transportation
- Studies including feasibility, environmental, planning and integration
- Highway, bridge, interchange and road projects along corridors that involve more than one modes of transportation
- Infrastructure that involves more than one mode of transportation (ex. Airports, ports, rail yards, etc.)
- Grade separations that provide more efficient and safer road and rail interaction
- New technologies that advance and support the efficient movement of goods and people
- The NTCF will match up to 50% of total eligible expenditures

9.5.2 Program Value and Longevity

The NTCF will make available \$2 billion over 11 years. Requests per project cannot exceed \$500 million in value. Preference will be given to projects that can begin in 2018-19 and that have other contributing funding sources.

9.5.3 Funding Application Process

The initial funding application process began with Expression of Interests (EOI) which were to be submitted by September 5, 2017. However, additional intakes are planned.

An EOI requires:

- Applicant information
- Applicant mandate
- Project overview
- Project schedule
- Project costs
- Project funding (including funds committed from other sources)
- Description of how the project fulfils the objectives of the NTCF

Successful applications will be required to submit a Comprehensive Project Proposal by November 6, 2017.

9.5.4 Applicability to Pembroke and Area Airport

The Pembroke and Area Airport may be eligible for this funding based on the following criteria:

- The project could leverage investments from multiple partners such as, municipalities, Renfrew County, and Garrison Petawawa;
- Municipalities are eligible recipients; and
- An airfield rehabilitation project would prepare, construct, rehabilitate and improve infrastructure assets related to transportation.

Further study is required of this new program to confirm its eligibility for the Pembroke and Area Airport, however, based on the funding programs noted in this report, the NTCF appears to offer the best opportunity to secure funding for the Airport to repair and replace aging airfield infrastructure. However, based on information provided, the program does require support and expects financial contributions from the six municipalities to be successful.

9.6 Federal Economic Development Agency for Southern Ontario

The Federal Economic Development Agency for Southern Ontario (FedDev Ontario) work's with communities to promote and provide funding for various initiatives. FedDev Ontario acts as a federal delivery agent for Community Futures, which the PAAC has been successful in securing funding from in the past.

9.6.1 Eligibility

FedDev Ontario focuses activities on four areas:

- Technological Innovation
- Business Development
- Community Economic Development
- Internal Services

9.6.2 Program Value and Longevity

FedDev Ontario has been running since 2009 and for the 2016-217 fiscal year, FedDev Ontario invested \$193.8 million. Its present five year term started in 2014-15 and is scheduled to finish in 2018-19.

9.6.3 Applicability to Pembroke and Area Airport

Based on past successes, the Pembroke and Area Airport is eligible for this funding, especially through the Community Futures program. This may be a program to help fund geotechnical studies recommended for the future airfield pavement rehabilitation requirements together with those required for municipal servicing assessments.

10.0 RECOMMENDATIONS AND NEXT STEPS

10.1 Actions Required

The recommendations and next steps noted in this report are summarized in the attached Table 10.1. The project team has created this table of action items to facilitate tracking progress in the implementation of this Strategic Plan and Business Case. Actions are broken out by:

- Short term (0-2 years);
- Medium term (3-10 years); and,
- Long term (11-20 years)

Key action items have priorities assigned to them based on the following classification:

- Priority 1: Safety and Security – Safety of aircraft, passengers, and staff
- Priority 2: Strategic Planning – Strategic priorities to provide for long-term decision making and progress of the Airport
- Priority 3: Financial feasibility – Provide long-term financial support for the Airport
- Priority 4: Operational efficiency – Provide for increase airport operational efficiencies
- Priority 5: Quality of life and social responsibility – Continue to provide essential services such as medivac/ORNGE and OMNRF related forestry, wildlife and fish re-stocking programs.

As some tasks are dependent on a previous action, we have organized the table and listed tasks generally by the recommended initiation or completion date. It is important to note that some Priority 2 items (such as a review of airport governance/funding) come before Priority 1 items (such as rehabilitation of the airfield). This is because it's anticipated that items such as reviews of airport governance and the present municipal funding model, would need to be completed before securing capital through various federal or provincial funding programs; funding that in turn will allow for the airfield rehabilitation projects to proceed.

The table lists a Person or Party Responsible for each task. For this column, the project team has identified some initial groups that we believe would lead the tasks. However, we recommend the PAAC undertake a review of this and potentially assign tasks to a specific person or group who in turn would be responsible for advancing the project(s) forward and reporting progress back to the PAAC. Without this, progress tends to fall to the wayside and/or all tasks fall to one person who, due to time limitations, may not be able to advance actions as well as a group of people can who share responsibility in progress of the Airport's objectives.

Pembroke and Area Airport Strategic Plan and Business Case Recommendations and Next Steps Table 10.1						
Timeframe	Task ID #	Recommendation or Action Required	Priority Level	Deliverable(s)	Recommended Completion Date (Month-Year)	Party or Person Responsible
Short Term (0-2 Years)	1.0	Presentation to Municipal Councils and other Stakeholders	Priority 2: Strategic Planning			
	1.1	Utilize advocacy strategy to present a summary of this report to the six municipalities		1.Presentation to Municipal Councils	Jan-18	Municipal Representatives on the PAAC
	1.2	Present results of study to Garrison Petawawa		2.Presentation to Garrison Petawawa	Jan-18	Chair of the Commission
	1.3	Continue with presentations to local business groups and economic development groups		3. Presentations to local businesses (ongoing)	Mar-18	PAAC
	2.0	Review and Update Airport Governance	Priority 2: Strategic Planning			
	2.1	Conduct governance workshop		1.Summary report with recommended new Governance structure. 2.New Governance Structure	Feb-18	PAAC
	2.2	Develop new Governance Structure based on results of Workshop			Mar-18	PAAC
	2.3	Amend operating agreement for Airport			Apr-18	PAAC
	2.4	Implement new governance structure			Jul-18	PAAC
	3.0	Review Funding Model	Priority 3: Financial Feasibility			
	3.1	Review municipal financial contributions		1. New funding agreement with Municipalities (tied to new Governance model) 2. New funding agreement with Garrison (tied to new Governance model)	Feb-18	PAAC
	3.2	Enter into discussions with Garrison on funding			Mar-18	PAAC
	3.3	Establish new Municipal funding structure			Jul-18	PAAC
	4.0	Geotechnical Investigations and Updated Capital Cost Estimate	Priority 1: Safety & Security			
	4.1	Solicit quotes for airfield geotechnical investigation		1. Updated cost estimates for airfield rehabilitation and capital plan 2. Municipal servicing cost estimates	Mar-18	PAAC
	4.2	Commission engineering study to assess municipal services requirements and cost			Mar-18	PAAC
	4.3	Completed geotechnical investigations and municipal services assessment			Jun-18	PAAC
	4.4	Geotechnical report and updated cost estimates for airfield rehabilitation. Municipal services assessment and costs			Jul-18	PAAC

Timeframe	Task ID #	Recommendation or Action Required	Priority Level	Deliverable(s)	Recommended Completion Date (Month-Year)	Party or Person Responsible
Short Term (0-2 Years) Continued	5.0	Funding for Capital Improvements	Priority 3: Financial Feasibility			
	5.1	Explore opportunities for Federal and Provincial funding		1. Funding applications 2. Secure funding for airfield rehabilitation and municipal services	Jul-18	Forward Thinking Marketing / PAAC
	5.2	Study National Trade Corridor Funding program			Aug-18	Forward Thinking Marketing / PAAC
	5.3	Update applications for funding			Oct-18	Forward Thinking Marketing / PAAC
	5.4	Solicit municipal approvals for funding applications (as required)			Mar-19	PAAC + Six Municipalities
	5.5	Secure funding for airfield rehabilitation and municipal servicing			Aug-19	PAAC
	6.0	Business Development Opportunities	Priority 3: Financial Feasibility			
	6.1	Further study of the three business development opportunities proposed (Cardlock Fuel system, T-Hangar, Military Training)		1. Approval to proceed with business development opportunities including funding	Mar-18	PAAC
	6.2	Investigate costs and environmental requirements including soil testing for the removal of the old underground tank fuel system.			Apr-18	PAAC
	6.3	PAAC and Municipal Approval to proceed with funding			Jun-18	PAAC + Six Municipalities
	6.4	Implement Business Development Opportunities			Dec-18	PAAC
	7.0	Develop a Formal Community Engagement Program	Priority 5: Quality of Life & Social Responsibility			
	7.1	Develop and/or amend promotional material on the Airport for the local community		1. New airport promotional material	Mar-18	Forward Thinking Marketing
	7.2	Update media package on the Airport as required		2. Media package	Apr-18	Forward Thinking Marketing
	7.3	Organize, promote and host an "Airport Family Day" to build upon Canada 150 Fly-In Event		3. "Airport Family Day" (Annual)	Jul-18	PAAC

Timeframe	Task ID #	Recommendation or Action Required	Priority Level	Deliverable(s)	Recommended Completion Date (Month-Year)	Party or Person Responsible
Medium Term (3-10 Years)	8.0	Airfield Rehabilitation and Municipal Services	Priority 1: Safety & Security			
	8.1	Issue request for proposal for design of airfield pavement and electrical rehabilitation together with municipal servicing		1.Proposals for engineering consulting services for airfield rehabilitation	Oct-19	PAAC
	8.2	Design airfield pavement and electrical rehabilitation and municipal servicing		2.Designs for airfield rehabilitation	Feb-20	Engineering Company
	8.3	Airfield pavement and electrical construction and municipal services		3.Reconstruction of airfield pavement and electrical facilities and new municipal services	Sep-20	Engineering Company
	9.0	Update Economic Impact Assessment	Priority 2: Strategic Planning			
	9.1	Solicit quotes to update the 2015 Economic Impact Assessment		1. Updated Economic Impact Assessment with Indirect and Induced economic impact of the airport calculated	Jan-20	PAAC
	9.2	Identify the Indirect and Induced economic impact of the airport		2. Presentations to Municipal Councils and local business community on Economic Impact of the airport	Apr-20	PAAC
	9.3	Present updated Economic Impact Assessment to the Six Municipal Councils and local business community			Jun-20	PAAC + Six Municipalities
	10.0	Add Business Development Role To Airport	Priority 2: Strategic Planning			
	10.1	Establish new role with a focus on Business Development		1. New role established 2. New role in place	Jan-21	PAAC
	10.2	Seek out candidates (internal or external)			Feb-21	PAAC
	10.3	Hire new position			Jul-21	PAAC
	11.0	Equipment Replacement	Priority 4: Operational Efficiency			
	11.1	Implement fleet replacement program to replace old airfield maintenance equipment		1. New airfield equipment	Jan-21	PAAC
	11.2	Purchase necessary equipment			Jun-21	PAAC
	12.0	Lease Agreements and Marketing Materials	Priority 4: Operational Efficiency			
	12.1	Prepare standardized lease agreements for tenants		1. Standardized leases	Apr-20	PAAC
	12.2	Prepare new marketing materials for the airport promoting current and new services		2. New marketing materials	May-20	Forward Thinking Marketing
	Long Term (11-20 Years)	13.0	Terminal Building Upgrade	Priority 4: Operational Efficiency		
13.1		Review condition of terminal building (as needed)		1. Terminal building condition assessment	Jan-27	PAAC
13.2		Assess long term needs of terminal facilities (security, scheduled passenger services, fixed-based-operator)		2. Renovated or upgraded terminal building	Jun-27	PAAC
13.3		Renovate or upgrade terminal building as needed			Oct-28	PAAC

11.0 COMMUNICATION PLAN AND ADVOCACY STRATEGY

This Strategic Plan and Business Case contains a wealth of information about the Airport and offers bold recommendations to the municipalities, Garrison Petawawa and the public. The PAAC, whether members of municipal councils, appointed by municipal councils or members of Garrison Petawawa, must be the advocates of the Airport and communicate its benefits to their colleagues and the community at large. To facilitate this, below, the report has been summarized into key talking points that can be used to discuss the Airport's benefits, challenges, as well as the results of this report. Also, presented below is an outline of a potential Community Engagement Program to continue to raise awareness of the Airport's importance.

11.1 Community Benefits of the Airport

- Garrison Petawawa, which employs 7,000 military and civilian personnel, has described the Airport as “critical infrastructure” that supports the base in terms of its helicopter operations, training, and deployment. The Garrison in turn provides significant employment and supports local businesses, both in its ongoing requirements, but also in special training situations where hotels, restaurants and catering companies, among others, are the beneficiaries. The Airport is important to the Garrison, who in turn are the largest employer in the region and the single greatest economic driver for the local communities.
- The Pembroke Economic Development Advisory Committee (PEDAC) has described the Airport as “*an essential component to attracting new business to our area.*”
- The Airport, through ORNGE, provides medical transfer of patients. Annually, 30 fixed wing or rotary (helicopter) arrivals and departures are made at the Airport. This could translate to 30 patients per year receiving the life-saving critical care they need because of the Airport. If the Airport was not there, it could raise concerns whether ORNGE can provide the same level of service to area hospitals without knowing that they can refuel and transfer patients or staff from fixed wing aircraft (which require the runway) to helicopters (which need to refuel).
- The Airport provides for transfer of students to specialized schools in Ontario for blind, low vision, or deaf-blind. Without the Airport, opportunities for these students to receive the specialty education they need could be limited or non-existent.
- OMNRF uses the Airport for fire suppression, wildlife counts and has a fish restocking program that are based from the Airport; which has a direct benefit to local business and the public.

11.2 Current Status of Airport

- The public does not have a strong awareness of the importance of the Airport to the community.
- Traditionally, municipal airports do not realize an operating surplus. Just like a road, a park, or a recreation centre, they enhance the quality of life of a community and provide the infrastructure to support area businesses or key services necessary to the community.

- In 2016, the six municipalities that own the Airport contributed a total of \$73,302 to the Airport; this translates to a subsidy per capita of \$1.34. When compared to similar airports in Ontario, such as Peterborough, Brantford, Lake Simcoe (Barrie), North Bay and Arnprior, this is far below, by a factor of almost five, the per capita average contribution of these airports of \$6.54 per person.
- Garrison Petawawa contributed \$44,167 in 2016 to Airport operations.
- If the Pembroke and Area Airport received funding equivalent to the average subsidy of these comparable airports, it would allow for investment in new business opportunities, fund a portion of the infrastructure repairs, and provide for a new business development position and further marketing and promotion efforts at the Airport.
- The previously completed *Economic Impact and Infrastructure Analysis Report (2015)* estimated that the present economic impact of the Airport to Renfrew County is \$1M per year with 10 Full Time Equivalents (FTEs), but this only included the direct benefit, not the indirect or induced economic benefit. Therefore, the actual value to the communities is likely significantly higher.
- Current Airport infrastructure, including airfield pavements and electrical systems, is over 30 years old and in very poor condition, requiring immediate rehabilitation. Although no reports of Foreign Object Debris (FOD) have been reported as of yet, with the current condition of the pavement there is a risk of (FOD) which could result in damage to aircraft and a safety risk to passengers. An estimate, which requires further geotechnical investigation, is that the Airport requires approximately \$7.3 million in capital funding to repair airfield infrastructure.
- The Airport should consider undertaking a review of its airport governance structure, which could include converting to a full “Airport Commission” model. The review would ensure the structure, operating agreement, member nomination process, and funding is appropriate to be a true Airport Commission and allows for independence and advancement of the Airport’s interests. A governance review could include a workshop facilitated by an outside party followed by a recommended new governance structure and action plan to transition to a more appropriate governance structure, if required.
- In reviewing the airport governance structure, it is also an appropriate time to review the Airport funding model. Providing funding on par with competitor airports would provide the long-term investments needed to promote the airport, invest in new business opportunities, and enhance airside facilities.
- Given the current state of infrastructure, the age of the hangar owned by the Airport, present municipal funding, and conflicting opinions on the value of the Airport, the facility does not give the full appearance of being “Open for Business” when compared to the other airports profiled in this report. However, within their budget capabilities, the PAAC has had success in attracting Skydive Petawawa and potentially expanding their service offering, attracted Dynamic Parachute Rigging, completed the Canada 150 Fly-In event, and has been very active in promoting the Airport to local groups that support economic development.

- Airport staff have received very positive comments from the military about level of service which would translate well to support new businesses/tenants.
- With the present hangar fully leased, attracting new tenants without availability of hangar space at the Airport is a challenge.

11.3 Business Opportunities

A number of potential business opportunities were identified in this report with three identified as the most promising and selected for business case development. These three opportunities are:

1. Card Lock Fuel System

- Replacing the current below ground tanks with above ground tanks.
- Adding a card lock system to the 100LL aviation fuel allows pilots to fuel aircraft with monetary transactions handled at the pump by the customer.
- The estimated capital cost to supply and install new fuel tanks is \$350,000.
- The capital costs of the tanks have been included, but an argument could be made that, given the present age and condition of the current tanks, this work is required regardless to maintain present fuel sales of \$291,000 (2016 sales). The card lock component itself only represents \$20,000 of estimated capital cost.

2. T-Hangar Construction

- The current hangar is at capacity and its design has not been optimized for its current use.
- T-Hangars offer privacy and reduces possible conflict between aircraft owners or businesses using the same hangar.
- Proposed construction of a 10 Unit T-Hangar at a cost of \$35,000 per unit or \$350,000 total.

3. Private Contracted Military Training Activity

- Builds upon current military training done by the Garrison that generates significant economic impact in the region.
- Option considers attracting a private company into the Airport that offers military training (domestic or international pilots)
- Increased training would increase the sale of fuel and other Airport services as well as spending in the community.

Based on the financial assessments, the most viable option is T-Hangar construction, followed by a Card Lock Fuel System, with the last being Private Contracted Military Training Activity.

Table 11.1 – Summary of Pro Forma Statements

Summary	Status Quo	Option 1	Option 2	Option 3
		Fuel System	T-Hangar	Military Training
20 Year Total Revenue	\$14,443,094	\$14,700,230	\$14,720,556	\$15,226,319
20 Year Total Expense	\$13,249,616	\$13,893,668	\$13,765,895	\$13,663,665
20 Year Operating Surplus	\$1,193,478	\$806,562	\$954,661	\$1,562,654
Capital Cost	N/A	\$350,000	\$350,000	\$7,300,000
Net Surplus / Deficits	N/A	\$456,562	\$604,661	-\$5,737,346

Note: Should one omit the cost for the rehabilitation of the runway for Option 3 – Contracted Military Activity, this opportunity could be the most attractive. Again, it could be argued that the cost of the rehabilitation is required not only to secure new business, but protect and provide a safe operating environment for current operations at the Airport.

11.4 Airport Funding Programs

There are few federal or provincial funding programs that can apply to municipal airports. Many are dependent on an airport providing scheduled passenger services.

However, a new program may offer an opportunity for the Airport; the National Trade Corridors Fund (NTFC). It supports transportation and infrastructure construction projects which aligns with Pembroke's needs. Based on information provided, the program will not fund 100% of a capital project, therefore, it does require support and contributions from the six municipalities to be successful.

Further study is required of this new program to confirm its eligibility for the Pembroke and Area Airport, however, based on an initial review, the NTFC appears to offer the best opportunity to secure funding for the Airport to repair and replace aging airfield infrastructure and eliminate any safety concerns regarding pavement cracking.

The PAAC should continue to assess if FedDev Ontario, whether through that program or Community Futures, can support other projects or studies required (such as a geotechnical study).

11.5 Community Engagement Program

Building upon the work being undertaken with local groups that support economic development in the region, the PAAC should consider development and implementation of a formal Community Engagement Program. Elements of this program would include (many of which are already being done):

- Promotional materials noting key services supplied to the public via the Airport (i.e. medivac, forestry, fish re-stocking).

- Create the linkage between the Garrison and the Airport providing “critical infrastructure” which in turn supports the base and its 7,000+ employees.
- Highlight local business community’s support for the Airport.
- Enhance website with more community-focused information (much like the Facebook page).
- Dispel the belief that with no schedule passenger services, the airport does not have value.
- Build upon the great success of the Canada 150 Fly-In Event organized by the PAAC, and consider holding a fly-in event annually. Much like the Canada 150 Fly-In Event, these open houses can include:
 - Presence of military aircraft to view or tour (helicopters and fixed-wing aircraft).
 - Garrison personnel to describe how they use the Airport and how it helps them in training or delivering valuable services to Canada and the international community.
 - Free or low cost site-seeing flights for children and families.
 - Family breakfast or lunch.
 - Ensure members of local media are in attendance.
- Continue to provide a media-package on the Airport.

11.6 Key Recommendations and Next Steps

Key next steps and recommendations proposed in this report include:

1. Present the results of this study to Municipal Councils and other key stakeholders such as local business groups.
2. Review and update the airport governance structure to help facilitate independent decision-making and create stronger ties to the community and move towards a full “Airport Commission” model. A governance workshop is recommended to initiate this process as is Garrison involvement.
3. Review the municipal funding model with the goal of providing funding that matches comparable and competitive airports.
4. Complete a geotechnical investigation and updated capital plan for the airfield rehabilitation.
5. Explore funding for capital projects through the NTCF and other programs.
6. Implement a new position focused on business development at the Airport.
7. Update the Economic Impact Assessment to include Indirect and Induced economic impact.
8. Implement the Community Engagement Program.

The Airport is a valuable asset to the six municipalities it serves and vital to current employment in the region, such as the Garrison, but also to new or existing businesses in the region. Through this study it has been identified the benefits of the Airport to the public, and options for future business opportunities.

12.0 CONCLUSION

The information in this study will help the Pembroke and Area Airport Commission fulfill the Airport Vision and Mission Statements:

Airport Vision Statement: An air transportation facility critical to the economic and social prosperity of the six municipalities it serves.

Airport Mission Statement: The provision of safe, secure and viable airport facilities and services which meet user needs and support the community's economic development goals.

To support the Airport Vision and Mission Statements, the PAAC, together with the six municipalities and Garrison Petawawa, can help achieve the Airport's objectives. Below the objectives have been identified, together with key outcomes from the study that can help advance these objectives:

Objective #1 - To operate and maintain the Airport in a safe, secure and efficient manner and in compliance with all regulatory requirements.

- Undertake the necessary airfield rehabilitation projects to eliminate the safety concerns over pavement cracking and FOD potential and ensure the Airport meets the regulatory requirements.

Objective #2 - To provide and enhance Airport services and facilities to meet user needs and augment the Airport's financial viability

- Provide funding for business development opportunities.
- Implement select business opportunities proposed in this study.
- Replace existing fuel system with a card lock system.
- Promote the Airport as a Fixed Based Operator facility.

Objective #3 - To develop and leverage the Airport's assets in support of area economic development initiatives

- Continue to update marketing materials.
- Continue to conduct presentations and promotions with local economic development agencies within the municipalities and in Renfrew County.
- Seek out letters of support such as that provided by the Pembroke Economic Development Advisory Committee.
- Create and staff an Airport business development position.

Objective #4 - To form partnerships and cooperative arrangements to ensure the long term sustainability of the Airport

- Review funding program with municipalities.
- Review funding program with Garrison Petawawa.
- Through a review of Airport Governance, move towards a full Airport Commission model.

Objective #5 - To foster awareness and understanding of the value of the Airport to the community's well being

- Implement a Community Engagement Program and continue with Airport "Open Houses".



APPENDIX A – ORNGE CYTA Arrivals & Departures (2013-2016)



Arrivals and Departures (Air Only) - CYTA

From : Jan 01, 2013 to Dec 31, 2016

Summary By Year	CY2013		CY2014		CY2015		CY2016	
Airport Name	Arrival	Departure	Arrival	Departure	Arrival	Departure	Arrival	Departure
CYTA - Pembroke	33	32	30	30	29	29	30	30

Summary By Year and Vehicle Type		CY2013		CY2014		CY2015		CY2016	
Airport Name	Vehicle Type	Arrival	Departure	Arrival	Departure	Arrival	Departure	Arrival	Departure
CYTA - Pembroke	Fixed	13	13	15	15	15	15	12	12
	Rotor	20	19	15	15	14	14	18	18
Total		33	32	30	30	29	29	30	30

APPENDIX B – Business Case Pro Forma – Status Quo

Table B.1 - Status Quo

DESCRIPTION	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2017-2037 TOTAL
Revenue																								
Interest Income	\$836	\$838	\$1,243	\$1,261	\$1,280	\$1,300	\$1,319	\$1,339	\$1,359	\$1,379	\$1,400	\$1,421	\$1,442	\$1,464	\$1,486	\$1,508	\$1,531	\$1,554	\$1,577	\$1,601	\$1,625	\$1,649	\$1,674	\$30,413
Investment Income	-\$4,623	\$10,428	\$2,707	\$2,747	\$2,789	\$2,830	\$2,873	\$2,916	\$2,960	\$3,004	\$3,049	\$3,095	\$3,141	\$3,189	\$3,236	\$3,285	\$3,334	\$3,384	\$3,435	\$3,486	\$3,539	\$3,592	\$3,646	\$66,238
Miscellaneous Income	\$4,391	\$45,044	\$18,501	\$18,779	\$19,061	\$19,346	\$19,637	\$19,931	\$20,230	\$20,534	\$20,842	\$21,154	\$21,472	\$21,794	\$22,121	\$22,452	\$22,789	\$23,131	\$23,478	\$23,830	\$24,188	\$24,550	\$24,919	\$452,737
Garrison Petawawa Subsidy	\$0	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$927,507
Municipal Operating Subsidy	\$69,810	\$73,302	\$65,110	\$68,365	\$71,784	\$75,373	\$79,141	\$83,098	\$87,253	\$91,616	\$96,197	\$101,007	\$106,057	\$111,360	\$116,928	\$122,774	\$128,913	\$135,359	\$142,127	\$149,233	\$156,695	\$164,529	\$172,756	\$2,325,675
RCCFDC	\$8,874	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Land Lease	\$7,068	\$7,668	\$7,835	\$7,952	\$8,071	\$8,193	\$8,315	\$8,440	\$8,567	\$8,695	\$8,826	\$8,958	\$9,092	\$9,229	\$9,367	\$9,508	\$9,650	\$9,795	\$9,942	\$10,091	\$10,243	\$10,396	\$10,552	\$191,718
Terminal Building Rental	\$743	\$7,711	\$1,488	\$1,510	\$1,533	\$1,556	\$1,579	\$1,603	\$1,627	\$1,652	\$1,676	\$1,702	\$1,727	\$1,753	\$1,779	\$1,806	\$1,833	\$1,861	\$1,888	\$1,917	\$1,946	\$1,975	\$1,946	\$36,416
Hangar Rentals	\$41,619	\$45,454	\$49,971	\$50,721	\$51,481	\$52,254	\$53,037	\$53,833	\$54,640	\$55,460	\$56,292	\$57,136	\$57,993	\$58,863	\$59,746	\$60,642	\$61,552	\$62,475	\$63,412	\$64,364	\$65,329	\$66,309	\$67,304	\$1,222,816
Warehouses	\$17,400	\$8,400	\$34,033	\$34,544	\$35,062	\$35,588	\$36,122	\$36,664	\$37,214	\$37,772	\$38,338	\$38,913	\$39,497	\$40,090	\$40,691	\$41,301	\$41,921	\$42,550	\$43,188	\$43,836	\$44,493	\$45,161	\$45,838	\$832,813
Fuel Sales - Jet A1	\$107,204	\$196,610	\$161,041	\$163,457	\$165,909	\$168,397	\$170,923	\$173,487	\$176,090	\$178,731	\$181,412	\$184,133	\$186,895	\$189,698	\$192,544	\$195,432	\$198,364	\$201,339	\$204,359	\$207,425	\$210,536	\$213,694	\$216,899	\$3,940,766
Fuel Sales - 100LL	\$94,407	\$95,124	\$110,285	\$111,939	\$113,618	\$115,322	\$117,052	\$118,808	\$120,590	\$122,399	\$124,235	\$126,098	\$127,990	\$129,910	\$131,858	\$133,836	\$135,844	\$137,881	\$139,950	\$142,049	\$144,180	\$146,342	\$148,537	\$2,698,723
Fuel Sales - MoGas	\$1,269	\$1,231	\$3,663	\$3,718	\$3,774	\$3,830	\$3,888	\$3,946	\$4,005	\$4,065	\$4,126	\$4,188	\$4,251	\$4,315	\$4,379	\$4,445	\$4,512	\$4,579	\$4,648	\$4,718	\$4,789	\$4,860	\$4,933	\$89,631
Tiedowns	\$7,228	\$10,388	\$7,699	\$7,815	\$7,932	\$8,051	\$8,172	\$8,294	\$8,419	\$8,545	\$8,673	\$8,803	\$8,935	\$9,069	\$9,205	\$9,344	\$9,484	\$9,626	\$9,770	\$9,917	\$10,066	\$10,217	\$10,370	\$188,407
Ground Maintenance	\$12,038	\$3,080	\$10,163	\$10,316	\$10,471	\$10,628	\$10,787	\$10,949	\$11,113	\$11,280	\$11,449	\$11,621	\$11,795	\$11,972	\$12,151	\$12,334	\$12,519	\$12,707	\$12,897	\$13,091	\$13,287	\$13,486	\$13,689	\$248,702
Gateage	\$42,269	\$6,000	\$33,093	\$33,589	\$34,093	\$34,605	\$35,124	\$35,651	\$36,185	\$36,728	\$37,279	\$37,838	\$38,406	\$38,982	\$39,567	\$40,160	\$40,762	\$41,374	\$41,995	\$42,624	\$43,264	\$43,913	\$44,571	\$809,803
Ground Power Unit	\$4,650	\$8,075	\$5,596	\$5,680	\$5,765	\$5,851	\$5,939	\$6,028	\$6,119	\$6,211	\$6,304	\$6,398	\$6,494	\$6,592	\$6,690	\$6,791	\$6,893	\$6,996	\$7,101	\$7,208	\$7,316	\$7,425	\$7,537	\$136,933
Deicing Revenue	\$375	\$5,655	\$1,685	\$1,710	\$1,736	\$1,762	\$1,788	\$1,815	\$1,842	\$1,870	\$1,898	\$1,927	\$1,956	\$1,985	\$2,015	\$2,045	\$2,076	\$2,107	\$2,138	\$2,170	\$2,203	\$2,236	\$2,269	\$41,233
Landing Fee Revenue	\$3,460	\$4,200	\$3,353	\$3,403	\$3,454	\$3,506	\$3,559	\$3,612	\$3,666	\$3,721	\$3,777	\$3,834	\$3,891	\$3,949	\$4,009	\$4,069	\$4,130	\$4,192	\$4,255	\$4,319	\$4,383	\$4,449	\$4,516	\$82,046
Callouts	\$4,050	\$7,800	\$4,925	\$4,999	\$5,074	\$5,150	\$5,227	\$5,306	\$5,385	\$5,466	\$5,548	\$5,631	\$5,716	\$5,801	\$5,888	\$5,977	\$6,066	\$6,157	\$6,250	\$6,344	\$6,439	\$6,535	\$6,633	\$120,517
Solar Revenue	\$31,604	\$30,951	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Appropriation from Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenue	\$454,672	\$612,126	\$566,558	\$576,673	\$587,053	\$597,709	\$608,650	\$619,887	\$631,432	\$643,294	\$655,488	\$668,025	\$680,918	\$694,181	\$707,829	\$721,876	\$736,339	\$751,233	\$766,577	\$782,388	\$798,684	\$815,486	\$832,814	\$14,443,094
Expenditures																								
Fuel Purchases - Jet A1	\$53,578	\$99,112	\$93,752	\$95,158	\$96,586	\$98,035	\$99,505	\$100,998	\$102,513	\$104,050	\$105,611	\$107,195	\$108,803	\$110,435	\$112,092	\$113,773	\$115,480	\$117,212	\$118,970	\$120,755	\$122,566	\$124,405	\$126,271	\$2,294,164
Fuel Purchases - 100LL	\$72,244	\$71,874	\$90,306	\$91,660	\$93,035	\$94,431	\$95,847	\$97,285	\$98,744	\$100,225	\$101,729	\$103,255	\$104,804	\$106,376	\$107,971	\$109,591	\$111,235	\$112,903	\$114,597	\$116,316	\$118,060	\$119,831	\$121,629	\$2,209,831
Fuel Purchases - Gasoline	\$5,925	\$4,573	\$9,448	\$9,590	\$9,734	\$9,880	\$10,028	\$10,178	\$10,331	\$10,486	\$10,643	\$10,803	\$10,965	\$11,129	\$11,296	\$11,466	\$11,638	\$11,812	\$11,989	\$12,169	\$12,352	\$12,537	\$12,725	\$231,197
Fuel Purchases - Diesel	\$6,198	\$4,328	\$6,723	\$6,823	\$6,926	\$7,030	\$7,135	\$7,242	\$7,351	\$7,461	\$7,573	\$7,686	\$7,802	\$7,919	\$8,038	\$8,158	\$8,280	\$8,405	\$8,531	\$8,659	\$8,789	\$8,920	\$9,054	\$164,503
Grease & Oil Purchases	\$698	\$2,259	\$958	\$972	\$986	\$1,001	\$1,016	\$1,031	\$1,047	\$1,063	\$1,079	\$1,095	\$1,111	\$1,128	\$1,145	\$1,162	\$1,179	\$1,197	\$1,215	\$1,233	\$1,252	\$1,271	\$1,290	\$23,431
Wages & Salaries Full Time	\$101,262	\$106,924	\$97,973	\$99,443	\$100,935	\$102,449	\$103,985	\$105,545	\$107,128	\$108,735	\$110,366	\$112,022	\$113,702	\$115,408	\$117,139	\$118,896	\$120,679	\$122,489	\$124,327	\$126,192	\$128,085	\$130,006	\$131,956	\$2,397,459
Wages Part Time	\$37,289	\$44,459	\$38,376	\$38,951	\$39,535	\$40,128	\$40,730	\$41,341	\$41,961	\$42,591	\$43,230	\$43,878	\$44,536	\$45,204	\$45,882	\$46,571	\$47,269	\$47,978	\$48,698	\$49,428	\$50,170	\$50,922	\$51,686	\$939,069
EI Expense	\$3,587	\$3,844	\$3,432	\$3,483	\$3,536	\$3,589	\$3,642	\$3,697	\$3,753	\$3,809	\$3,866	\$3,924	\$3,983	\$4,043	\$4,103	\$4,165	\$4,227	\$4,291	\$4,355	\$4,420	\$4,487	\$4,554	\$4,622	\$83,979
CPP Expense	\$6,554	\$6,974	\$6,336	\$6,431	\$6,527	\$6,625	\$6,724	\$6,825	\$6,928	\$7,031	\$7,137	\$7,244	\$7,353	\$7,463	\$7,575	\$7,688	\$7,804	\$7,921	\$8,040	\$8,160	\$8,283	\$8,407	\$8,533	\$155,033
WSIB Expense	\$2,722	\$2,965	\$2,767	\$2,808	\$2,850	\$2,893	\$2,936	\$2,980	\$3,025	\$3,070	\$3,116	\$3,163	\$3,211	\$3,259	\$3,308	\$3,357	\$3,408	\$3,459	\$3,511	\$3,563	\$3,617	\$3,671	\$3,726	\$67,698
EHT Expense	\$1,458	\$1,458	\$1,389	\$1,410	\$1,431	\$1,452	\$1,474	\$1,496	\$1,519	\$1,542	\$1,565	\$1,588	\$1,612	\$1,636	\$1,661	\$1,686	\$1,711	\$1,737	\$1,763	\$1,789	\$1,816	\$1,843	\$1,871	\$33,990
Employee Benefits	\$10,774	\$10,655	\$9,838	\$9,985	\$10,135	\$10,287	\$10,442	\$10,598	\$10,757	\$10,918	\$11,082	\$11,248	\$11,417	\$11,588	\$11,762	\$11,939	\$12,118	\$12,300	\$12,484	\$12,671	\$12,861	\$13,054	\$13,250	\$240,737
Accounting Fees	\$5,550	\$5,700	\$5,429	\$5,511	\$5,593	\$5,677	\$5,762	\$5,849	\$5,936	\$6,026	\$6,116	\$6,208	\$6,301	\$6,395	\$6,491	\$6,589	\$6,687	\$6,788	\$6,890	\$6,993	\$7,098	\$7,204	\$7,312	\$132,855
Advertising & Promotion	\$13,225	\$16,592	\$13,200	\$13,398	\$13,599	\$13,803	\$14,010	\$14,220	\$14,433	\$14,650	\$14,870	\$15,093	\$15,319	\$15,549	\$15,782	\$16,019	\$16,259	\$16,503	\$16,751	\$17,002	\$17,257	\$17,516	\$17,778	\$323,011
Business Fees & Licenses	\$26,428	\$17,549	\$19,459	\$19,751	\$20,047	\$20,348	\$20,653	\$20,963	\$21,277	\$21,596	\$21,920	\$22,249	\$22,583	\$22,922	\$23,266	\$23,615	\$23,969	\$24,328	\$24,693	\$25,064	\$25,440	\$25,821	\$26,208	\$476,172
Credit Card Fees	\$5,198	\$7,215	\$6,229	\$6,323	\$6,417	\$6,514	\$6,611	\$6,711	\$6,811	\$6,913	\$7,017	\$7,122	\$7,229	\$7,338	\$7,448	\$7,559	\$7,673	\$7,788	\$7,905	\$8,023	\$8,144	\$8,266	\$8,390	\$152,431
Gas Pump Repairs	\$0	\$3,344	\$1,160	\$1,178	\$1,195	\$1,213	\$1,232	\$1,250	\$1,269	\$1,288	\$1,307	\$1,327	\$1,347	\$1,367	\$1,387	\$1,408	\$1,429	\$1,451	\$1,472	\$1,495	\$1,517	\$1,540	\$1,563	\$28,394
Insurance	\$29,834	\$29,972	\$31,322	\$31,792	\$32,269	\$32,753	\$33,244	\$33,743	\$34,249	\$34,763	\$35,284	\$35,813	\$36,351	\$36,896	\$37,449	\$38,011	\$38,581	\$39,160	\$39,747	\$40,344	\$40,949	\$41,563	\$42,186	\$766,470
Legal Fees	\$485	\$525	\$335	\$340	\$345	\$350	\$356	\$361	\$366	\$372	\$377	\$383	\$389	\$395	\$401	\$407	\$413	\$419	\$425	\$431	\$438	\$445	\$451	\$8,198
Office Supplies	\$3,783	\$6,591	\$4,821	\$4,893	\$4,966	\$5,041	\$5,116	\$5,193	\$5,271	\$5,350	\$5,430	\$5,512	\$5,595	\$5,678	\$5,764	\$5,850	\$5,938	\$6,027	\$6,117	\$6,209	\$6,302	\$6,397	\$6,493	\$117,964
Miscellaneous Expenses	\$0	\$24,242	\$4,040	\$4,101	\$4,162	\$4,225	\$4,288	\$4,353	\$4,418	\$4,484	\$4,551	\$4,620	\$4,689	\$4,759	\$4,831	\$4,903	\$4,977	\$5,051	\$5,127	\$5,204	\$5,282	\$5,361	\$5,442	\$98,869
Protection & Security	\$1,475	\$1,889	\$2,006	\$2,036	\$2,067	\$2,098	\$2,129	\$2,161	\$2,194	\$2,227	\$2,260	\$2,294	\$2,328	\$2,363	\$2,399	\$2,435	\$2,471	\$2,508	\$2,546	\$2,584	\$2,623	\$2,662	\$2,702	\$49,092
Repair & Maintenance - Airport	\$3,243	\$3,778	\$7,468	\$7,580	\$7,694	\$7,809	\$7,926	\$8,04																

APPENDIX C– Business Case Pro Forma – Cardlock Fuel System (Option 1)

Table C.1 - Option 1: Card Lock System

DESCRIPTION	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2017-2037 TOTAL
Revenue																								
Interest Income	\$836	\$838	\$1,243	\$1,261	\$1,280	\$1,300	\$1,319	\$1,339	\$1,359	\$1,379	\$1,400	\$1,421	\$1,442	\$1,464	\$1,486	\$1,508	\$1,531	\$1,554	\$1,577	\$1,601	\$1,625	\$1,649	\$1,674	\$30,413
Investment Income	-\$4,623	\$10,428	\$2,707	\$2,747	\$2,789	\$2,830	\$2,873	\$2,916	\$2,960	\$3,004	\$3,049	\$3,095	\$3,141	\$3,189	\$3,236	\$3,285	\$3,334	\$3,384	\$3,435	\$3,486	\$3,539	\$3,592	\$3,646	\$66,238
Miscellaneous Income	\$4,391	\$45,044	\$18,501	\$18,779	\$19,061	\$19,346	\$19,637	\$19,931	\$20,230	\$20,534	\$20,842	\$21,154	\$21,472	\$21,794	\$22,121	\$22,452	\$22,789	\$23,131	\$23,478	\$23,830	\$24,188	\$24,550	\$24,919	\$452,737
Garrison Petawawa Subsidy	\$0	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$927,507
Municipal Operating Subsidy	\$69,810	\$73,302	\$65,110	\$68,365	\$71,784	\$75,373	\$79,141	\$83,098	\$87,253	\$91,616	\$96,197	\$101,007	\$106,057	\$111,360	\$116,928	\$122,774	\$128,913	\$135,359	\$142,127	\$149,233	\$156,695	\$164,529	\$172,756	\$2,325,675
RCCFDC	\$8,874	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Land Lease	\$7,068	\$7,668	\$7,835	\$7,952	\$8,071	\$8,193	\$8,315	\$8,440	\$8,567	\$8,695	\$8,826	\$8,958	\$9,092	\$9,229	\$9,367	\$9,508	\$9,650	\$9,795	\$9,942	\$10,091	\$10,243	\$10,396	\$10,552	\$191,718
Terminal Building Rental	\$743	\$7,711	\$1,488	\$1,510	\$1,533	\$1,556	\$1,579	\$1,603	\$1,627	\$1,652	\$1,676	\$1,702	\$1,727	\$1,753	\$1,779	\$1,806	\$1,833	\$1,861	\$1,888	\$1,917	\$1,946	\$1,975	\$2,004	\$36,416
Hangar Rentals	\$41,619	\$45,454	\$49,971	\$50,721	\$51,481	\$52,254	\$53,037	\$53,833	\$54,640	\$55,460	\$56,292	\$57,136	\$57,993	\$58,863	\$59,746	\$60,642	\$61,552	\$62,475	\$63,412	\$64,364	\$65,329	\$66,309	\$67,304	\$1,222,816
Warehouses	\$17,400	\$8,400	\$34,033	\$34,544	\$35,062	\$35,588	\$36,122	\$36,664	\$37,214	\$37,772	\$38,338	\$38,913	\$39,497	\$40,090	\$40,691	\$41,301	\$41,921	\$42,550	\$43,188	\$43,836	\$44,493	\$45,161	\$45,838	\$832,813
Fuel Sales - Jet A1	\$107,204	\$196,610	\$161,041	\$163,457	\$165,909	\$168,397	\$170,923	\$173,487	\$176,090	\$178,731	\$181,412	\$184,133	\$186,895	\$189,698	\$192,544	\$195,432	\$198,364	\$201,339	\$204,359	\$207,425	\$210,536	\$213,694	\$216,899	\$3,940,766
Fuel Sales - 100LL	\$94,407	\$95,124	\$110,285	\$123,133	\$124,980	\$126,855	\$128,757	\$130,689	\$132,649	\$134,639	\$136,658	\$138,708	\$140,789	\$142,901	\$145,044	\$147,220	\$149,428	\$151,670	\$153,945	\$156,254	\$158,598	\$160,977	\$163,391	\$2,957,567
Fuel Sales - MoGas	\$1,269	\$1,231	\$3,663	\$3,718	\$3,774	\$3,830	\$3,888	\$3,946	\$4,005	\$4,065	\$4,126	\$4,188	\$4,251	\$4,315	\$4,379	\$4,445	\$4,512	\$4,579	\$4,648	\$4,718	\$4,789	\$4,860	\$4,933	\$89,631
Tiedowns	\$7,228	\$10,388	\$7,699	\$7,815	\$7,932	\$8,051	\$8,172	\$8,294	\$8,419	\$8,545	\$8,673	\$8,803	\$8,935	\$9,069	\$9,205	\$9,344	\$9,484	\$9,626	\$9,770	\$9,917	\$10,066	\$10,217	\$10,370	\$188,407
Ground Maintenance	\$12,038	\$3,080	\$10,163	\$10,316	\$10,471	\$10,628	\$10,787	\$10,949	\$11,113	\$11,280	\$11,449	\$11,621	\$11,795	\$11,972	\$12,151	\$12,334	\$12,519	\$12,707	\$12,897	\$13,091	\$13,287	\$13,486	\$13,689	\$248,702
Gateage	\$42,269	\$6,000	\$33,093	\$33,589	\$34,093	\$34,605	\$35,124	\$35,651	\$36,185	\$36,728	\$37,279	\$37,838	\$38,406	\$38,982	\$39,567	\$40,160	\$40,762	\$41,374	\$41,995	\$42,624	\$43,264	\$43,913	\$44,571	\$809,803
Ground Power Unit	\$4,650	\$8,075	\$5,596	\$5,680	\$5,765	\$5,851	\$5,939	\$6,028	\$6,119	\$6,211	\$6,304	\$6,398	\$6,494	\$6,592	\$6,690	\$6,791	\$6,893	\$6,996	\$7,101	\$7,208	\$7,316	\$7,425	\$7,537	\$136,933
Deicing Revenue	\$375	\$5,655	\$1,685	\$1,710	\$1,736	\$1,762	\$1,788	\$1,815	\$1,842	\$1,870	\$1,898	\$1,927	\$1,956	\$1,985	\$2,015	\$2,045	\$2,076	\$2,107	\$2,138	\$2,170	\$2,203	\$2,236	\$2,269	\$41,233
Landing Fee Revenue	\$3,460	\$4,200	\$3,353	\$3,403	\$3,454	\$3,506	\$3,559	\$3,612	\$3,666	\$3,721	\$3,777	\$3,834	\$3,891	\$3,949	\$4,009	\$4,069	\$4,130	\$4,192	\$4,255	\$4,319	\$4,383	\$4,449	\$4,516	\$82,046
Callouts	\$4,050	\$7,800	\$4,925	\$4,925	\$4,999	\$5,074	\$5,150	\$5,227	\$5,306	\$5,385	\$5,466	\$5,548	\$5,631	\$5,716	\$5,801	\$5,888	\$5,977	\$6,066	\$6,157	\$6,250	\$6,344	\$6,439	\$6,535	\$118,809
Solar Revenue	\$31,604	\$30,951	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Appropriation from Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenue	\$454,672	\$612,126	\$566,558	\$587,793	\$598,340	\$609,165	\$620,278	\$631,690	\$643,411	\$655,454	\$667,829	\$680,551	\$693,632	\$707,086	\$720,928	\$735,171	\$749,834	\$764,931	\$780,480	\$796,499	\$813,007	\$830,024	\$847,570	\$14,700,230
Expenditures																								
Fuel Purchases - Jet A1	\$53,578	\$99,112	\$93,752	\$95,158	\$96,586	\$98,035	\$99,505	\$100,998	\$102,513	\$104,050	\$105,611	\$107,195	\$108,803	\$110,435	\$112,092	\$113,773	\$115,480	\$117,212	\$118,970	\$120,755	\$122,566	\$124,405	\$126,271	\$2,294,164
Fuel Purchases - 100LL	\$72,244	\$71,874	\$90,306	\$100,826	\$102,339	\$103,874	\$105,432	\$107,014	\$108,619	\$110,248	\$111,902	\$113,580	\$115,284	\$117,013	\$118,768	\$120,550	\$122,358	\$124,194	\$126,056	\$127,947	\$129,867	\$131,815	\$133,792	\$2,421,783
Fuel Purchases - Gasoline	\$5,925	\$4,573	\$9,448	\$9,590	\$9,734	\$9,880	\$10,028	\$10,178	\$10,331	\$10,486	\$10,643	\$10,803	\$10,965	\$11,129	\$11,296	\$11,466	\$11,638	\$11,812	\$11,989	\$12,169	\$12,352	\$12,537	\$12,725	\$231,197
Fuel Purchases - Diesel	\$6,198	\$4,328	\$6,723	\$6,823	\$6,926	\$7,030	\$7,135	\$7,242	\$7,351	\$7,461	\$7,573	\$7,686	\$7,802	\$7,919	\$8,038	\$8,158	\$8,280	\$8,405	\$8,531	\$8,659	\$8,789	\$8,920	\$9,054	\$164,503
Grease & Oil Purchases	\$698	\$2,259	\$958	\$972	\$986	\$1,001	\$1,016	\$1,031	\$1,047	\$1,063	\$1,079	\$1,095	\$1,111	\$1,128	\$1,145	\$1,162	\$1,179	\$1,197	\$1,215	\$1,233	\$1,252	\$1,271	\$1,290	\$23,431
Wages & Salaries Full Time	\$101,262	\$106,924	\$97,973	\$99,443	\$100,935	\$102,449	\$103,985	\$105,545	\$107,128	\$108,735	\$110,366	\$112,022	\$113,702	\$115,408	\$117,139	\$118,896	\$120,679	\$122,489	\$124,327	\$126,192	\$128,085	\$130,006	\$131,956	\$2,397,459
Wages Part Time	\$37,289	\$44,459	\$38,376	\$38,951	\$39,535	\$40,128	\$40,730	\$41,341	\$41,961	\$42,591	\$43,230	\$43,878	\$44,536	\$45,204	\$45,882	\$46,571	\$47,269	\$47,978	\$48,698	\$49,428	\$50,170	\$50,922	\$51,686	\$939,069
EI Expense	\$3,587	\$3,844	\$3,432	\$3,483	\$3,536	\$3,589	\$3,642	\$3,697	\$3,753	\$3,809	\$3,866	\$3,924	\$3,983	\$4,043	\$4,103	\$4,165	\$4,227	\$4,291	\$4,355	\$4,420	\$4,487	\$4,554	\$4,622	\$83,979
CPP Expense	\$6,554	\$6,974	\$6,336	\$6,431	\$6,527	\$6,625	\$6,724	\$6,825	\$6,928	\$7,031	\$7,137	\$7,244	\$7,353	\$7,463	\$7,575	\$7,688	\$7,804	\$7,921	\$8,040	\$8,160	\$8,283	\$8,407	\$8,533	\$155,033
WSIB Expense	\$2,722	\$2,965	\$2,767	\$2,808	\$2,850	\$2,893	\$2,936	\$2,980	\$3,025	\$3,070	\$3,116	\$3,163	\$3,211	\$3,259	\$3,308	\$3,357	\$3,408	\$3,459	\$3,511	\$3,563	\$3,617	\$3,671	\$3,726	\$67,698
EHT Expense	\$1,458	\$1,458	\$1,389	\$1,410	\$1,431	\$1,452	\$1,474	\$1,496	\$1,519	\$1,542	\$1,565	\$1,588	\$1,612	\$1,636	\$1,661	\$1,686	\$1,711	\$1,737	\$1,763	\$1,789	\$1,816	\$1,843	\$1,871	\$33,990
Employee Benefits	\$10,774	\$10,655	\$9,838	\$9,985	\$10,135	\$10,287	\$10,442	\$10,598	\$10,757	\$10,918	\$11,082	\$11,248	\$11,417	\$11,588	\$11,762	\$11,939	\$12,118	\$12,300	\$12,484	\$12,671	\$12,861	\$13,054	\$13,250	\$240,737
Accounting Fees	\$5,550	\$5,700	\$5,429	\$5,511	\$5,593	\$5,677	\$5,762	\$5,849	\$5,936	\$6,026	\$6,116	\$6,208	\$6,301	\$6,395	\$6,491	\$6,589	\$6,687	\$6,788	\$6,890	\$6,993	\$7,098	\$7,204	\$7,312	\$132,855
Advertising & Promotion	\$13,225	\$16,592	\$13,200	\$13,398	\$13,599	\$13,803	\$14,010	\$14,220	\$14,433	\$14,650	\$14,870	\$15,093	\$15,319	\$15,549	\$15,782	\$16,019	\$16,259	\$16,503	\$16,751	\$17,002	\$17,257	\$17,516	\$17,778	\$323,011
Business Fees & Licenses	\$26,428	\$17,549	\$19,459	\$19,751	\$20,047	\$20,348	\$20,653	\$20,963	\$21,277	\$21,596	\$21,920	\$22,249	\$22,583	\$22,922	\$23,266	\$23,615	\$23,969	\$24,328	\$24,693	\$25,064	\$25,440	\$25,821	\$26,208	\$476,172
Credit Card Fees	\$5,198	\$7,215	\$6,229	\$6,323	\$6,417	\$6,514	\$6,611	\$6,711	\$6,811	\$6,913	\$7,017	\$7,122	\$7,229	\$7,338	\$7,448	\$7,559	\$7,673	\$7,788	\$7,905	\$8,023	\$8,144	\$8,266	\$8,390	\$152,431
Gas Pump Repairs	\$0	\$3,344	\$1,160	\$1,178	\$1,195	\$1,213	\$1,232	\$1,250	\$1,269	\$1,288	\$1,307	\$1,327	\$1,347	\$1,367	\$1,387	\$1,408	\$1,429	\$1,451	\$1,472	\$1,495	\$1,517	\$1,540	\$1,563	\$28,394
Insurance	\$29,834	\$29,972	\$31,322	\$31,792	\$32,269	\$32,753	\$33,244	\$33,743	\$34,249	\$34,763	\$35,284	\$35,813	\$36,351	\$36,896	\$37,449	\$38,011	\$38,581	\$39,160	\$39,747	\$40,344	\$40,949	\$41,563	\$42,186	\$766,470
Legal Fees	\$485	\$525	\$335	\$340	\$345	\$350	\$356	\$361	\$366	\$372	\$377	\$383	\$389	\$395	\$401	\$407	\$413	\$419	\$425	\$431	\$438	\$445	\$451	\$8,198
Office Supplies	\$3,783	\$6,591	\$4,821	\$4,893	\$4,966	\$5,041	\$5,116	\$5,193	\$5,271	\$5,350	\$5,430	\$5,512	\$5,595	\$5,678	\$5,764	\$5,850	\$5,938	\$6,027	\$6,117	\$6,209	\$6,302	\$6,397	\$6,493	\$117,964
Miscellaneous Expenses	\$0	\$24,242	\$4,040	\$4,101	\$4,162	\$4,225	\$4,288	\$4,353	\$4,418	\$4,484	\$4,551	\$4,620	\$4,689	\$4,759	\$4,831	\$4,903	\$4,977	\$5,051	\$5,127	\$5,204	\$5,282	\$5,361	\$5,442	\$98,869
Protection & Security	\$1,475	\$1,889	\$2,006	\$2,036	\$2,067	\$2,098	\$2,129	\$2,161	\$2,194	\$2,227	\$2,260	\$2,294	\$2,328	\$2,363	\$2,399	\$2,435	\$2,471	\$2,508	\$2,546	\$2,584	\$2,623	\$2,662	\$2,702	\$49,092
Repair & Maintenance - Airport	\$3,243	\$3,778	\$7,468	\$7,580	\$7,694	\$7,809	\$7,926	\$8,045	\$8,166	\$8,289	\$8,413	\$8,539	\$8,667	\$8,797	\$8,929	\$9,063	\$9,199							

APPENDIX D– Business Case Pro Forma – T-Hangar Construction (Option 2)

Table D.1 - Option 2: T-Hangar Construction

DESCRIPTION	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2017-2037 TOTAL
Revenue																								
Interest Income	\$836	\$838	\$1,243	\$1,261	\$1,280	\$1,300	\$1,319	\$1,339	\$1,359	\$1,379	\$1,400	\$1,421	\$1,442	\$1,464	\$1,486	\$1,508	\$1,531	\$1,554	\$1,577	\$1,601	\$1,625	\$1,649	\$1,674	\$30,413
Investment Income	-\$4,623	\$10,428	\$2,707	\$2,747	\$2,789	\$2,830	\$2,873	\$2,916	\$2,960	\$3,004	\$3,049	\$3,095	\$3,141	\$3,189	\$3,236	\$3,285	\$3,334	\$3,384	\$3,435	\$3,486	\$3,539	\$3,592	\$3,646	\$66,238
Miscellaneous Income	\$4,391	\$45,044	\$18,501	\$18,779	\$19,061	\$19,346	\$19,637	\$19,931	\$20,230	\$20,534	\$20,842	\$21,154	\$21,472	\$21,794	\$22,121	\$22,452	\$22,789	\$23,131	\$23,478	\$23,830	\$24,188	\$24,550	\$24,919	\$452,737
Garrison Petawawa Subsidy	\$0	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$927,507
Municipal Operating Subsidy	\$69,810	\$73,302	\$65,110	\$68,365	\$71,784	\$75,373	\$79,141	\$83,098	\$87,253	\$91,616	\$96,197	\$101,007	\$106,057	\$111,360	\$116,928	\$122,774	\$128,913	\$135,359	\$142,127	\$149,233	\$156,695	\$164,529	\$172,756	\$2,325,675
RCCFDC	\$8,874	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Land Lease	\$7,068	\$7,668	\$7,835	\$7,952	\$8,071	\$8,193	\$8,315	\$8,440	\$8,567	\$8,695	\$8,826	\$8,958	\$9,092	\$9,229	\$9,367	\$9,508	\$9,650	\$9,795	\$9,942	\$10,091	\$10,243	\$10,396	\$10,552	\$191,718
Terminal Building Rental	\$743	\$7,711	\$1,488	\$1,510	\$1,533	\$1,556	\$1,579	\$1,603	\$1,627	\$1,652	\$1,676	\$1,702	\$1,727	\$1,753	\$1,779	\$1,806	\$1,833	\$1,861	\$1,888	\$1,917	\$1,946	\$1,975	\$2,004	\$36,416
Hangar Rentals	\$41,619	\$45,454	\$49,971	\$50,721	\$52,446	\$55,389	\$60,534	\$61,442	\$62,363	\$63,299	\$64,248	\$65,212	\$66,190	\$67,183	\$68,191	\$69,214	\$70,252	\$71,306	\$72,375	\$73,461	\$74,563	\$75,681	\$76,816	\$1,370,857
Warehouses	\$17,400	\$8,400	\$34,033	\$34,544	\$35,062	\$35,588	\$36,122	\$36,664	\$37,214	\$37,772	\$38,338	\$38,913	\$39,497	\$40,090	\$40,691	\$41,301	\$41,921	\$42,550	\$43,188	\$43,836	\$44,493	\$45,161	\$45,838	\$832,813
Fuel Sales - Jet A1	\$107,204	\$196,610	\$161,041	\$163,457	\$165,909	\$168,397	\$170,923	\$173,487	\$176,090	\$178,731	\$181,412	\$184,133	\$186,895	\$189,698	\$192,544	\$195,432	\$198,364	\$201,339	\$204,359	\$207,425	\$210,536	\$213,694	\$216,899	\$3,940,766
Fuel Sales - 100LL	\$94,407	\$95,124	\$110,285	\$117,536	\$119,299	\$121,088	\$122,905	\$124,748	\$126,620	\$128,519	\$130,447	\$132,403	\$134,389	\$136,405	\$138,451	\$140,528	\$142,636	\$144,775	\$146,947	\$149,151	\$151,389	\$153,659	\$155,964	\$2,828,145
Fuel Sales - MoGas	\$1,269	\$1,231	\$3,663	\$3,718	\$3,774	\$3,830	\$3,888	\$3,946	\$4,005	\$4,065	\$4,126	\$4,188	\$4,251	\$4,315	\$4,379	\$4,445	\$4,512	\$4,579	\$4,648	\$4,718	\$4,789	\$4,860	\$4,933	\$89,631
Tiedowns	\$7,228	\$10,388	\$7,699	\$7,815	\$7,932	\$8,051	\$8,172	\$8,294	\$8,419	\$8,545	\$8,673	\$8,803	\$8,935	\$9,069	\$9,205	\$9,344	\$9,484	\$9,626	\$9,770	\$9,917	\$10,066	\$10,217	\$10,370	\$188,407
Ground Maintenance	\$12,038	\$3,080	\$10,163	\$10,316	\$10,471	\$10,628	\$10,787	\$10,949	\$11,113	\$11,280	\$11,449	\$11,621	\$11,795	\$11,972	\$12,151	\$12,334	\$12,519	\$12,707	\$12,897	\$13,091	\$13,287	\$13,486	\$13,689	\$248,702
Gateage	\$42,269	\$6,000	\$33,093	\$33,589	\$34,093	\$34,605	\$35,124	\$35,651	\$36,185	\$36,728	\$37,279	\$37,838	\$38,406	\$38,982	\$39,567	\$40,160	\$40,762	\$41,374	\$41,995	\$42,624	\$43,264	\$43,913	\$44,571	\$809,803
Ground Power Unit	\$4,650	\$8,075	\$5,596	\$5,680	\$5,765	\$5,851	\$5,939	\$6,028	\$6,119	\$6,211	\$6,304	\$6,398	\$6,494	\$6,592	\$6,690	\$6,791	\$6,893	\$6,996	\$7,101	\$7,208	\$7,316	\$7,425	\$7,537	\$136,933
Deicing Revenue	\$375	\$5,655	\$1,685	\$1,710	\$1,736	\$1,762	\$1,788	\$1,815	\$1,842	\$1,870	\$1,898	\$1,927	\$1,956	\$1,985	\$2,015	\$2,045	\$2,076	\$2,107	\$2,138	\$2,170	\$2,203	\$2,236	\$2,269	\$41,233
Landing Fee Revenue	\$3,460	\$4,200	\$3,353	\$3,403	\$3,454	\$3,506	\$3,559	\$3,612	\$3,666	\$3,721	\$3,777	\$3,834	\$3,891	\$3,949	\$4,009	\$4,069	\$4,130	\$4,192	\$4,255	\$4,319	\$4,383	\$4,449	\$4,516	\$82,046
Callouts	\$4,050	\$7,800	\$4,925	\$4,999	\$5,074	\$5,150	\$5,227	\$5,306	\$5,385	\$5,466	\$5,548	\$5,631	\$5,716	\$5,801	\$5,888	\$5,977	\$6,066	\$6,157	\$6,250	\$6,344	\$6,439	\$6,535	\$6,633	\$120,517
Solar Revenue	\$31,604	\$30,951	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Appropriation from Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenue	\$454,672	\$612,126	\$566,558	\$582,270	\$593,698	\$606,611	\$621,999	\$633,437	\$645,184	\$657,253	\$669,656	\$682,405	\$695,514	\$708,996	\$722,866	\$737,139	\$751,831	\$766,958	\$782,537	\$798,587	\$815,127	\$832,175	\$849,754	\$14,720,556
Expenditures																								
Fuel Purchases - Jet A1	\$53,578	\$99,112	\$93,752	\$95,158	\$96,586	\$98,035	\$99,505	\$100,998	\$102,513	\$104,050	\$105,611	\$107,195	\$108,803	\$110,435	\$112,092	\$113,773	\$115,480	\$117,212	\$118,970	\$120,755	\$122,566	\$124,405	\$126,271	\$2,294,164
Fuel Purchases - 100LL	\$72,244	\$71,874	\$90,306	\$96,243	\$97,687	\$99,152	\$100,640	\$102,149	\$103,682	\$105,237	\$106,815	\$108,418	\$110,044	\$111,694	\$113,370	\$115,070	\$116,796	\$118,548	\$120,327	\$122,132	\$123,964	\$125,823	\$127,710	\$2,315,807
Fuel Purchases - Gasoline	\$5,925	\$4,573	\$9,448	\$9,590	\$9,734	\$9,880	\$10,028	\$10,178	\$10,331	\$10,486	\$10,643	\$10,803	\$10,965	\$11,129	\$11,296	\$11,466	\$11,638	\$11,812	\$11,989	\$12,169	\$12,352	\$12,537	\$12,725	\$231,197
Fuel Purchases - Diesel	\$6,198	\$4,328	\$6,723	\$6,823	\$6,926	\$7,030	\$7,135	\$7,242	\$7,351	\$7,461	\$7,573	\$7,686	\$7,802	\$7,919	\$8,038	\$8,158	\$8,280	\$8,405	\$8,531	\$8,659	\$8,789	\$8,920	\$9,054	\$164,503
Grease & Oil Purchases	\$698	\$2,259	\$958	\$972	\$986	\$1,001	\$1,016	\$1,031	\$1,047	\$1,063	\$1,079	\$1,095	\$1,111	\$1,128	\$1,145	\$1,162	\$1,179	\$1,197	\$1,215	\$1,233	\$1,252	\$1,271	\$1,290	\$23,431
Wages & Salaries Full Time	\$101,262	\$106,924	\$97,973	\$99,443	\$100,935	\$102,449	\$103,985	\$105,545	\$107,128	\$108,735	\$110,366	\$112,022	\$113,702	\$115,408	\$117,139	\$118,896	\$120,679	\$122,489	\$124,327	\$126,192	\$128,085	\$130,006	\$131,956	\$2,397,459
Wages Part Time	\$37,289	\$44,459	\$38,376	\$38,951	\$39,535	\$40,128	\$40,730	\$41,341	\$41,961	\$42,591	\$43,230	\$43,878	\$44,536	\$45,204	\$45,882	\$46,571	\$47,269	\$47,978	\$48,698	\$49,428	\$50,170	\$50,922	\$51,686	\$939,069
EI Expense	\$3,587	\$3,844	\$3,432	\$3,483	\$3,536	\$3,589	\$3,642	\$3,697	\$3,753	\$3,809	\$3,866	\$3,924	\$3,983	\$4,043	\$4,103	\$4,165	\$4,227	\$4,291	\$4,355	\$4,420	\$4,487	\$4,554	\$4,622	\$83,979
CPP Expense	\$6,554	\$6,974	\$6,336	\$6,431	\$6,527	\$6,625	\$6,724	\$6,825	\$6,928	\$7,031	\$7,137	\$7,244	\$7,353	\$7,463	\$7,575	\$7,688	\$7,804	\$7,921	\$8,040	\$8,160	\$8,283	\$8,407	\$8,533	\$155,033
WSIB Expense	\$2,722	\$2,965	\$2,767	\$2,808	\$2,850	\$2,893	\$2,936	\$2,980	\$3,025	\$3,070	\$3,116	\$3,163	\$3,211	\$3,259	\$3,308	\$3,357	\$3,408	\$3,459	\$3,511	\$3,563	\$3,617	\$3,671	\$3,726	\$67,698
EHT Expense	\$1,458	\$1,458	\$1,389	\$1,410	\$1,431	\$1,452	\$1,474	\$1,496	\$1,519	\$1,542	\$1,565	\$1,588	\$1,612	\$1,636	\$1,661	\$1,686	\$1,711	\$1,737	\$1,763	\$1,789	\$1,816	\$1,843	\$1,871	\$33,990
Employee Benefits	\$10,774	\$10,655	\$9,838	\$9,985	\$10,135	\$10,287	\$10,442	\$10,598	\$10,757	\$10,918	\$11,082	\$11,248	\$11,417	\$11,588	\$11,762	\$11,939	\$12,118	\$12,300	\$12,484	\$12,671	\$12,861	\$13,054	\$13,250	\$240,737
Accounting Fees	\$5,550	\$5,700	\$5,429	\$5,511	\$5,593	\$5,677	\$5,762	\$5,849	\$5,936	\$6,026	\$6,116	\$6,208	\$6,301	\$6,395	\$6,491	\$6,589	\$6,687	\$6,788	\$6,890	\$6,993	\$7,098	\$7,204	\$7,312	\$132,855
Advertising & Promotion	\$13,225	\$16,592	\$13,200	\$13,398	\$13,599	\$13,803	\$14,010	\$14,220	\$14,433	\$14,650	\$14,870	\$15,093	\$15,319	\$15,549	\$15,782	\$16,019	\$16,259	\$16,503	\$16,751	\$17,002	\$17,257	\$17,516	\$17,778	\$323,011
Business Fees & Licenses	\$26,428	\$17,549	\$19,459	\$19,751	\$20,047	\$20,348	\$20,653	\$20,963	\$21,277	\$21,596	\$21,920	\$22,249	\$22,583	\$22,922	\$23,266	\$23,615	\$23,969	\$24,328	\$24,693	\$25,064	\$25,440	\$25,821	\$26,208	\$476,172
Credit Card Fees	\$5,198	\$7,215	\$6,229	\$6,323	\$6,417	\$6,514	\$6,611	\$6,711	\$6,811	\$6,913	\$7,017	\$7,122	\$7,229	\$7,338	\$7,448	\$7,559	\$7,673	\$7,788	\$7,905	\$8,023	\$8,144	\$8,266	\$8,390	\$152,431
Gas Pump Repairs	\$0	\$3,344	\$1,160	\$1,178	\$1,195	\$1,213	\$1,232	\$1,250	\$1,269	\$1,288	\$1,307	\$1,327	\$1,347	\$1,367	\$1,387	\$1,408	\$1,429	\$1,451	\$1,472	\$1,495	\$1,517	\$1,540	\$1,563	\$28,394
Insurance	\$29,834	\$29,972	\$31,322	\$31,792	\$32,269	\$32,753	\$33,244	\$33,743	\$34,249	\$34,763	\$35,284	\$35,813	\$36,351	\$36,896	\$37,449	\$38,011	\$38,581	\$39,160	\$39,747	\$40,344	\$40,949	\$41,563	\$42,186	\$766,470
Legal Fees	\$485	\$525	\$335	\$340	\$345	\$350	\$356	\$361	\$366	\$372	\$377	\$383	\$389	\$395	\$401	\$407	\$413	\$419	\$425	\$431	\$438	\$445	\$451	\$8,198
Office Supplies	\$3,783	\$6,591	\$4,821	\$4,893	\$4,966	\$5,041	\$5,116	\$5,193	\$5,271	\$5,350	\$5,430	\$5,512	\$5,595	\$5,678	\$5,764	\$5,850	\$5,938	\$6,027	\$6,117	\$6,209	\$6,302	\$6,397	\$6,493	\$117,964
Miscellaneous Expenses	\$0	\$24,242	\$4,040	\$4,101	\$4,162	\$4,225	\$4,288	\$4,353	\$4,418	\$4,484	\$4,551	\$4,620	\$4,689	\$4,759	\$4,831	\$4,903	\$4,977	\$5,051	\$5,127	\$5,204	\$5,282	\$5,361	\$5,442	\$98,869
Protection & Security	\$1,475	\$1,889	\$2,006	\$2,036	\$2,067	\$2,098	\$2,129	\$2,161	\$2,194	\$2,227	\$2,260	\$2,294	\$2,328	\$2,363	\$2,399	\$2,435	\$2,471	\$2,508	\$2,546	\$2,584	\$2,623	\$2,662	\$2,702	\$49,092
Repair & Maintenance - Airport	\$3,243	\$3,778	\$7,468	\$7,580	\$7,694	\$7,809	\$7,92																	

APPENDIX E – Business Case Pro Forma – Military Training (Option 3)

Table E.1 - Option 3: Private Military Training

DESCRIPTION	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2017-2037 TOTAL
Revenue																								
Interest Income	\$836	\$838	\$1,243	\$1,261	\$1,280	\$1,300	\$1,319	\$1,339	\$1,359	\$1,379	\$1,400	\$1,421	\$1,442	\$1,464	\$1,486	\$1,508	\$1,531	\$1,554	\$1,577	\$1,601	\$1,625	\$1,649	\$1,674	\$30,413
Investment Income	-\$4,623	\$10,428	\$2,707	\$2,747	\$2,789	\$2,830	\$2,873	\$2,916	\$2,960	\$3,004	\$3,049	\$3,095	\$3,141	\$3,189	\$3,236	\$3,285	\$3,334	\$3,384	\$3,435	\$3,486	\$3,539	\$3,592	\$3,646	\$66,238
Miscellaneous Income	\$4,391	\$45,044	\$18,501	\$18,779	\$19,061	\$19,346	\$19,637	\$19,931	\$20,230	\$20,534	\$20,842	\$21,154	\$21,472	\$21,794	\$22,121	\$22,452	\$22,789	\$23,131	\$23,478	\$23,830	\$24,188	\$24,550	\$24,919	\$452,737
Garrison Petawawa Subsidy	\$0	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$44,167	\$927,507
Municipal Operating Subsidy	\$69,810	\$73,302	\$65,110	\$68,365	\$71,784	\$75,373	\$79,141	\$83,098	\$87,253	\$91,616	\$96,197	\$101,007	\$106,057	\$111,360	\$116,928	\$122,774	\$128,913	\$135,359	\$142,127	\$149,233	\$156,695	\$164,529	\$172,756	\$2,325,675
RCCFDC	\$8,874	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Land Lease	\$7,068	\$7,668	\$7,835	\$20,132	\$20,434	\$20,741	\$21,052	\$21,368	\$21,688	\$22,013	\$22,344	\$22,679	\$23,019	\$23,364	\$23,715	\$24,070	\$24,431	\$24,798	\$25,170	\$25,547	\$25,931	\$26,320	\$26,714	\$473,365
Terminal Building Rental	\$743	\$7,711	\$1,488	\$1,692	\$1,717	\$1,743	\$1,769	\$1,796	\$1,822	\$1,850	\$1,878	\$1,906	\$1,934	\$1,963	\$1,993	\$2,023	\$2,053	\$2,084	\$2,115	\$2,147	\$2,179	\$2,212	\$2,245	\$40,608
Hangar Rentals	\$41,619	\$45,454	\$49,971	\$50,721	\$51,481	\$52,254	\$53,037	\$53,833	\$54,640	\$55,460	\$56,292	\$57,136	\$57,993	\$58,863	\$59,746	\$60,642	\$61,552	\$62,475	\$63,412	\$64,364	\$65,329	\$66,309	\$67,304	\$1,222,816
Warehouses	\$17,400	\$8,400	\$34,033	\$34,544	\$35,062	\$35,588	\$36,122	\$36,664	\$37,214	\$37,772	\$38,338	\$38,913	\$39,497	\$40,090	\$40,691	\$41,301	\$41,921	\$42,550	\$43,188	\$43,836	\$44,493	\$45,161	\$45,838	\$832,813
Fuel Sales - Jet A1	\$107,204	\$196,610	\$161,041	\$183,072	\$185,818	\$188,605	\$191,434	\$194,306	\$197,220	\$200,179	\$203,181	\$206,229	\$209,322	\$212,462	\$215,649	\$218,884	\$222,167	\$225,500	\$228,882	\$232,315	\$235,800	\$239,337	\$242,927	\$4,394,332
Fuel Sales - 100LL	\$94,407	\$95,124	\$110,285	\$111,939	\$113,618	\$115,322	\$117,052	\$118,808	\$120,590	\$122,399	\$124,235	\$126,098	\$127,990	\$129,910	\$131,858	\$133,836	\$135,844	\$137,881	\$139,950	\$142,049	\$144,180	\$146,342	\$148,537	\$2,698,723
Fuel Sales - MoGas	\$1,269	\$1,231	\$3,663	\$3,718	\$3,774	\$3,830	\$3,888	\$3,946	\$4,005	\$4,065	\$4,126	\$4,188	\$4,251	\$4,315	\$4,379	\$4,445	\$4,512	\$4,579	\$4,648	\$4,718	\$4,789	\$4,860	\$4,933	\$89,631
Tiedowns	\$7,228	\$10,388	\$7,699	\$7,815	\$7,932	\$8,051	\$8,172	\$8,294	\$8,419	\$8,545	\$8,673	\$8,803	\$8,935	\$9,069	\$9,205	\$9,344	\$9,484	\$9,626	\$9,770	\$9,917	\$10,066	\$10,217	\$10,370	\$188,407
Ground Maintenance	\$12,038	\$3,080	\$10,163	\$10,316	\$10,471	\$10,628	\$10,787	\$10,949	\$11,113	\$11,280	\$11,449	\$11,621	\$11,795	\$11,972	\$12,151	\$12,334	\$12,519	\$12,707	\$12,897	\$13,091	\$13,287	\$13,486	\$13,689	\$248,702
Gateage	\$42,269	\$6,000	\$33,093	\$33,589	\$34,093	\$34,605	\$35,124	\$35,651	\$36,185	\$36,728	\$37,279	\$37,838	\$38,406	\$38,982	\$39,567	\$40,160	\$40,762	\$41,374	\$41,995	\$42,624	\$43,264	\$43,913	\$44,571	\$809,803
Ground Power Unit	\$4,650	\$8,075	\$5,596	\$6,361	\$6,457	\$6,554	\$6,652	\$6,752	\$6,853	\$6,956	\$7,060	\$7,166	\$7,273	\$7,383	\$7,493	\$7,606	\$7,720	\$7,836	\$7,953	\$8,072	\$8,194	\$8,316	\$8,441	\$152,693
Deicing Revenue	\$375	\$5,655	\$1,685	\$1,916	\$1,944	\$1,973	\$2,003	\$2,033	\$2,064	\$2,094	\$2,126	\$2,158	\$2,190	\$2,223	\$2,256	\$2,290	\$2,325	\$2,359	\$2,395	\$2,431	\$2,467	\$2,504	\$2,542	\$45,979
Landing Fee Revenue	\$3,460	\$4,200	\$3,353	\$3,812	\$3,869	\$3,927	\$3,986	\$4,045	\$4,106	\$4,168	\$4,230	\$4,294	\$4,358	\$4,423	\$4,490	\$4,557	\$4,625	\$4,695	\$4,765	\$4,837	\$4,909	\$4,983	\$5,058	\$91,489
Callouts	\$4,050	\$7,800	\$4,925	\$5,599	\$5,683	\$5,768	\$5,854	\$5,942	\$6,031	\$6,122	\$6,214	\$6,307	\$6,402	\$6,498	\$6,595	\$6,694	\$6,794	\$6,896	\$7,000	\$7,105	\$7,211	\$7,319	\$7,429	\$134,388
Solar Revenue	\$31,604	\$30,951	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Appropriation from Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenue	\$454,672	\$612,126	\$566,558	\$610,544	\$621,432	\$632,604	\$644,068	\$655,837	\$667,920	\$680,331	\$693,080	\$706,180	\$719,646	\$733,490	\$747,727	\$762,373	\$777,443	\$792,954	\$808,924	\$825,370	\$842,311	\$859,767	\$877,760	\$15,226,319
Expenditures																								
Fuel Purchases - Jet A1	\$53,578	\$99,112	\$93,752	\$106,577	\$108,176	\$109,799	\$111,446	\$113,117	\$114,814	\$116,536	\$118,284	\$120,059	\$121,860	\$123,687	\$125,543	\$127,426	\$129,337	\$131,277	\$133,247	\$135,245	\$137,274	\$139,333	\$141,423	\$2,558,214
Fuel Purchases - 100LL	\$72,244	\$71,874	\$90,306	\$91,660	\$93,035	\$94,431	\$95,847	\$97,285	\$98,744	\$100,225	\$101,729	\$103,255	\$104,804	\$106,376	\$107,971	\$109,591	\$111,235	\$112,903	\$114,597	\$116,316	\$118,060	\$119,831	\$121,629	\$2,209,831
Fuel Purchases - Gasoline	\$5,925	\$4,573	\$9,448	\$9,590	\$9,734	\$9,880	\$10,028	\$10,178	\$10,331	\$10,486	\$10,643	\$10,803	\$10,965	\$11,129	\$11,296	\$11,466	\$11,638	\$11,812	\$11,989	\$12,169	\$12,352	\$12,537	\$12,725	\$231,197
Fuel Purchases - Diesel	\$6,198	\$4,328	\$6,723	\$6,823	\$6,926	\$7,030	\$7,135	\$7,242	\$7,351	\$7,461	\$7,573	\$7,686	\$7,802	\$7,919	\$8,038	\$8,158	\$8,280	\$8,405	\$8,531	\$8,659	\$8,789	\$8,920	\$9,054	\$164,503
Grease & Oil Purchases	\$698	\$2,259	\$958	\$972	\$986	\$1,001	\$1,016	\$1,031	\$1,047	\$1,063	\$1,079	\$1,095	\$1,111	\$1,128	\$1,145	\$1,162	\$1,179	\$1,197	\$1,215	\$1,233	\$1,252	\$1,271	\$1,290	\$23,431
Wages & Salaries Full Time	\$101,262	\$106,924	\$97,973	\$99,443	\$100,935	\$102,449	\$103,985	\$105,545	\$107,128	\$108,735	\$110,366	\$112,022	\$113,702	\$115,408	\$117,139	\$118,896	\$120,679	\$122,489	\$124,327	\$126,192	\$128,085	\$130,006	\$131,956	\$2,397,459
Wages Part Time	\$37,289	\$44,459	\$38,376	\$38,951	\$39,535	\$40,128	\$40,730	\$41,341	\$41,961	\$42,591	\$43,230	\$43,878	\$44,536	\$45,204	\$45,882	\$46,571	\$47,269	\$47,978	\$48,698	\$49,428	\$50,170	\$50,922	\$51,686	\$939,069
EI Expense	\$3,587	\$3,844	\$3,432	\$3,483	\$3,536	\$3,589	\$3,642	\$3,697	\$3,753	\$3,809	\$3,866	\$3,924	\$3,983	\$4,043	\$4,103	\$4,165	\$4,227	\$4,291	\$4,355	\$4,420	\$4,487	\$4,554	\$4,622	\$83,979
CPP Expense	\$6,554	\$6,974	\$6,336	\$6,431	\$6,527	\$6,625	\$6,724	\$6,825	\$6,928	\$7,031	\$7,137	\$7,244	\$7,353	\$7,463	\$7,575	\$7,688	\$7,804	\$7,921	\$8,040	\$8,160	\$8,283	\$8,407	\$8,533	\$155,033
WSIB Expense	\$2,722	\$2,965	\$2,767	\$2,808	\$2,850	\$2,893	\$2,936	\$2,980	\$3,025	\$3,070	\$3,116	\$3,163	\$3,211	\$3,259	\$3,308	\$3,357	\$3,408	\$3,459	\$3,511	\$3,563	\$3,617	\$3,671	\$3,726	\$67,698
EHT Expense	\$1,458	\$1,458	\$1,389	\$1,410	\$1,431	\$1,452	\$1,474	\$1,496	\$1,519	\$1,542	\$1,565	\$1,588	\$1,612	\$1,636	\$1,661	\$1,686	\$1,711	\$1,737	\$1,763	\$1,789	\$1,816	\$1,843	\$1,871	\$33,990
Employee Benefits	\$10,774	\$10,655	\$9,838	\$9,985	\$10,135	\$10,287	\$10,442	\$10,598	\$10,757	\$10,918	\$11,082	\$11,248	\$11,417	\$11,588	\$11,762	\$11,939	\$12,118	\$12,300	\$12,484	\$12,671	\$12,861	\$13,054	\$13,250	\$240,737
Accounting Fees	\$5,550	\$5,700	\$5,429	\$5,511	\$5,593	\$5,677	\$5,762	\$5,849	\$5,936	\$6,026	\$6,116	\$6,208	\$6,301	\$6,395	\$6,491	\$6,589	\$6,687	\$6,788	\$6,890	\$6,993	\$7,098	\$7,204	\$7,312	\$132,855
Advertising & Promotion	\$13,225	\$16,592	\$13,200	\$13,398	\$13,599	\$13,803	\$14,010	\$14,220	\$14,433	\$14,650	\$14,870	\$15,093	\$15,319	\$15,549	\$15,782	\$16,019	\$16,259	\$16,503	\$16,751	\$17,002	\$17,257	\$17,516	\$17,778	\$323,011
Business Fees & Licenses	\$26,428	\$17,549	\$19,459	\$19,751	\$20,047	\$20,348	\$20,653	\$20,963	\$21,277	\$21,596	\$21,920	\$22,249	\$22,583	\$22,922	\$23,266	\$23,615	\$23,969	\$24,328	\$24,693	\$25,064	\$25,440	\$25,821	\$26,208	\$476,172
Credit Card Fees	\$5,198	\$7,215	\$6,229	\$6,323	\$6,417	\$6,514	\$6,611	\$6,711	\$6,811	\$6,913	\$7,017	\$7,122	\$7,229	\$7,338	\$7,448	\$7,559	\$7,673	\$7,788	\$7,905	\$8,023	\$8,144	\$8,266	\$8,390	\$152,431
Gas Pump Repairs	\$0	\$3,344	\$1,160	\$1,178	\$1,195	\$1,213	\$1,232	\$1,250	\$1,269	\$1,288	\$1,307	\$1,327	\$1,347	\$1,367	\$1,387	\$1,408	\$1,429	\$1,451	\$1,472	\$1,495	\$1,517	\$1,540	\$1,563	\$28,394
Insurance	\$29,834	\$29,972	\$31,322	\$31,792	\$32,269	\$32,753	\$33,244	\$33,743	\$34,249	\$34,763	\$35,284	\$35,813	\$36,351	\$36,896	\$37,449	\$38,011	\$38,581	\$39,160	\$39,747	\$40,344	\$40,949	\$41,563	\$42,186	\$766,470
Legal Fees	\$485	\$525	\$335	\$340	\$345	\$350	\$356	\$361	\$366	\$372	\$377	\$383	\$389	\$395	\$401	\$407	\$413	\$419	\$425	\$431	\$438	\$445	\$451	\$8,198
Office Supplies	\$3,783	\$6,591	\$4,821	\$4,893	\$4,966	\$5,041	\$5,116	\$5,193	\$5,271	\$5,350	\$5,430	\$5,512	\$5,595	\$5,678	\$5,764	\$5,850	\$5,938	\$6,027	\$6,117	\$6,209	\$6,302	\$6,397	\$6,493	\$117,964
Miscellaneous Expenses	\$0	\$24,242	\$4,040	\$4,101	\$4,162	\$4,225	\$4,288	\$4,353	\$4,418	\$4,484	\$4,551	\$4,620	\$4,689	\$4,759	\$4,831	\$4,903	\$4,977	\$5,051	\$5,127	\$5,204	\$5,282	\$5,361	\$5,442	\$98,869
Protection & Security	\$1,475	\$1,889	\$2,006	\$2,036	\$2,067	\$2,098	\$2,129	\$2,161	\$2,194	\$2,227	\$2,260	\$2,294	\$2,328	\$2,363	\$2,399	\$2,435	\$2,471	\$2,508	\$2,546	\$2,584	\$2,623	\$2,662	\$2,702	\$49,092
Repair & Maintenance - Airport	\$3,243	\$3,778	\$7,468	\$7,580	\$7,694																			

APPENDIX F – National Trade Corridor Fund Technical Briefing



NATIONAL TRADE CORRIDORS FUND

Technical Briefing
July 2017

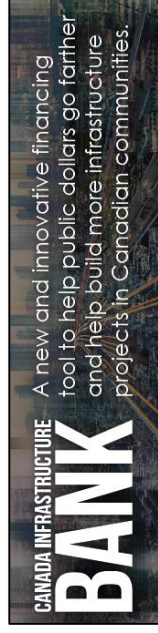


INVESTING IN CANADA PLAN

INFRASTRUCTURE

The investments in infrastructure we make today will pay dividends for years to come: delivering clean, sustained economic growth; building stronger, more inclusive communities; and creating more good, middle class jobs for Canadians.

By investing in infrastructure now, we can strengthen and grow the middle class and make Canada an even better place to call home.



FUTURE OF TRANSPORTATION

Transportation 2030

ACTIONS FOCUSED **UNDER FIVE THEMES**

A national transportation system that supports economic growth, job creation, and Canada's middle class.



1 The Traveller

2 Safer Transportation

3 Green and Innovative Transportation

4 Waterways, Coasts and the North

5 Trade Corridors to Global Markets

Improve the performance of our transportation system to get products to markets and grow Canada's economy



DEDICATED SOURCES OF FUNDING

National Trade Corridors Fund (NTCF)

- For investments in transportation assets that support economic activity and the movement of goods and people
- Will address transportation bottlenecks, vulnerabilities and congestion
- Funding allocated to projects based on merit, with a focus on trade corridor efficiency and reliability
- \$2 billion over 11 years, including up to \$400 million in dedicated funding for the North

Canada Infrastructure Bank (CIB)

- Will invest \$35 billion from the federal government into transformative infrastructure projects
- At least \$5 billion will be invested to address trade and transportation priorities



OBJECTIVES OF THE NTCF

- Support the fluidity of Canadian trade by easing capacity constraints and strengthening modal connectivity
- Increase the resilience of the Canadian transportation system to a changing climate and adapt it to new technologies and future innovations
- Address the transportation needs of Northern communities, including safety and economic development
- Leverage investments from multiple partners



NTCF ELIGIBLE RECIPIENTS

- Provinces and Territories, including provincially and territorially owned entities
- Municipalities, including local and regional governments and municipally owned entities
- Indigenous governments, tribal councils and other forms of regional government, organizations, and/or development corporations
- Public sector organizations
- Federal Crown corporations and agencies
- Not-for-profit and for-profit private sector organizations
- Canadian Port Authorities (subject to *Canada Marine Act*)
- National Airport System Airport Authorities
- Research, education and academic institutions



NTCF MAXIMUM CONTRIBUTIONS

- Federal funding provided for up to 50% of eligible costs, except for:
 - P3 (public-private partnership) projects - up to 33%
 - Projects in Yukon, Northwest Territories and Nunavut - up to 75%
 - Projects with Federal Crown Corporations - up to 100%
- Maximum contribution amount requested must not exceed \$500 million in NTCF funding
- Maximum level of total Canadian government funding must not exceed 100% of total eligible expenditures



NTCF ELIGIBLE PROJECTS

1. Preparation, construction, rehabilitation and improvement of transportation-related infrastructure assets
2. Acquisition, installation and deployment of technologies and equipment related to traffic and trade monitoring
3. Studies and research and development related to the efficiency and resilience of the transportation system, transportation-related technologies, and transportation-related trade or efficiency barriers



TIMING CONSIDERATIONS



Two application phases: Expression of Interest and Comprehensive Project Proposal

Expression of Interest

- Short summary of the proposed project and a summary of how the project is expected to meet the program's objectives, terms and conditions
- Applicants successful in this stage will be provided with a detailed application guide and will be invited to submit a comprehensive project proposal

Comprehensive Project Proposal

- Detailed business case that provides important qualitative and quantitative information to demonstrate how well a project meets selection criteria



EXPRESSION OF INTEREST

Expression of Interest to include:

- Name of organization, and contact information
- Description of organization's mandate and role in proposed project
- Short rationale for the project
- Overview of proposed project activities
- Work plan with estimated start and end dates, key milestones, and major activities
- Estimate of total project costs
- Sources of project funding

Application form available on [Transport Canada's website](#)



COMPREHENSIVE PROJECT PROPOSAL

Comprehensive Project Proposal to include

- Thorough description of how the proposed project would respond to a demonstrated need to improve the trade network
e.g., demonstrate time lost resulting from an inefficient modal connection between road and rail, how the project would improve the connection, and the expected project and economic benefits
- Clear description of how National Trade Corridor Fund funding would provide value for money (i.e., economic gain versus cost of project)
- Detailed and realistic work plan, budget and schedule
- Thorough financial plan with evidence of secured balance of funds
- Risk analysis including mitigation strategy
- Performance measurement strategy with key measurable indicators and results

Applicant guide provided by Transport Canada to eligible applicants whose projects are screened in via Expression of Interest phase



MOVING FORWARD

- Expression of Interest phase closes on September 5, 2017
 - Applicants to be notified of assessment within 30 working days
- Additional Calls for Proposals will follow over the 11-year life of the program
- Transport Canada will undertake regular, priority-setting exercises to identify trade-related investment needs and northern transportation needs
 - These will inform future calls for proposals



FOR ADDITIONAL DETAILS

PLEASE SEND EMAIL TO

tc.ntcf-fncc.tc@tc.gc.ca

OR VISIT THE NATIONAL TRADE CORRIDORS FUND WEBSITE AT

<http://www.tc.gc.ca/eng/programs/national-trade-corridors-fund.html>



August 21, 2017

CITY OF PEMBROKE

1 Pembroke Street East
Pembroke, Ontario
K8A 3J5
Tel. 613-735-6821

**Chief Administrative
Officer & Human
Resources**

Extension: 1330
Fax: 613-735-3660

Finance

Extension: 1320
Fax: 613-735-3660

Fire

Extension: 1201
Fax: 613-732-7673

OPP Administration
613-732-3332

**Economic Development,
Culture & Tourism**
Extension: 1303
Fax: 613-735-3660

Operations

Extension: 1409
Fax: 613-732-1421

**Planning, Building &
By-Law Enforcement**
Extension: 1304
Fax: 613-735-3660

Purchasing

Extension: 1409
Fax: 613-732-1421

Parks & Recreation
Extension: 1501
Fax: 613-635-7709

general email:
pembroke@pembroke.ca

www.pembroke.ca

Pembroke & Area Airport Commission
176 Len Hopkins Drive, RR#6
Pembroke, Ontario
K8A 6W7

To whom it may concern:

I am writing on behalf of the Pembroke Economic Development Advisory Committee (PEDAC) with regards to the importance of the Pembroke & Area Airport.

As you may be aware, PEDAC is group of 12 business leaders appointed by City Council in Pembroke who convene on a monthly basis to discuss economic development challenges in the area. We advise the City of Pembroke on economic development issues and assist the City in achieving its goals. Committee members are all volunteers and come from a variety of sectors including manufacturing, retail, education, and government services.

The committee grounds its recommendations on research and regularly has guest speakers attend its meetings so it can better understand the conditions that are impacting the local economy, either positively or negatively. Among its initiatives has been the completion of a Business Retention and Expansion effort to gather first hand feedback from businesses and the participation of several of its members in a First Impressions Community Exchange program to help Pembroke understand an outsider's perspective of the City.

PEDAC would like to take this opportunity to express how vital the Pembroke & Area Airport is to economic growth and success in the Ottawa Valley. The information we have received to date through the Business Retention and Expansion project indicates that of the large employers and manufacturers who have been interviewed, 80% of businesses have positively rated the Pembroke & Area Airport and indicated that its presence and services benefit their business and related businesses.

We believe that the Pembroke & Area Airport is an essential component to attracting new business to our area. With the removal of rail lines and the challenges posed by having a 2-lane highway through much of Renfrew County, the airport is essential in providing services for larger organizations, such as more convenient travel opportunities for company executives and prospective businesses.

In order to attract economic growth and successful businesses an airport is vital to the upper Ottawa Valley. We fully understand the challenges that come with operating a regional airport in a rural area, but we also believe an airport is an



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general email:
pembroke@pembroke.ca

www.pembroke.ca

asset that many smaller communities don't have, and one that is worth investing in and protecting. It is our hope that the airport will continue to operate for many years to come, helping support the overall economic prosperity of our region.

Sincerely,

Jamie Bramburger
Chair, Pembroke Economic Development Advisory Committee