

MEMORANDUM

DATE: January 24, 2019
TO: Council
FROM: Kevin De Leebeeck, P.Eng. Director of Operations
SUBJECT: AIRPORT FEASIBILITY STUDY

As part of the 2018 draft budget staff brought forward the Airport Master Plan update to support the 2015 “Approved in Principle” conceptual master plan drawing (attached) and to provide new strategic direction and planning for the future of the Airport. During the 2018 budget deliberations it was communicated that Council needed additional information regarding the asset such as;

- potential increased funding and/or sale/transfer to Oxford County,
- potential for tax revenue sharing with SWOX,
- third party management, and
- options for disposal

As a result staff revised the 2018 Operations Business Plan and brought forward the concept of completing an “Airport Feasibility Study” in advance of proceeding with an Airport Master Plan update to address Councils additional information request.

Unfortunately Operations Services was unable to complete this 2018 business objective due to, in part, continuous and prolonged staff vacancies as well as coming to the realization that much of the scope of work is beyond typical Operations staff undertakings.

At the December 10, 2018 Council meeting Council requested staff to report on;

- a new business model of a flight school managing the Airport facility, and
- to provide a risk assessment of the general public accessing the Airport.

Therefore as part of the 2019 draft budget staff re-introduced the “Airport Feasibility Study” incorporating and expanding upon all the informational items requested by Council as outlined above before proceeding with an Airport Master Plan update. It is anticipated that staff would bring forward a draft terms of reference of the “Airport Feasibility Study” for Council consideration prior to tendering. Alternatively should Council consider that the need of conducting an Airport Feasibility Study is no longer required, the associated funds could be re-directed towards completing the Airport Master Plan update.

Reference has been made that the attached 2010 Airport Business Park and Airpark Market Analysis and Feasibility Study should be sufficient, however it should be noted that the 2010 study provided the following:

- Strength, Weakness, Opportunities and Threat (SWOT) analysis of the Airport,
- Aviation Related Industrial Land Survey,
- Market Analysis and Development Implementation Plan,
- Market Analysis and Feasibility of an Airpark at the Airport, and
- Governance Models

Of the topics covered in the 2010 study it would appear that section 6.0 Governance Models may address Councils additional information request for:

- third party management, and
- a new business model of a flight school managing the Airport facility.

Staff are open to further suggestions and direction regarding the warrant or scope of an “Airport Feasibility Study” in order to work towards the completion an Airport Master Plan update.

PROUSE ROAD ROAD ALLOWANCE BETWEEN CONCESSIONS 6 AND 7 PROUSE ROAD

DUFFY LINE AND LOTS 7 AND 8

LOT 7 LOT 4 LOT 3 LOT 2

GEOGRAPHIC

AERODROME REFERENCE POINT (APPROXIMATE LOCATION) REFERENCE ELEVATION 270m

ROAD (CLOSED)

DEREHAM

THE KING'S HIGHWAY No. 19

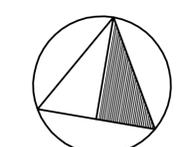
RUNWAY 08-26 EXISTING ASPHALT RUNWAY

AIRCRAFT TIE-DOWN AREA

EXISTING ASPHALT RUNWAY

AIRPORT ROAD ROAD ALLOWANCE BETWEEN CONCESSIONS 7 AND 8 AIRPORT ROAD

CRANBERRY ROAD



LEGEND

- PROPOSED AIRSIDE/GROUNDSIDE FENCING
- PROPOSED INTERNAL LOT BOUNDARIES
- OPERATIONAL ZONE BOUNDARY (FROM 41R-2877, 1984)
- TILLSONBURG REGIONAL AIRPORT PROPERTY BOUNDARY
- AIRSIDE OPERATIONAL AREA
- PUBLIC FACILITIES DEVELOPMENT AREA
- MUSEUM DEVELOPMENT AREA - AIRSIDE
- HANGER DEVELOPMENT AREA - GENERAL AVIATION
- HANGER DEVELOPMENT AREA - COMMERCIAL AVIATION
- COMMERCIAL DEVELOPMENT AREA - AIRSIDE
- COMMERCIAL DEVELOPMENT AREA - GROUNDSIDE
- FUTURE AIRPARK DEVELOPMENT AREA
- FUTURE DEVELOPMENT AREA (EX. AGRICULTURAL/WOODLOT)



METRIC SCALE: 1:4,000

TOWNSHIP OF SOUTHWEST OXFORD

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**TILLSONBURG REGIONAL AIRPORT
2013 MASTER PLAN CONSOLIDATION
AIRPORT OVERVIEW**

No.	REVISION	DATE	BY	PROJECT NO. 1339	SURVEY BY: TPM	DATE: DEC 2013	DRAWING No.
1	REV. ACCESS ROAD TO 20m R.O.W., UPDATE HANGARS	17 NOV. 2015	ACV	DESIGN BY: DSK	DRAWN BY: DSK	CHECKED BY: PJP	1

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E X P L O R E R
SOLUTIONS

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Final Report

**Airport Business Park and Airpark
Market Analysis and Feasibility Study**

Tillsonburg Airport

April 29, 2010



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Abbreviations

ACAP – Airports Capital Assistance Program
 AMO – Approved Maintenance Organization
 AWOS – All weather operating system
 BA – Business aviation
 CHAA – Canadian Harvard Aircraft Association
 FBO- Fixed base operators
 GA – General aviation
 GPS – Ground Positioning System
 GPU – Ground Power Unit
 IFR – Instrument Flight Rules
 ILS – Instrument Landing System
 JAM – Jet Aviation Museum
 MRO – Maintenance, repair and overhaul
 NAS – National Airport System
 OPP – Ontario Provincial Police
 SUV – Sport Utility Vehicle
 TC – Transport Canada
 TMA – Tillsonburg Municipal Airport
 VFR – Visual Flight Rules



1. Context

1.1 Tillsonburg Municipal Airport

The Tillsonburg Municipal Airport (TMA) is located in Southwest Oxford Township, approx 7 kilometres north of the Town of Tillsonburg. The airport is accessed from Highway 19 and is only 15 kilometres south of Highway 401. It is comprised of a paved runway (08-26), 5,500 feet long by 100 feet wide, lighted and 2 grass runways (02-20 & 32-14) which are 2,600 feet long by 100 feet wide.



The Town of Tillsonburg owns the Tillsonburg Municipal Airport. The Royal Canadian Air Force originally built the airport as an emergency grass airfield to support flying training during the Second World War. Three grass runways, each 2,600 feet in length, were defined in the typical military triangular configuration of the time. The Town of Tillsonburg leased the airport from the Federal Government in the late 1950's. As part of the conditions of lease prior to ownership, the Town contributed funding towards airport improvements. In 1971, the Town reconstructed and paved the primary runway (08-26) and constructed an exit taxiway and an apron on the south side of the runway. Also added in the 1970's were the terminal building, aircraft hangars and fuel facilities. Two additional hangars were added in 1981 and one in 1982. The Town took over ownership and administration of the airport in 1981.

The airport is home to the Canadian Harvard Aircraft Association (CHAA) which is headquartered at the airport and maintains a fleet of the Harvard aircraft at the airport. The airport has recently undergone a significant expansion and upgrade including the lengthening of the main asphalt runway to 5,500 feet including an asphalt overlay of the existing 4000 foot runway. A new terminal building was also built and is located just south of the former Air Terminal Building which will be demolished. A new privately owned 10 bay general aviation "T" hangar is almost completed and the airport is hosting 2 new flight schools (general aviation and ultra-light) and charter flights are available at a neighboring charter operators. Another 9 hangars have been built since 2002.



The Tillsonburg Municipal Airport has the only paved runway in Oxford and nearby Norfolk Counties.

TABLE 1.1 – AIRPORT DATA

Tillsonburg Municipal Airport

IATA: *none* – ICAO: *none* – LID: CNQ4

Summary

Airport type	Public
Owner	Town of Tillsonburg
Operator	Town of Tillsonburg
Serves	Oxford, Elgin and Norfolk Counties with some tenants travelling from Middlesex County
Location	244 411 Airport road Tillsonburg, ON N4G 4H1
Elevation AMSL	885 feet / 270 metres
Coordinates	42°55'37"N 080°44'59"W 42.92694°N 80.74972°W

Runways

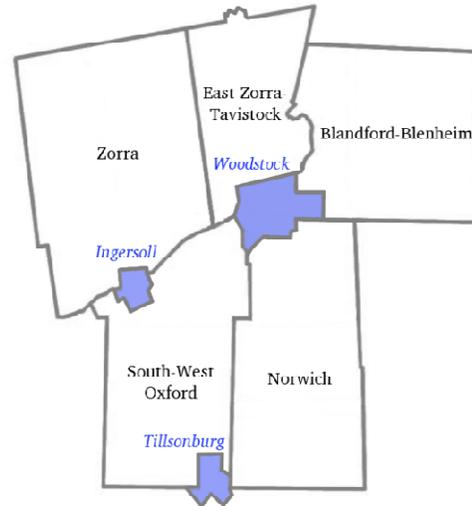
Direction	Length		Surface
	feet	metres	
02/20	2,400	732	Turf
08/26	5 500 (there is a threshold at 4002 ft landing on runway 26 or taking-off on runway 08)	1,220	Asphalt
14/32	2,400	732	Turf



1.2 Overview of Oxford County

Oxford County is located in the heart of Southwestern Ontario, amid rolling hills and productive farmland. The roots of the county are in agriculture. The strength of the county is in business. With a choice location at the crossroads of Highways 401 and 403, Oxford County is easy to find. Within a 2 hour driving radius, you can access all of Southwestern Ontario, including the Greater Toronto area.

Oxford County is a regional municipality and census division of the province of Ontario. The regional seat is in Woodstock. Oxford County has functioned as a regional municipality since 2001, despite still containing the word *county* in its official title.



Oxford comprises the city of Woodstock, the towns of Ingersoll and Tillsonburg, and the townships of Blandford-Blenheim, East Zorra-Tavistock, Norwich, South-West Oxford and Zorra.

In 1788, the Hesse District was established within Upper Canada covering the territory of what is today southwestern Ontario. Four years later it became the Western District with the establishment of Norfolk County which included the territory of present-day Oxford County. In 1798, these lands were included into a new London District. The Brock District, containing the Oxford County territory, was then split off from the London District by 1840 as Upper Canada was replaced by the Province of Canada governance.

Area	2,039.46 kilometres ² (787.44 mi ²)
Population	
Total 2006	102,756
Density	50.4/kilometres ² (130.5/mi ²)

The boundaries of Oxford County for most of its existence were established in 1850 with the implementation of the Baldwin Act. In 1855, Norwich Township in the county's southeast was divided into North and South townships to accommodate significant population levels in that area. Except for this adjustment, the township boundaries within the county remained intact until the late 20th century.

On 1 January 1975, major revisions to Oxford County's structure took effect when the townships were compressed to the current five under an amalgamation. Three urban municipalities also remained, namely Ingersoll, Tillsonburg and Woodstock.

Because of its designation as a regional municipality, Oxford County has a regional-level police force, titled the Oxford Community Police Service. However, a few communities such as Ingersoll and Tillsonburg are patrolled by the Ontario Provincial Police (OPP) Oxford detachment. Recently Norwich Township opted to remove OCPS from service and now relies upon the OPP.



Located in the heart of Southwestern Ontario, Oxford County is home to several thriving communities within its eight area municipalities. Featuring a highly accessible location, a large day-drive market, first-rate transportation routes, fast and effective communications, a strong work ethic, and a charming lifestyle it is a prime area for businesses.

Oxford represents the best of both worlds. From the urban view, the communities of Ingersoll, Tillsonburg and Woodstock offer an abundance of business and residential opportunities. Big enough to support well-recognized franchise operations and small enough to boast a wide selection of business independents. Big enough to cater to world markets and small enough to know the neighbours and feel safe.

Rural communities are rich in natural resources and pastoral charm. Farming is both a way of life and a way to make a living. State-of-the-art farming operations are plentiful in Oxford. Record harvests are an annual event as a result of first-class soils and ample heat and rain, combined with the skill of County farm managers. Agriculture is big business in Oxford County and is well supported all the way up the food chain by local manufacturers of farm inputs, farm machinery outlets and food processors.

Our sources for this information are:

<http://www.county.oxford.on.ca/>

http://en.wikipedia.org/wiki/Oxford_County,_Ontario

1.3 Mandate recap

The objective is to provide the town of Tillsonburg with an Airport Business Park Market Analysis and Feasibility Study to help the town determine the appropriate level of infrastructure investment to support, and the role of the private sector in making these investments. The town's long term objectives for the airport are:

- Increased public and private sector investment in the airport
- Increased employment at the airport and the strengthening of an existing employment hub in the rural area
- Increased diversification of the rural economy of the South Central Ontario Region (SCOR)
- Increased assessment for the Township of South-West Oxford and the County of Oxford
- Increased financial sustainability of the airport



2. Airport strengths, weaknesses, opportunities and threats

TMA is primarily a general aviation airport with private aircraft operations and vintage aircraft activities accounting for most of the approximately 11,000 movements (estimated 2009).

In terms of aviation activities, the airport is competing with a significant number of other general aviation airports in southern Ontario and three large commercial airports, London, Kitchener and Hamilton. This context makes for a very competitive environment where aircraft owners are offered various choices and rates.

The number of private hangars and aircraft at the airport is still significant with 38 aircraft based locally, and the completion of ten new private hangars should offer sufficient space to attract new customers. To evaluate the growth potential of the airport, Explorer Solutions conducted a series of one-on-one interviews and one focus group during which we met with airport tenants, owners and operators of private and vintage aircraft, local and regional industry leaders, elected officials and economic development executives.

We also gathered information through web research, phone surveys of local and regional pilots and aviation related industries throughout southern Ontario. Based on our investigation, we were able to draft a portrait of the strengths, weaknesses, opportunities and threats (SWOT) facing TMA.

These SWOTS represent the opinion of those interviewed and are consistent with our experience and benchmarking at other airports. We have chosen to list the SWOT by priority and assemble a series of recommendations in article 2.5.

2.1 Tillsonburg Municipal Airport Strengths

The following elements represent the core infrastructures, services, activities and assets positively impacting TMA, its tenants and its growth potential. These elements should be part of the promotional and marketing tools of the TMA, and TMA leaders should work to maintain these strengths.

2.1.1 New Terminal

This new terminal is a much more attractive, practical and better-adapted building. Its key features are the new pilot lounge, conference room, restaurant, washrooms and extra space available in the basement to host events and activities. Due to its configuration, pilots and users will appreciate the building's enhanced look and better-adapted environment. It will also contribute to the new and refreshed image of the airport.



2.1.2 Good-Sized Cluster of General Aviation Hangars with Available Space

The airport already benefits from the presence of fourteen hangars which are generally speaking in good condition and all occupied. The airport is also well positioned to attract new users and aircraft with the availability of 10 new private hangars on the premises. A total of 38 aircraft are presently located at the airport generating a fairly decent volume of activity, boosting operational revenues, and indirectly promoting the TMA location.

2.1.3 Paint and Maintenance Shop on Site

These companies are business generators for the airport. They represent the industrial component of TMA and as such should be considered key clients in any growth strategy. Moreover, these two companies enjoy a good reputation within the pilot community we surveyed. They also generate lease and operational revenues from the business they attract. These companies can play a positive role in TMA promotional material.

2.1.4 Canadian Harvard Aircraft Association (CHAA)

This vintage aircraft association has been the main client of the airport for many years. CHAA represents a distinctive component for TMA. Their unique niche activities create value and are a key component that can differentiate TMA from other GA airports. CHAA operates 6 to 8 aircraft from TMA and is the main fuel client. They also host an average of two major events per year attracting crowds to the airport. CHAA activities are coordinated by a group of volunteers and financed through fundraising activities, donations and ride fees.

2.1.5 Land Availability

The airport has ample land for development. On the south side of the runway, the parcels of land are easily accessible from Airport Road or the airport entrance road. There are no major natural obstacles limiting the expansion of the airport. On the north side of the runway, the parcels of land will need to be accessed from Prouse Road, and here again there are no serious natural obstacles. Oxford County and South-Oxford Township bylaws permit both industrial and commercial aviation-related activities on airport land. Concerning private property, the definition of a “lot” will need to be studied more comprehensively.

2.1.6 80% VFR Operating Days – 20% IFR Days

Even though the airport operates a VFR approach system at this time, it can rely on an average ratio of five to one VFR days. Basically, if the airport is lucky, the once-a-week IFR day will occur on a weekday when traffic volume is lighter, thereby enabling the airport to welcome the larger weekend traveler crowds.

2.1.7 Lowly Populated Area

Being far enough from the city, the airport benefits from its location in a lowly populated area where less noise-related problems can occur. Oxford County bylaws already contain provisions to limit residential housing development within the TMA protection radius.



2.1.8 Well Managed Airport

We have received very positive comments on the airport's management and aviation activities management. This element should be promoted.

2.1.9 No Control Tower and Slots¹ Availability

We have chosen to list this element in the "strengths" category to reflect the lesser-controlled airspace around TMA. Many GA pilots prefer less-stringent airspace giving them more latitude on approach and take off patterns. With an average of 11,000 movements annually, the airport can support a much larger volume of flight operations. This opportunity favours the future development of the airport and should be used as a marketing tool to promote the airport.

2.1.10 No Landing Fees and Low Fuel Prices

The no-landing-fee approach and low fuel prices should attract more GA aircraft. GA enthusiasts are notoriously opposed to landing fees, so this approach will enhance TMA attractiveness and should be advertised.

2.1.11 Runway Extension and Quality

The runway extension, with no threshold, opens the door to a wider range of aircraft, specifically, more business jets and turbo props. It also offers a more secure landing and takeoff facility for pilots. Runway conditions range from good to excellent. The threshold issue (related to tree height at the end of runway 08) must be addressed quickly.

2.1.12 Site Owned and Operated by the Town

Municipally-operated sites offer a more stable operating environment and funding is usually a much smaller issue. But towns are usually less responsive than privately owned airports, and town officials must stay well connected with airport activities over the long run.

2.1.13 Transportation into Town

TMA offers free taxi service into town with the purchase of fuel.

¹ **Landing slots** or **Airport slots** are rights allocated to an entity by an airport or government agency granting the slot owner the right to schedule a landing or departure during a specific time period. Landing slots are allocated in accordance with guidelines set down by IATA's Scheduling Services Group. All airports worldwide are categorized as either Level 1 (Non-Coordinated Airport), Level 2 (Schedules Facilitated Airport) and Level 3 (Coordinated Airport).



2.2 Tillsonburg Airport Weaknesses

We have also identified a number of weaknesses. These weaknesses encompass a number of mainly short term decisions, actions and requirements that the airport would need to undertake to enhance its attractiveness and support growth activities, but also include some larger issues that reflect the overall southern Ontario aviation portrait. A number of these weaknesses could have a stronger impact on TMA's growth opportunities if they are not addressed quickly.

2.2.1 Displacement of Runway Threshold

The runway threshold imposed by the tree height at the end of runway 08 is a major weakness affecting the airport's growth potential. At this time, it limits the type of aircraft TMA can accommodate and will continue to do so until resolved. There are also tall weeds and bushes at the end of runway 26 that require trimming.

2.2.2 Marketing of the Airport

Overall, the airport lacks visibility within the Tillsonburg and GA communities. TMA is not unlike most GA airports in that its marketing efforts are limited. Among the communication tools TMA is lacking are an official web site (apart from the information on the town's web site) and good road signage on Highway 19 and around the exits of Highway 401. Signage could also be installed at strategic regional transportation road crossings, and TMA should have a stronger presence at all Ontario GA events and in various GA publications.

Marketing activities should also address the "old-airport" image. This comment came out a number of times during our interviews and at the focus group, and seems to be centered on the age of the first row of buildings and hangars at the airport. The new terminal building should help to reduce this impression, but the overall image of the property should be addressed in a marketing plan.

2.2.3 Snow Removal

Snow removal operations seem to be inadequate according to a large number of airport users. This situation could be addressed by requiring training and certification of snow removal equipment operators. Training could also cover airport operation rules and regulations.

2.2.4 No Commercial Flights

The proximity of three major commercial airports with IFR approaches, custom services, larger MRO and FBO operations, and commercial flights, eliminates any opportunity for Tillsonburg Airport to attract commercial flights. These larger airports also reduce the number of business jets that may choose to land at TMA. However enhancing TMA to cater to business jets should remain a target, and airport services should be planned accordingly. Business jets activity generate good revenues. Most aircraft are pampered and require many services (storage, parking, catering, cleaning, fuel, GPU, heater, car rental) for which owners and operators are ready to pay. Additional services like meeting and conference room should also be considered.



2.2.5 Wildlife

With safety being paramount for aviation, reducing any threats of wildlife on the runway and the overall property will add to TMA's image and popularity. The airport should invest in fencing off the entire airport perimeter and setting up means for scaring off or eliminating any wildlife on or around the property.

2.2.6 Inadequate Road System for Access to Private Hangars

There is no access road to the private hangars. As a result, safety issues are a concern as private vehicles cross the main ramp to access private hangars. These safety concerns become much more significant when fuel pumps are located and fuelling operations take place in the path of vehicle crossings. If TMA wishes to grow its activities, a separate road to access the hangars should be built to keep aircraft and vehicles apart.

2.2.7 No Instrument Flight Rules Approach (IFR)

The absence of IFR approaches augments the height minimums and approach distances for aircraft. This reduces the number of movements at the airport on days when there is low cloud cover, fog or any other type of negative weather system. Offering IFR approaches will favour the hosting of more flights, provide pilots with a safer tool to reach the airport, and reduce the risk of accidents. The growing use of the GPS approach system offers a relatively low-cost and secure system.

2.2.8 No Weather Information System

Accurate and up-to-date weather information is essential to the safe and economic operation of any airport, large or small. Fewer things change faster than the weather. A weather information system would automatically measure meteorological parameters, analyze the data and broadcast aviation weather reports. Pilots can use the aviation weather information provided by a system such as the AWOS to partially fulfill the requirements of various aviation regulations.

2.2.9 Lack of Industrial Buildings and Public Services

The airport has no private or airport-owned industrial or aviation related (other than GA) hangars or buildings available. Airport hangars are a rare commodity, and any airport that is able to offer hangar space has an advantage over others. In terms of public services, the expansion of industrial activities at the airport or the construction of a larger group of hangars could be limited by the absence of services such as water, sewage, and gas as well as limited electrical power (only 220 volt service is available at the airport). All of these impose a limit and act as a deterrent on the ability to attract manufacturing plants and medium size service companies.

2.2.10 Small Ramp and Fuel Services

The ramp area is small (about 3400 sq metres). It limits the number of aircraft that can park and the total number of aircraft the airport can host (without parking them on the grass). The fuel pumps are located on the southwest corner of the ramp thus reducing even more the parking and manoeuvring space on the ramp. This situation is especially acute when refuelling activities



are taking place. Aircraft that are manoeuvring to get close to the fuel pump or onto the ramp must do so in tight quarters. This layout is based on general aviation, piston aircraft models. With the current distribution, if it were necessary to service larger turboprops and turbofan aircraft with a greater wingspan, the situation would be much more difficult and would seriously detract from the airport's image and the quality of its services.

Overall services, as mentioned before, receive very positive comments. The only issues that came up were the lack of after-hours service for refuelling and the lack of self-service equipment which was mentioned many times. A number of pilots felt service should be extended until 7 pm. The relocation of the fuel pump to facilitate movement on the ramp should also be addressed.

2.2.11 No Customs Clearing at the Airport

In this regard, TMA is no different than most GA airports. Customs officers have become a rare commodity at all GA airports, especially at those not located in industry-driven or tourist regions or that do not have a large number of annual movements. For example, Saint-Hubert Airport on the South Shore of Montreal has over 140,000 movements annually but no customs officers. The chances of TMA getting a custom officer are very low. This situation forces international flights to land at another airport to clear customs. For this reason, some pilots will choose to remain at those airports with passengers using ground transport to complete their trip.

2.3 Opportunities

Our research has revealed a number of opportunities, some short term, others long term, that can contribute to the growth and financial stability of the airport. Some of these opportunities are more general in nature while others target specific organizations or sub-sectors of aerospace. Those opportunities which offer the best chance for TMA to grow will be presented in more detail in Section 4 - Market Analysis and Development Plan. Our presentation includes background information as well as our understanding of the steps required to translate these opportunities into confirmed investments.

2.3.1 Canadian Harvard Aircraft Association

The Canadian Harvard Aircraft Association is a charitable organization driven and supported by a group of volunteer pilots and Harvard aircraft enthusiasts. CHAA relies mainly on donations and membership and ride fee revenue as funding sources. The association has no full or part-time staff, and leadership is carried out by a group of dedicated individuals. CHAA leaders have many current projects and foresee still others for the future.

Most of these projects are not new. They have been brought up during the meetings and have been envisioned and discussed by CHAA leaders for many years. The principal CHAA projects are presented in the following chart:



TABLE 2.1 – CHAA PROJECTS

CHAA PROJECTS	
Harvard Museum	Build and furnish a museum for Harvard memorabilia and aircraft at TMA. Present various exhibits targeted at school-aged children and families. Further the history of Harvard aircraft and those who built, maintained, and flew them. The museum could be accompanied by an outdoor static display when weather permits
Educational Courses	CHAA volunteers have already started offering some aviation education courses and Harvard history courses to elementary school students. This project still needs structuring and marketing efforts.
Harvard Events	Annually, CHAA organizes various events at TMA to promote their aircraft, the association itself, and awareness and knowledge of Harvard.

In addition to these three projects, CHAA has many ongoing activities. On a weekly basis, a group of CHAA volunteers work on the maintenance and restoration of the association's aircraft. CHAA is presently restoring two aircraft and maintaining the six they have that are certified to fly. CHAA, represented by its team of pilots and aerobatics group, participates in various air shows. They also offer, on many occasions, rides to paying customers.

These numerous projects and activities create some excellent opportunities for TMA. To leverage these opportunities, TMA must pay special attention to a number of questions and issues that can have an impact on their success, including the following:

- Is CHAA in a position to develop its uniqueness and expertise?
- How will CHAA fund and market these projects along with their associated requirements (hangar improvements, new building (museum), aircraft purchasing and restoration costs, and marketing at the national and international level)?
- Can the projects be carried out by volunteers alone, or will permanent staff be required. If so, where will the funding come from?
- Will professional help be required to structure the museum activities and project?

On the other hand, over the years, CHAA and its members have developed, and consequently bring to the table, many strengths, among which are:

- CHAA is a recognized national vintage aircraft association
- CHAA has a good network of contacts in the aviation sector
- CHAA is the prime client of the airport
- CHAA leaders reside locally or within southern Ontario



2.3.2 Overcrowding of the London Airport Airspace – International Flight School

With more than 164,500 flights in 2009, London Airport and its surrounding airspace have become very crowded and dangerous in the eyes of many private pilots and aircraft owners located at the airport (London). The annual growth rate in the number of flights is one reason for these concerns. The second reason, which appears to be the main one, is the presence of international students at one of the flight schools. Pilots and aircraft owners are sceptical of the inadequate English-speaking skills of most of these international student pilots. Many fear these students do not fully understand air traffic control directives and as a result are a threat to other pilots flying in the same vicinity.

We believe this concern will lead some pilots and aircraft owners, presently located at London Airport, to search for another location to park and operate their aircraft. To a lesser degree, the same situation seems to be affecting the Region of Waterloo International Airport. This situation presents TMA with the opportunity of attracting private owners and pilots from the London and the Waterloo/Kitchener regions.

To leverage this opportunity, TMA should consider preparing a targeted marketing campaign to promote and attract multiple private owners/operators of general aviation aircraft thereby strengthening the GA cluster at the airport.

On the other hand, if TMA chooses not to focus on general aviation activities, it could try to attract a flight school by offering courses to international students. With 100-150 students every six months, a flight school would generate strong economic activity at the airport. Three main sources of revenues linked to the training of international students are: 1) the offer of nearby housing for students, 2) the generation of many new jobs such as flight instructors, a flight manager, and mechanics and technicians for aircraft maintenance, and 3) flight operations that bolster airport fuel and property leasing revenues. Other economic impacts would include food sales, entertainment, and retail and associated services.

TMA's relatively low number of movements would allow for, and be attractive to a flight school. If a flight school were to set up operations at TMA, we would recommend that an airspace management policy be developed to regulate flight patterns and manage the increased volume of movements.

2.3.3 Buttonville Airport - Closer and Stiffer Regulations at Brantford Airport

The recently announced closure of Buttonville Airport in Markham has many pilots and aircraft owners located there trying to find a new location for their aircraft. Buttonville airport is home to over 200 aircraft and a well organized flight club. However, this opportunity raises the challenge of distance. Markham is more than one-and-a-half hours away from Tillsonburg, while there are many other GA airports located along the way. To leverage this opportunity, TMA should be proactive in contacting the pilots, aircraft owners and the Buttonville flight club to show its interest in welcoming new tenants as well as promote the advantages associated with the airport.

A similar offer could be presented to pilots and aircraft owners facing either stiffer rules and regulations at other local airports or who are looking to move to a friendlier GA airport.



2.3.4 Jet Aircraft Museum

During the focus groups and meetings, we met with representatives of the Jet Aircraft Museum (JAM). JAM is presently located at London Airport but has been following the recent improvements to TMA (runway lengthening and new terminal building) with interest. JAM is a not-for-profit foundation (charitable organization) whose primary activities include the acquisition, display, preservation, and maintenance of aircraft, and more importantly, the providing of in flight demonstrations for present and future generations of Canadians. JAM's mission is to create and operate a museum housing aircraft, historical artefacts, records, and salient memorabilia, while simultaneously keeping representative historic aircraft in the air, whenever and wherever major aviation events are held across Canada, and at appropriate international centers. The Museum is under the leadership of a group of volunteers.

JAM also offers an Advanced Flight Training Program for experienced pilots wishing to deepen their understanding of aircraft stability and handling while having the opportunity to fly a high performance ex-military jet. The pilots who enrol in this program will not only enhance their flying skills, but will be making a valuable contribution to the preservation of Canada's aeronautical heritage.

JAM is well established at London Airport where they own a large hangar with multiple bays. Leasing revenues from the hangar along with other less significant sources of revenue provide sufficient funding to support JAM activities. However, these revenues are being offset by the higher operational cost of operating out of London Airport (cost of fuel, delays for take-off, and property leasing costs).

To be able to attract JAM, TMA will have to resolve the runway threshold displacement problem. JAM T-33 aircraft require the use of the entire runway for landing and take-off. JAM would also need a suitable hangar for its storage, maintenance, restoration and office activities along with space to accommodate their museum.

This opportunity would help bolster the vintage aircraft cluster at TMA. The relocation of JAM to TMA would bring a second component to the cluster and some synergies might be created between CHAA and JAM.

2.3.5 Spectrum Aviation to Expand its Activities

Spectrum Aviation is a renowned paint shop in southern Ontario and abroad. The company has shown interest in growing its activities and facilities. The company also has experience with vintage aircraft and has shown interest in the development of such a cluster of activities. To garner their growth, Spectrum Aviation would require a larger hangar capable of housing various types and sizes of vintage and non-vintage aircraft.



2.3.6 Events

Aviation related events usually draw large crowds of aviation enthusiasts, aircraft owners and pilots. Developing the airport as an aviation-event facility would be a rarely seen concept in the aviation community. CHAA would be a key partner in hosting such events, and the airport could look at new event possibilities such as a Jamboree Day, an Aviation Picnic, a Camping Weekend, and aviation theme days like Piper Day, Cessna Day, etc.

2.3.7 Ontario Provincial Police

The Ontario Provincial Police department uses the airport for storage purposes on an ad hoc basis mainly as a result of one of their pilots being a Tillsonburg resident. They also use the airport for flight operations when a mission is carried out in the vicinity of Oxford County. OPP flight operations are headquartered at Orillia Airport, and our findings from the meetings and research conducted do not suggest that the OPP is thinking of changing or outsourcing any of its activities. Nevertheless, we must emphasize the need for TMA officials to remain in contact with the OPP, keep them aware of the services the airport can provide, and try to position TMA as the southern Ontario hub for OPP flight operations.

2.4 Threats

TMA is also faced with a number of issues that threaten its ability to grow and develop. While varied in nature, they have a negative impact on the airport. To put this into perspective, TMA does not face any “life threatening” issues, but these threats do involve important services, pieces of equipment, processes and competitors that will slow down or block growth opportunities in the future if solutions and strategies are not implemented in the short term.

2.4.1 IFR Approaches

Over the past ten years, flight management systems on BA and GA aircraft have evolved quickly. Most new aircraft will be equipped with a glass cockpit² to facilitate flight management and provide the pilot with more accurate information. These systems also offer instrument landing equipment that make landing under less favorable weather conditions safer.

TMA would benefit from upgrading its approach system to IFR³ standards. An IFR system would enable flight operations (landing and take-off) in most weather conditions (including low cloud cover) thus reducing the number of aircraft having to divert to other airports or not fly at all.

² A **glass cockpit** is an aircraft cockpit that features electronic instrument displays. Where a traditional cockpit relies on numerous mechanical gauges to display information, a glass cockpit uses several displays driven by flight management systems that can be adjusted to display flight information as needed. This simplifies aircraft operation and navigation and allows pilots to focus only on the most pertinent information.

³ **Instrument flight rules (IFR)** are regulations and procedures for flying aircraft by referring only to the aircraft instrument panel for navigation. Even if nothing can be seen outside the cockpit windows, an IFR-rated pilot can fly while looking only at the instrument panel. An IFR-rated pilot can also be authorized to fly through clouds, using Air Traffic Control procedures designed to maintain separation from other aircraft



2.4.2 Many GA airports within a 100 kilometres radius

Southern Ontario boasts a large number of general aviation and commercial airports. Most of these are located closer to areas that have a larger population than Tillsonburg or are closer to tourist attractions or major industrial centers. Airports such as St-Thomas, Stratford and Brantford compete directly with Tillsonburg's airport for general aviation markets. The London, Hamilton, and Region of Waterloo airports are also competitors more so for the aerospace manufacturing sector than for commercial flights. They also have large flight schools and maintenance centers.

2.5 Recommendations

Taking into consideration these various strengths, weaknesses, opportunities and threats (SWOT), we present a list of key short-to-medium term recommendations. These are presented in line with the development plan (section 4) of this report.

2.5.1 Runway Threshold

TMA, the Town of Tillsonburg, South-West Oxford Township and Oxford County should work together to solve this issue quickly. We recommend that TMA take the necessary steps to acquire the parcel of land which is creating the threshold issue. TMA should try to obtain the rights to manage this parcel of land to permit the full use of all runways at the airport.

The land could be acquired through a land exchange agreement or by expropriation. The rights to manage the wooded area could be made subject to TMA's planting of new trees there or in the wooded area on the western boundary of the airport property. These mitigating efforts would compensate for the trees lost at the end of Runway 26. If this situation is not remedied, it will hamper the pace of development and reduce the number of potential projects at TMA.

2.5.2 Canadian Harvard Aircraft Association (CHAA)

Since CHAA is the airport's main tenant and a nationally recognized vintage aircraft association, TMA would benefit from the growth of its activities. Growth in CHAA activities should have a direct impact on TMA's operational revenues, on its overall image and promotion, and favour the attraction of support business. So notwithstanding the support TMA already provides CHAA, we recommend TMA help CHAA with project definition and management. This help could take the form of funding for professional resources such as a museum expert (to develop the museum concept along with the structuring of the exposition and the collectables, and the creation of a true museum experience) or a part-time mechanic (to help with the restoration and certification of old aircraft). It could also be professional services to support CHAA's administration or marketing efforts.

TMA should be careful to avoid substituting itself for CHAA volunteers but instead remain proactive to help further the development of the association in line with TMA objectives.



2.5.3 IFR Approach and Weather System

Safety is paramount in aviation. Airports that provide the highest safety standards and equipment are likely to attract a larger share of the market. With reference to instrument approach systems, we recommend using GPS over ILS. GPS approaches are much more affordable to purchase and maintain. Technically, ILS provides lower minimums for approaches, but GPS is the system of choice for the future and will become even better with the launching of block 3 satellites by the US government and the upcoming European (Galileo), Russian (Glonass), and Chinese (Biedou) systems. We therefore recommend that TMA hire a specialist to design and survey both GPS approaches (08 and 26) and quickly apply to NAV Canada to obtain GPS approach certification. There is presently a long waiting list (2 to 4 years) at NAV Canada for GPS certification, so early application is important.

2.5.4 Marketing and Communications Plan

We strongly believe that the airport should structure a marketing and communications effort. A marketing plan would be the first step. It should include a new independent web site for TMA, planned marketing activities (mailing, e-mailing, magazine advertising, radio interviews, banners, posters) to reach various targeted groups (GA pilots and owners, BA pilots, Fortune 500 Canadian Companies owning and operating BA aircraft, the general public and others). Joint advertising with airport tenants or other companies interested in showcasing their products or advertising during events can be considered.

2.5.5 Try to Bring Back the Tillsonburg Flying Club

Tillsonburg Airport should try to bring back the Tillsonburg Flying Club with the objective of creating a larger cluster of general aviation aircraft at the airport thus improving business. More aircraft could mean additional work for companies located or looking to locate at the airport. Bridging the gap between TMA and the Tillsonburg Flying Club would probably contribute to the growth of both parties and generate the construction (rental) of new hangars and structures. The general aviation sector, by itself, would not achieve that goal.

2.5.6 Customs at the Airport

The airport should work with the Canadian Border Services Agency to locate one or more local part time or retired customs officers who could be on call, be paid per flight, or on full duty when the airport hosts an event that brings in a higher volume of cross border flights. This approach favours flexibility and local involvement in the service, provides the quality and responsiveness pilots and passengers appreciate along with a reasonable financial cost. TMA could also look at offering a free-customs-service-if-you-buy-fuel deal.

2.5.7 Available Land

The results of our land availability survey, conducted throughout southern Ontario during this mandate (see Table 3.3), show that most GA airports have little to offer in the way of land zoned for aviation or industrial use. Among GA airports, several have no services at all, while only Brantford offers all services.



TMA thus enjoys a favourable position as it can offer large parcels of land zoned for aviation related activities. The absence of some public services (mainly water and sewage) reduces its attractiveness to a certain extent, so marketing should be focused on companies that do not require large volumes of water and employ a limited number of people.

We recommend that TMA put together a comprehensive marketing tool to promote the land that is available at the airport. In addition to this document, TMA must work with local utilities to ensure the availability of 600 volt, three-phase electricity and a structured approach for infrastructure such as water, sewage (septic tanks) and gas if available. TMA must be proactive and offer realistic solutions to incoming investors as well as demonstrate the feasibility and efficiency of the airport. The land use plan should also consider segregating manufacturing, maintenance, and R&D activities from general aviation, flight schools, and flight operation activities (see our suggested Land Use Plan in section 4).

3. Aviation Related Industrial Land Survey

For the purpose of this study we have identified eleven airports surrounding Tillsonburg. The following tables describe these airports in detail showing their diversity in size and services as well as land and building space availability.



TABLE 3.1 – GENERAL INFORMATION

NAME	POP Census 2006	RWY	Approach	CERT	MRO	CHARTER	AIRLINE(s)	MFR(S)
Tillsonburg	14,822	5500 2400 2400	VOR/DME	NO	Lee Maintenance Spectrum Aviation	NONE	NONE	NONE
Brantford Municipal Airport	90,192	5,000 2,600 2,600	RNAV NDB	NO	Brant-Aero Nelles Aviation Brantford Flight Center Gilbert Custom Aircraft	Brantford Flight Center	NONE	NONE
Burlington Airpark	164,415	3,763 2,145	NONE	NO	Kovachik Aircraft Services	Spectrum Airways	NONE	NONE
Chatham-Kent Airport	45 000	5,000	RNAV	YES	Sontair Limited	Sontair Limited	NONE	NONE
Goderich Municipal Airport	7 563	5,000 3,000 1,870	NDB	NO	B&B	NONE	NONE	Sky Harbour
Kincardine Airport	12 000	4,085 2,083	NDB	NO	Evans Aviation	Evans Aviation	NONE	NONE
London International Airport	352,395	8,800 6,300	ILS LOC VOR	YES	Aero Academy Diamond Aircraft Maylan Flight Academy London Northwind Aviation and Marine XY Aviation	Air London Flightexec	Air Canada Northwest Sunquest Sunwing Transat Holidays United WestJet	Diamond
Region of Waterloo International Airport	204,668	7,002 4,100	ILS LOC/DME	YES	Kitchener Aero Avionics Tri-City Aero Rotor Services Reliable Horsepower	Adler Aviation Airsprint Great Lakes Helicopter Flightpath Charter Airways	Bearskin WestJet Sunwing	NONE
Sarnia Chris Hadfield Airport	71,419	5,100 2,989	ILS LOC/DME	YES	Huron Aviation (FBO)	Huron Aviation	Air Georgian	NONE
St. Catharines/ Niagara District Airport	131,989	5,000 2,497 1,989	RNAV NDB	YES	Eaglerock Aviation (FBO)	St. Catharines Flying Club Niagara Air National Helicopters Fox Aviation Pace Executive Aviation Services	NONE	Genaire
St. Thomas Municipal Airport	36,110	5,050 2,640 2,640	VOR/DME RNA	YES	NONE	NONE	NONE	NONE
Stratford Municipal Airport	30,461	5,000 2,829	VOR/DME	YES	NONE	NONE	NONE	NONE



TABLE 3.2 – GENERAL INFORMATION

Airport	Size	City nearby	Lease or sale	Price per sq ft	Landing fee	Parking fee
Tillsonburg	620 acres	Woodstock Ingersoll	Lease	\$ 0,29	No	\$ 42 / month or \$ 6 night
Brantford Municipal Airport	400 acres	Hamilton Kitchener	Lease	Under review \$3 to \$5	No	\$132 / year
Burlington Airpark		Hamilton Oakville				
Chatham-Kent Airport	422 acres	Chatham- Kent	Lease	Variable	Cmm'l only	7.50\$ per night
Goderich Municipal Airport	400 acres	Goderich	Lease and sale	No set price	Cmm'l only	10\$ per night
Kincardine Airport	125 acres	Kincardine	Lease	\$ 0,29	Cmm'l only	\$ 5.00 per night
London International Airport	1 500 acres	London	Lease or sale	Unknown	Unknown	Unknown
Region of Waterloo International Airport	Unknown	Kitchener/ Waterloo	Lease	\$ 0.21	Cmm'l only	\$ 8.14 daily
Sarnia Chris Hadfield Airport	Did not answer our questions					
St. Catharines/ Niagara District Airport	329 acres	St. Catherine	Lease only	\$ 0.256	Yes Variable	Yes Variable
St. Thomas Municipal Airport	600 acres	St. Thomas	Lease only	\$ 0.20 (40 year lease)	No	\$75 - \$100
Stratford Municipal Airport	482 acres	Stratford	Lease only	\$ 0.31	Cmm'l only	5 \$ night

NOTE: Landing fees for commercial flights vary between \$ 40 to \$ 55 depending on the airport and the aircraft.



TABLE 3.3 – LAND AVAILABILITY SURVEY

Airport	Available	Zoning	Owner	Services	Runway access
Tillsonburg	Approximately 125 acres south of the runway	Airport related	Town of Tillsonburg	Electricity	Yes
Brantford Municipal Airport	50 acres	Light industry	City	All	Yes
Burlington Airpark					
Chatham-Kent Airport	300 acres	Farm, Industry, Airport	Municipality of Chatham-Kent	Water and electricity	Yes for most
Goderich Municipal Airport	1 acre	Airport related	Town of Goderich	None	No
Kincardine Airport	1 acre	Airport related	Town of Kincardine	Electricity	Yes
London International Airport	2.968 acres	General Industrial	City and Airport	All	Yes
Region of Waterloo International Airport	6.4 acres 50.4 acres	Aviation related	Regional Municipality of Waterloo	All	Yes No
Sarnia Chris Hadfield Airport	Did not answer our questions				
St. Catharines/Niagara District Airport	2.75 acres	Airport related	Town of Niagara-on-the-Lake	None	No
St. Thomas Municipal Airport	85 acres	Industrial	Town of St. Thomas	Electricity	Yes
Stratford Municipal Airport	None	-	-	-	-

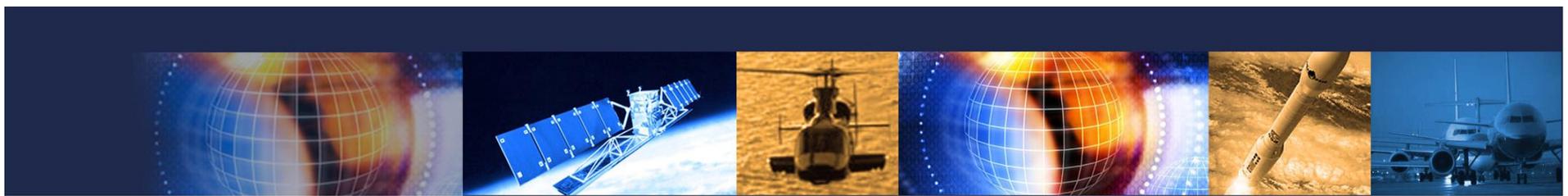


TABLE 3.4 – BUILDING SPACE AVAILABILITY SURVEY

Airport	Available	Zoning	Owner	Services	Runway access
Tillsonburg	None	Aircraft hangar	City	Electricity	Yes
Brantford Municipal Airport	15 000 sq ft	Aircraft Hangar	City	All	Yes
Burlington Airpark					
Chatham-Kent Airport	Yes but unknown	Hangar	Privately owned	Electricity	Yes
Goderich Municipal Airport	None	-	-	-	-
Kincardine Airport	None	-	-	-	-
London International Airport	None	-	-	-	-
Region of Waterloo International Airport	None Possibly private hangars	-	-	-	-
Sarnia Chris Hadfield Airport	Did not answer our questions				
St. Catharines/ Niagara District Airport	3 800 sq ft	Aircraft hangar	Can-du Maintenance	All	Yes
St. Thomas Municipal Airport	None	-	-	-	-
Stratford Municipal Airport	Unknown	Aircraft hangar	Privately owned	All	Yes



4. Market Analysis and Development Plan

4.1 Market Overview

With a population of close to 13 million people, the province of Ontario is well equipped and serviced by airline companies and charter operators. Municipal airports in Ontario serve a multitude of communities and regional air transport needs. They also support a variety of general aviation activities. Some airports are more commercially focused, providing scheduled passenger service, while others are more oriented towards the private or corporate user.

The following map shows the location of the eighty-five municipal airports in Ontario. Those marked in red represent municipal airports that are not eligible for Airport Capital Assistance Program (ACAP) funding⁴. Those marked in green represent airports that are eligible for ACAP funding. National Airport System (NAS)⁵ and provincially owned airports are not shown on this map.

MAP 4.1 – ONTARIO AIRPORTS



⁴ ACAP - <http://www.tc.gc.ca/eng/programs/airports-acap-purpose-329.htm>

⁵ NAS - NAS includes airports in all national, provincial and territorial capitals, as well as airports with annual traffic of 200,000 passengers or more. Currently, the 26 NAS airports serve 94 per cent of all scheduled passenger and cargo traffic in Canada and are the points of origin and destination for almost all interprovincial and international air service in Canada.



The overall issues facing TMA are not unique. They are the same issues being faced by many municipal airports throughout Ontario and Canada.

From the various activities undertaken throughout the course of this mandate, and in line with the benchmarking of southern Ontario airports, TMA's characteristics, assets, and SWOT position, it is clear that TMA is a great general aviation airport. With the land available at the airport and a good GA cluster already on site, TMA seems poised for growth.

The following sections (4.1.1 to 4.1.5) cover various aviation and aerospace sub-sectors and provide an overview of possibilities for TMA within each sub-sector.

4.1.1 General Aviation

From comments, interviews and desk research, an overwhelming amount of information was obtained that described TMA as a great general aviation airport. During these undertakings, we challenged the main activities and sectors related to aviation and none got a stronger positive feedback than general aviation. To support a positioning that centers on general aviation would be the logical choice since Ontario is home to the largest concentration of registered aircraft in Canada. Transport Canada data show 9,669 registered aircraft in Ontario of which 8,017 are privately owned, 1,484 are commercially registered, and 168 are state registered.

As is the case with many types of businesses, timing is an issue, and at present, TMA could profit from a few situations impacting southern Ontario's general aviation sector. The first situation is the widespread and growing concern over airspace safety around London Airport due to the flight training activities of international students who have poor English language skills. To a lesser degree, the volume of movement at the Region of Waterloo International Airport is also becoming a concern for many pilots. During the surveys we conducted, a substantial number of pilots voiced their dissatisfaction with many other GA airports in southern Ontario; Brantford Airport was the one mentioned most often. This opens the door for promoting the safer, more accessible, and lower cost TMA location.

The second situation is the upcoming closure of Buttonville Airport. In September, 2009, the Sifton family, which owns the airport, announced plans to redevelop the airport during the next seven years (2009-2016) into a mixed use property for commercial, retail and residential development. In the meantime, the airport will continue to operate, and there are no known plans for the airport's operations to be relocated to another Greater Toronto Airport or to cease altogether. Presently, the Buttonville Flying Club has over 200 active members, and regularly organizes aviation-related activities such as monthly meetings with guest speakers, breakfasts, lunches, dinner fly-outs, 'Young Eagles' days, weekend trips, and an annual trip to the Bahamas.

To attract pilots from both neighbouring and more distant airports, TMA should structure a marketing effort centered on its range and availability of services, cost of operation, airport and airspace safety, availability of hangars, ambiance, events, activities, and flying club, and produce promotional tools to support this effort.



4.1.2 Business Aviation⁶ and Charters

Throughout our research, in the focus group, and during interviews, we never encountered, heard of, or sensed any strong local or even regional interest in increasing business aviation activity at TMA. Most of the companies we met with or interviewed were not using a business aircraft, were already established at another airport, or were using charter services from another airport. Among the reasons offered by the latter, most comments indicated that the services were already in place, and that the other airports had better facilities and services to accommodate business aviation (longer runway, customs, on-site FBO and AMO...).

During the five year period ending in the autumn of 2008, the BA sector had maintained an annual growth rate of over 17%, the best in the industry and their largest ever. However, business aviation is also the most vulnerable and volatile sub-sector of aerospace. BA suffered a huge blow during the following economic downturn with sales dropping by more than 22%. The small business jet segment was the worst hit of all with a 47% drop in sales. Today, business jet manufacturers are just beginning to experience a leveling off in their order books, and analysts don't foresee a new growth period before 2013-2014 or a return to the faster growth rate until around 2017-2018.

It is our opinion that TMA should not consider business aviation as a growth sub-sector at this time. As the market evolves, and smaller business jets enter the market (VLJ – Very Light Jet) later this decade, the overall growth potential may change and create opportunities. We don't feel that investing in infrastructure and services catering to this category of aircraft would create enough value and return on investment at this time.

But hosting business jets and corporate travel can be a lucrative business. There are a few key factors to consider. The first is total travel time and distance. BA jets are used to provide more latitude, to bring executives and other employees as close as possible to their destinations, and to provide them with more time at their destinations. BA travelers are often trying to avoid regular air carriers' scheduled flights because these do not match their personal schedules or work agendas. They're also interested in avoiding the waiting times that accompany boarding and deplaning commercial flights. Secondly, BA travelers look for quality services, special attention and a warm, friendly atmosphere. Most BA airports have a local FBO (fixed base operator) in charge of providing these services. North-American FBOs have developed the "concierge" approach and cater to the requirements of their clientele. FBOs provide luxurious, cosy, and inviting waiting rooms along with light snacks, cookies, and drinks for their customers during their wait. Most FBOs have offices and conference rooms available, at a fee⁷, for their clients, provide and coordinate ground travel in quality vehicles (limousines, large SUVs), and have a team to welcome and host BA travelers. FBOs are focused on providing good customer service to pilots since they are often the ones that recommend an airport to their client.

⁶ Business Aviation – Business aviation usually encompasses all multiengine aircraft powered by turboprop engines and by turbojet or turbofan power plants carrying company personal and executive on work related trips.

⁷ Clients will pay a fee to rent conference rooms.



Services for pilots include quality pilot lounges with many amenities (big screen television, computers, high speed internet, quality chairs, a resting area, beverages, light snacks), and depending on the duration of their stay, a car or rental car can be made available. FBOs also provide ramp services like customs, refuelling, interior cleaning, catering, aircraft parking, de-icing, GPUs and heaters.

Looking ahead, if TMA wishes to attract more BA flights, it will have to structure its operations better to respond to these BA requirements and provide the appropriate services. It would also have to promote the airport, its advantages, and its price structure to BA pilots and flight planning decision makers from large BA operators like Netjets, FlexJets, FlightOptions and the corporate flight centers of Fortune 500 companies. The main event for reaching flight planning decision makers is the Annual Schedulers & Dispatchers Conference⁸;

4.1.3 Air Cargo

We interviewed people with regard to the possibility of developing air cargo activities at TMA. Based on the survey results, there also does not to be good potential for air cargo activities at TMA. The proximity of much larger logistic platforms at four international airports (London, Waterloo Region, Hamilton and Toronto) leaves little room for any other air cargo activities. Air Cargo companies do use smaller aircraft (Cessna caravan) when flying to remote or less accessible areas, but their operational model revolves around centralized hubs located in major metropolitan centers where they can reduce their delivery time and operating costs.

We believe that it would be very difficult to develop a profitable business model that could induce any air cargo company to modify this model. Such operations would also require IFR approaches.

4.1.4 Commercial Flights

There are presently no commercial air services at TMA. We do not foresee any change in this situation due to the proximity of London Airport which hosted close to 450,000 passengers in 2008. London Airport offers direct flights to local, North-American, Caribbean and international destinations. The airport hosts four regular airlines and three charter operators. If travelers cannot reach their destination from London, they can also travel from nearby Region of Waterloo International Airport or Hamilton International Airport.

The Tillsonburg area does not have the critical population mass to render viable any regular airline service, and other communities within Oxford County have expressed little interest in supporting the development of such a service, once again because of the proximity of major airports. Furthermore, TMA is not a certified airport and as such cannot host scheduled commercial flights.

⁸ NBAA 21st Annual Schedulers & Dispatchers Conference



4.1.5 Specialized Flights

In the specialized flights category, we have created groups by use and type of aircraft. We present four of these - law enforcement operations, military operations, tourism flights and vintage aircraft activities. TMA has hosted these clientele on a number of occasions over the years.

For law enforcement flights, the Ontario Provincial Police (OPP) uses the airport on a frequent basis. Sometimes, OPP aircraft fly in for refuelling while carrying out operations in the vicinity of the airport. One of OPP's aircraft is stationed regularly at TMA, but this is mainly due to the fact that one of OPP's pilots is a Tillsonburg resident and comes home for the night. Our research and interviews with OPP personnel did not lead us to believe that the airport could leverage additional permanent OPP activities at this time. OPP's aerial team is headquartered at Lake Simcoe Regional Airport, and no other opportunities were found. For this reason, we do not recommend that "police flights and operations" continue to be considered as a potential market, but do believe that Tillsonburg leaders should maintain contact with OPP leaders to sustain the actual volume of activities and position themselves to cover future OPP needs.

The same situation exists with regards to military operations. We do not foresee the Tillsonburg Area and airport becoming a military operations hub. The airport receives occasional flights and should probably promote itself to Canadian forces operating in the region as well as consider offering value-added services to pilots and crews who are the ones who in the end decide where to refuel.

As for vintage aircraft activities, the Canadian Harvard Aircraft Association's role at the airport could set a trend, and we foresee a strong development opportunity that we have defined in article 4.2.1.

The last category, tourism and leisure flights, account for most of the flight activities at TMA together with vintage aircraft. Most general aviation enthusiasts like to "fly around", congregate and attend events. The following chart presents the main usages of general aviation aircraft by their owners and pilots.



TABLE 4.2 – GA AIRCRAFT USE

Reasons why people fly a general aviation aircraft	
Personal	35.6 %
Instructional	18.6 %
Corporate	11.4 %
Business	11.3 %
Air Taxi	7.6 %
Aerial application	4.8 %
Aerial observation	3.9 %
Public	3.5 %
Others	3.3 %

Personal flights and leisure/tourism/flying-around flights are the main usage GA owners and pilots make of their aircraft. These pilots and owners should thus be targeted by TMA, but the question is how TMA will position itself against other airports located in more populated regions with more readily known tourist attractions.

The new restaurant, that will offer breakfast and lunch on the weekends, should attract many new flights. But in the long run, TMA will need a stronger niche project to maintain the interest, and such a project could be structured around aviation events. This is an under-exploited niche market which opens up many possibilities that can be developed around GA and vintage aviation. Still, we would recommend this opportunity be integrated with the clusters presented later in the report to ensure a structured and more complete pole of attraction.



4.2 Industry Survey Results

The industry survey sample was created from a list of all the companies we could find on the Internet, from airport operators and our own contacts. The survey was conducted from February 1-23, 2010. Many follow-up calls were necessary to reach our respondents and to get significant answers. The total sample list is available in annex A.

Participation in the survey

- | | |
|----------------------------------|--------------|
| ➤ Initially contacted | 42 companies |
| ➤ Did not return our phone calls | 21 companies |
| ➤ Refused to participate | 5 companies |
| ➤ Participated in the survey | 15 companies |

Geographic distribution of respondents:

- 3 from Brantford
- 3 from Kitchener Waterloo
- 4 from London
- 1 from Simcoe
- 2 from St-Catharines
- 1 from Stratford
- 1 from Kincardine

Type of activity:

- 2 in the charter business
- 8 in the MRO business
- 5 in the training business

Q1. What are the major trends in your business sector?

Flight school owners indicated that the majority of their clients come for a commercial pilot's license. Participants also stated that the operating cost of keeping their respective licenses is increasing whereas revenues are not necessarily following the same trend. If General Aviation is loosing revenues, it means that small aviation businesses are also loosing revenues. General aviation is the primary feeder of the aviation industry. Participants noted that General Aviation is moving from mid-size airports to smaller ones where costs are less prohibitive. Furthermore, they noted a lack of hangar space at international and regional airports.

Rank	Trends
1	Shift to commercial license in training
2 (tied)	Operating costs getting higher
2 (tied)	Continuous but very slight growth
3	Many airfields not affordable for GA
4	Shortage of hangars for small aircraft



Q2. Are there activities that are growing faster than others?

The volume of activity in the maintenance sector seems to be stable, mainly due to the fact that there are a limited number of service suppliers. Less regulated by Transport Canada, amateur aviation is increasing due to lower expenses. Flight schools in larger cities are often supported by a foreign clientele. One owner stated that the Chinese clientele is being replaced by Indian students. Six respondents said that no activities are growing faster than others.

Q3. What are the strengths in southwestern Ontario's aviation sectors?

Due to the diversity of the answers, we have synthesized and summarized them.

Southwestern Ontario is seen as having very good potential for general aviation. Since controlled airspace is limited to large airports, there is sufficient non-controlled air space to permit general aviation to thrive. Population density is viewed as a positive aspect mainly due to the proximity of clientele. Numerous respondents confirmed their satisfaction at being given harbour at an intermediate airport, something to be expected since smaller airports attract unsatisfied customers from larger airports. These new customers have a positive effect on the business of smaller airports.

Q4. What are the weaknesses in southwestern Ontario's aviation sectors?

Respondents did not limit themselves to the weaknesses in the region but included the entire sector of activity. Many condemned the increase in the cost of operations due to Transport Canada requirements. This situation is mostly felt at the general aviation level. It was also noted by many respondents that pilots are getting older and are not being replaced by an equivalent number of younger ones. One explanation for this problem is the prohibitive increase in training, equipment, and operating costs. The present economic context is certainly not helping either.

A lack of avionics technicians, of flight schools, and of hangar availability were identified as the region's weaknesses.

Q5. What are the main challenges your business is facing?

Here again, respondents noted the increase in costs in this sector of activity. Combined with the current economic situation, operators have to manage their business much more closely. Improvement and growth are much more difficult, if not impossible, in this situation. Finally, they noted that provincial government college laws placed a further financial burden on private flying schools by increasing administrative bureaucracy.

Q6. Are there any challenges related to the airport you use?

All respondents answered "No", except for two flying schools in London that complained about certain fees that have been imposed.



Q7. Is your current location hindering the progress of your company?

Fourteen respondents said “No”, and one flying school in London said their operational costs are high.

Q8. Are your operations at a disadvantage as compared to commercial aviation?

Twelve respondents answered that their operations were not at a disadvantage as compared to commercial aviation. One respondent said his school had circuit restrictions at times. Another respondent answered that London was making a strong move towards commercial aviation.

Q9. What are your future business projects?

Most replied that their only project was to continue doing what they do best. It is possible that respondents did not want to publicize their projects. One company, though, replied that they want to increase flying time by 25% and achieve diversification by offering an air taxi service. Another respondent said he wanted to acquire the hangar where his business was located.

Q10. Do you foresee any expansion of your company at your present location?

Seven respondents said that they do not foresee any expansion for now. Six are thinking of expanding at their present location. Only one foresaw expansion that will force him to relocate.

Q11. What would your physical requirements be if you were to expand at a new location?

We received only one answer to that question: “My requirements are known, but I will not discuss them. I will say that London is a possibility.”

Q12. Do you know of Tillsonburg Airport?

Yes: 13 respondents
No: 2 respondents

Q13. What do you think of Tillsonburg Airport?

We have reproduced the most interesting answers in their entirety and verbatim in order to better preserve the clients’ true thoughts and feelings:

“Needs to be user-friendly e.g. low landing fee, place to eat, flight training might be a good opportunity to seize; Brantford picked a lot of the previous Hamilton business”

“They’ve done a hell of a good job with the new runway and the terminal is no longer a shack. No need to go into grandeur as Brantford did. Tillsonburg should stick to GA, avoid charter flights or jets”



“Tillsonburg is still perceived as lagging...still behind others. Not attractive enough. Be problematic for them to attract charters. Do they have new facilities? They're also lacking consistency with their training school.”

“They have to make sure that there is an added value for visiting pilots. Aircraft owners and pilots are looking for a good reason to go somewhere, whether it's a special event (Harvard!) or a good meal, a place to meet others and chat... Tillsonburg has to find a good reason to attract them!”

Others commented that Tillsonburg was a nice little airport.

Q14. Could Tillsonburg Airport become an asset to your business?

Eleven respondents simply answered “NO”. The owner of one flying school said that TLA is used as a destination point for students to fly to, but this is not considered as a real asset for his business development. Another suggested attracting the business of those who are disappointed with Brantford.

Q15. Would you be ready to set up one or more of your operations at Tillsonburg airport?

Twelve respondents said they were not ready to set up operations at Tillsonburg Airport. The most interesting comment was from the owner of another flying school who said that he might be interested in partnering with Tillsonburg for flight training if adequate incentives were offered (school satellite?). Another flying school manager said he might move to TA if the costs were low enough.

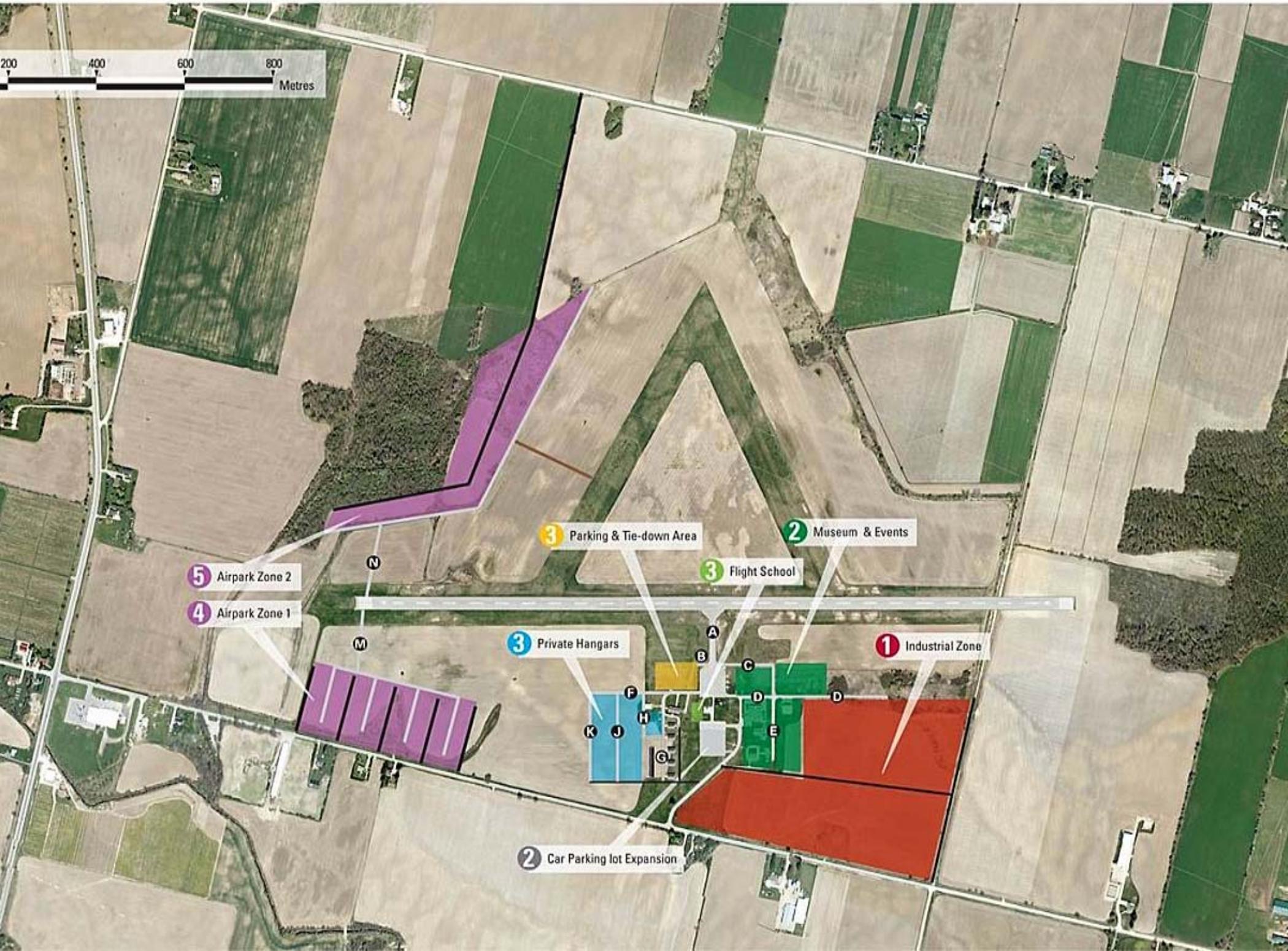
4.3 Development Plan

From the information we have obtained from our research, challenged, and discussed during the course of the various activities linked to this mandate, we foresee several niche opportunities for Tillsonburg Airport. One of these opportunities is definitely the “vintage aircraft” cluster. We also consider that an “industry” cluster evolving around general aviation activities would prosper and benefit the Airport. As previously mentioned, we integrate aviation events into each of these clusters. These two clusters are defined in greater depth in section 4.3.1 and 4.3.2.

Considering the various activities, we have also prepared a development layout for the Airport. This layout divides the south side of the airport into four separate aviation-related zones. Each zone is home to a specific type of aviation activity, and the overall layout places related activities together while reducing possible conflicts between less related activities (see chart 1).

4.3.1 Airport Layout Map

The map presented on the next page provides the complete portrait of the development plan proposed by Explorer Solutions. We have added a transparency of the original Airport Development Plan so you can see the differences between the two. The different zones are detailed in the following pages.



5 Airpark Zone 2

4 Airpark Zone 1

3 Parking & Tie-down Area

2 Museum & Events

3 Flight School

3 Private Hangars

1 Industrial Zone

2 Car Parking lot Expansion

N

M

A

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E

F

G

H

I

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K



The suggested airport layout map shows a concentration of all activities on the south side of the runway. We have favoured this part of the airport over the northern side because of its proximity to Airport Road, its already established activities (terminal, private hangars, commercial hangars), land availability (the airport has ample land to expand and grow on for many years), and the airport community effect it creates. Aviation enthusiasts love to congregate, and providing an airport environment that favors family and group activities will go a long way to attracting GA aircraft owners and operators to the airport.

Even though the northern side also offers ample land availability, developing it would come at a much higher price and stretch out the airport infrastructure and activities. Taxiways and a road network would have to be built. We do not foresee the need of developing the northern side of the airport for the next 25 to 30 years.

4.3.1.1 Differences between the Master Plan (MP) and Explorer Solution Development Plan (DP)

When the TMA master plan (MP) was produced in 1989, the airport was much smaller than it is now. The runway was still 4002 feet long, there were just a few hangars on the property, and the terminal was a small building that was replaced just a few months ago.

The 1989 layout suggested growing the general aviation side by setting up private hangars parallel to the main runway and facing north. It also suggested establishing an industrial zone to the east of the terminal where 8 small lots were proposed. The remainder of the property was destined for commercial development. This layout also reserved space on both the north and south sides of the airport to build a crosswind runway out of runway 14-32.

From the time the MP was developed, some 20 years ago, runway expansion and the building of the new terminal have followed the master plan, whereas increasing the number of private and general aviation hangars has not followed suit. Additionally, the airport is at a stage where it is ready to grow substantially as it focuses on the targeted niche industry and general aviation projects.

Rationale for the Development Plan (DP) Layout

Crosswind Runway

The DP suggests abandoning the crosswind runway project. Considering that most local and regional airports operate on one runway, that summer (mid spring to mid autumn) operations permit the use of grass crosswind runways (2), and that the cost of building such infrastructure is very high, we do not believe this project should be pursued. The main runway annually hosts an estimated 11,000 movements (in 2009) and can easily triple or quadruple this amount before congestion becomes an issue.

For this reason, we have suggested the creation of an extended industrial zone beginning just east of the terminal and extending all the way to the former Cranberry Line.



Industrial Zone

Planning for two structured industrial niche clusters, each encompassing various industrial activities, requires more space to support the expected growth. The MP layout does not cover this need as it only offers limited industrial land with access to the runway (8 small lots), and no land at all for companies not requiring access to the runway. The proposed DP takes into account these two needs – areas with and without access to the runway.

We thus suggested moving the MP industrial zone to the east of Taxiway E and expanding it all the way to Cranberry Line, with the objective of extending Taxiway D alongside the zone as companies set up their activities. We also recommended converting the former “east commercial development zone” into an industrial zone without access to the runway. Likewise, since water and sewage are issues at the airport, investment attraction activities should be focused on drawing technology-driven projects that require little water and companies that are not labour intensive.

Event and Museum Zone

The DP also integrates a new zone in the overall airport layout plan. The “event and museum” zone is now located where the former MP industrial zone had been placed. The event and museum zone will attract a host of visitors and tourists. Logic suggests this zone should be located close to the main airport entrance road, parking facilities, the restaurant, restrooms, and other general public facilities.

Locating this zone close to the airport terminal will favour crowd and visitor handling. It will also help keep visitors from wandering around the airport and having easy access to the industrial and general aviation zones where aircraft and private property could create security and safety issues.

General Aviation Zone

In its present state, the development of the general aviation zone is already out of line with the MP. The approach presently favoured by the airport provides more space and latitude. It makes room to develop a larger pool of aviation hangars by building perpendicularly to the main runway instead of parallel to it.

The DP suggests maintaining this approach as it favors a more concentrated layout. This approach will also reduce the overall cost of building taxiways and bringing public utilities to the hangars. The general aviation zone would thus continue to extend (as it already does) into the former MP west commercial zone which no longer exists in the DP.

Building and developing the general aviation zone perpendicular to the runway will reduce the footprint of the zone toward the west which in turn will leave space to develop a fourth zone - the airpark



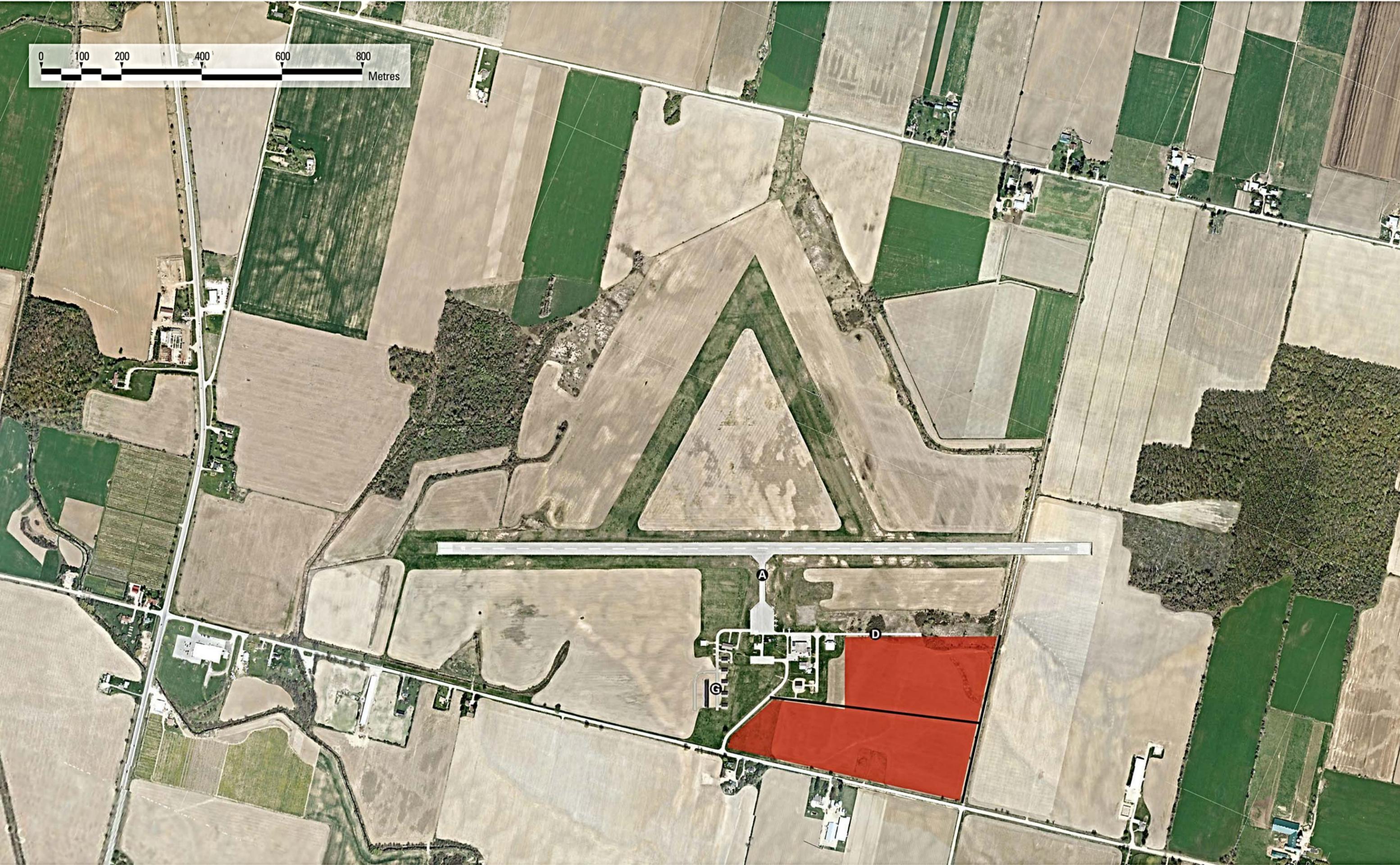
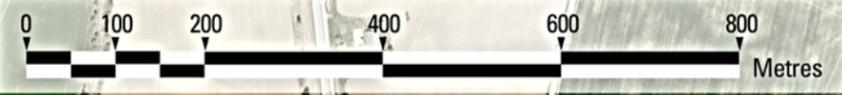
Airpark

The airpark was not envisioned in the MP. The concept did not even exist at that time. Airparks are a relatively new and growing concept in the aviation world. Integrating an airpark project into the DP required reserving parcels of land that could be easily accessed from both Airport Road and the main runway. The suggested location strengthens the overall general aviation cluster and is favored by the proximity of airport services while leaving room for future airpark expansion toward the east, the west, and even to the north of the airport.

4.3.1.1 Industrial Zone

See image on next page.

We suggest dedicating the red zone to aerospace and aviation industrial activities encompassing aircraft maintenance, aircraft repair and restoration, parts and components manufacturing, R&D activities, software development, and associated aviation services. We also strongly recommend not renting any land or buildings having access to the airside or runway to non-aviation companies. Over the years we have seen a number of non-aviation projects buy or lease aircraft hangars. As a result, these were not available later when needed by an aviation company which then had to set up elsewhere due to the lack of hangar space. We believe the Airport (Town) should build a three bay, 1800 square metre hangar facing Taxiway E. This hangar would serve for the expansion of the paint shop, maintenance activities, and other possible tenants. The total proposed industrial zone area is approximately 135,000 square metres (34 acres), with 56,000 square metres (14 acres) in the zone having runway access (an estimated 5 to 6 buildings), and 79,000 square metres (20 acres) without runway access (an estimated 8 to 10 buildings). We recommend a maximum lot coverage of 50% for usage without runway access, and a 35% lot coverage for usage with runway access (the 35% does not account for ramp space on the air side of the property or any parking space on the ground side of the property).

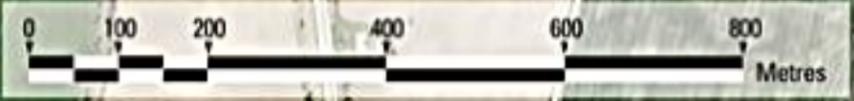
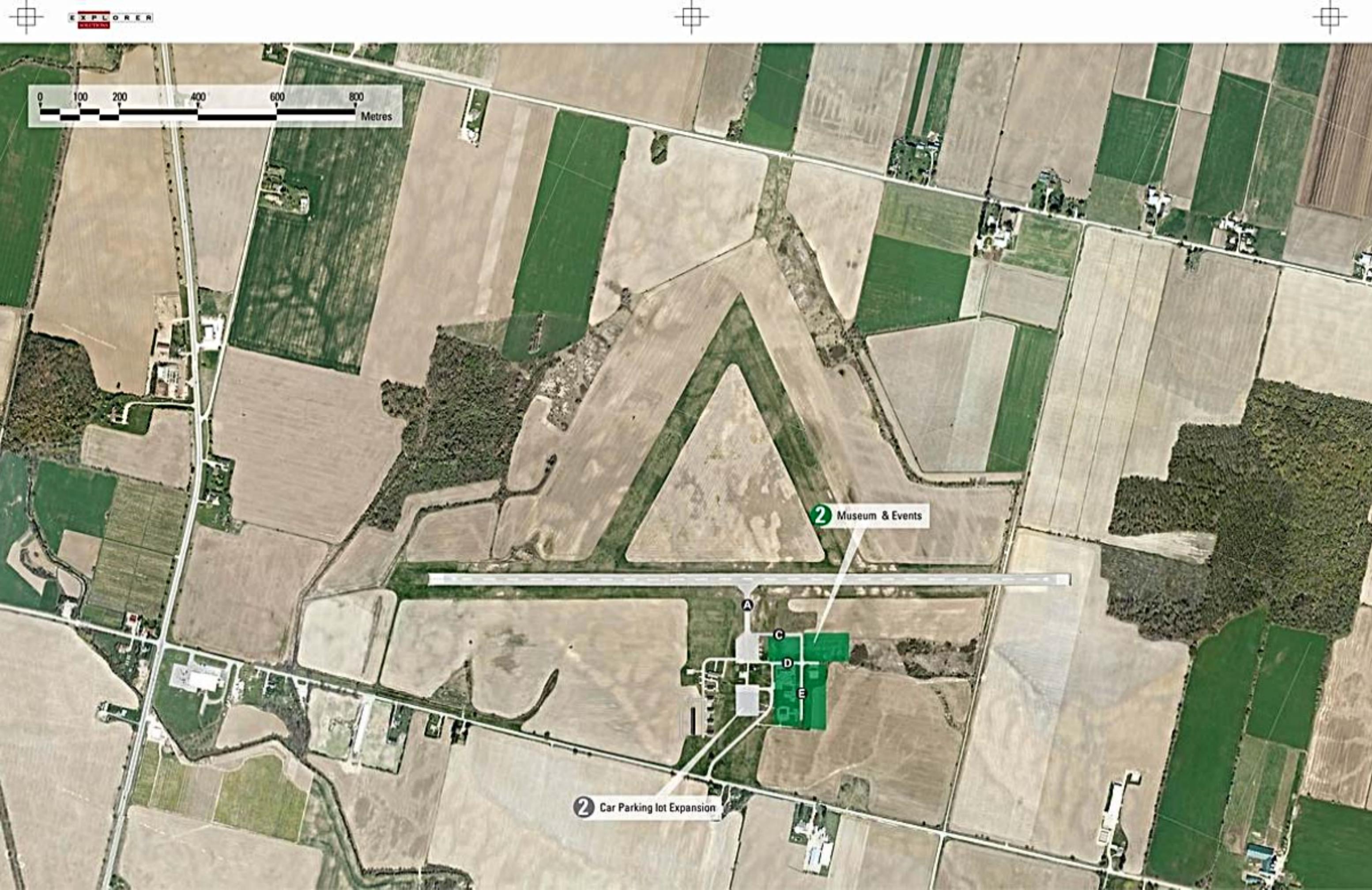




4.3.1.2 Museum and Events

See image on next page.

The green zone is part of the “vintage aircraft and event” cluster. We recommend developing a vintage aircraft museum on the green coloured parcels of land. The museum would be located at the current location of Spectrum Aviation and Lee Maintenance. This area, not encompassing the big CHAA hangar, covers 6000 square metres (approximately 1.5 acres). The abovementioned businesses could be moved to a brand new hangar across from Taxiway E in the industrial zone in a building better suited to their future needs and expectations. We further recommend creating an event ramp and area located north of Taxiway D, beginning at and east of the main ramp, and running alongside Taxiway D in front of the CHAA hangars. Its total length is estimated at 140 metres with a width of approximately 65 metres, creating an event zone of just over 9000 square metres (2.25 acres).



2 Museum & Events

2 Car Parking lot Expansion

A

C

D

E



4.3.1.3 General Aviation and Business Aviation

See image on next page.

The third zone encompasses a host of sub sectors but the entire zone is dedicated to general aviation and business aviation. The first part of this project is the creation of a parking and tie-down area (yellow rectangle on the map). The purpose of this area is to facilitate movement on the main ramp by reducing the number of aircraft on or around the ramp. It would also facilitate fuelling activities and lower the risk of accidents. We suggest locating this area adjacent to the main ramp on the west side. The parking and tie-down area could be expanded in response to future demand, but we suggest that the initial area be about 3,500 square metres, enough to host a minimum of fifteen aircraft. (Chart 4.3.1 shows an area covering 3,500 square metres (35 x 100)). The picture below shows a similar parking and tie-down area at Lewiston Airport (Me) which can host up the 55 aircraft. Under the picture, there is also find a short note on how snow removal is handled at Lewiston Airport.



Snow Removal Procedures - during the winter months, the airports take charge of removing snow from the taxiway portion of the tie-down area. Individual aircraft owners have the responsibility of removing snow from their parking spaces by plowing it behind their aircraft or onto the taxiway where the airport snow removal team clears it away.

The second part of the general aviation sector is a zone dedicated to flight school and FBO operations (green rectangle on the map). This zone is located just south of the ramp between the new terminal to the east and the first private hangar to the west. This location would facilitate access to the main ramp and the runway. The closeness of this area to the fuel pumps would also reduce excess movements on the ramp when refuelling activities are on going.

We also recommend designating a large parcel of land for the future expansion of the private hangar sector on the west side of the present rows of private hangars (blue zone on the map). As mentioned in the SWOT analysis, vehicle circulation on the main ramp needs to be stopped, and this will become more important with the development of the niche projects. We therefore propose building a private access road linking the airport entrance road to all private hangars.



This access road would be gated and controlled automatically allowing only qualified tenants and individuals to enter. As the chart shows, there is sufficient room for the airport to double the current number of private hangars and still have plenty of land available for future development.

4.3.1.4 Airpark

Finally, we suggest considering the development of an airpark located at the southwest end of the runway (you will find more information on the airpark project in section 5.3). This location offers many advantages. First and foremost, the proximity to Airport Road will have a direct impact on the overall development cost (roads, public services, and land preparation) and the operational costs (snow removal, landscaping) of the property. This location for the airpark will also reduce the cost of linking the airpark to the airport infrastructure due to the proximity of the runway (cost of taxiways).

Last, by locating the airpark on the south side of the airport, it would complement the airport's overall image and concentration of activities and facilitate the development of associated commercial and retail services in the vicinity if required.

The second option for locating the airpark is on the western boundary of the property. This location offers a warmer setting with a small wooded area adjacent to the housing unit and a small stream running through it. This site would call for a longer entrance road, longer taxiways, and generally a higher development cost. On the other hand, this site would clearly segregate airpark from airport activities.

Both locations have land for future expansion.

4.3.2 Vintage Aircraft Niche Project

When it comes to vintage aircraft, Tillsonburg is home to one of the largest Canadian associations in the sector. Not only does it claim an advocating role, but the Canadian Harvard Aircraft Association (CHAA) also operates, restores, and maintains vintage aircraft, as well as educates the public on aviation and the history of Harvard Aircraft.

As with any association, CHAA has its strengths and weaknesses, but we believe the association is well structured, brings together a strong membership, and counts on many active members. As such, the association constitutes a good anchor tenant to launch a vintage aircraft niche project.

The suggested niche project envisions an aerospace and aviation industry sub-cluster and encompasses a full spectrum of activities targeting all types of clientele that might be associated with the cluster. The vintage aircraft cluster should be developed as an industry-owned and industry-driven project and would consist of seven main groups of activities, each of which should be developed as a revenue generating division.

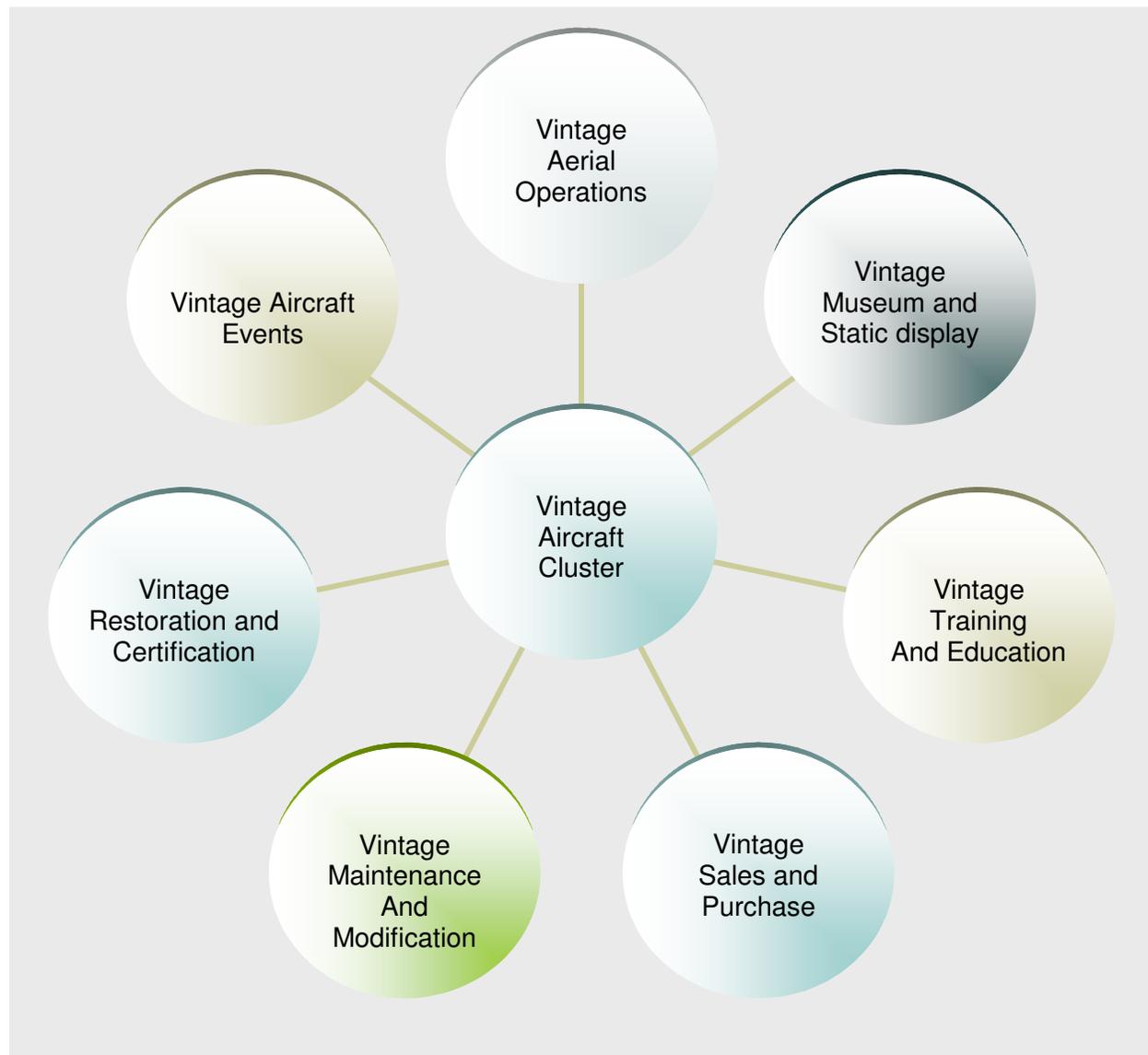
Companies and associations already involved in this niche market focus mainly on aircraft showcasing and display. All other activities and expertise are usually scattered at different sites (airports) making it difficult to accommodate the owners and operators of vintage aircraft.



Creating a one-stop shop for vintage aircraft in Canada would be a first. Owners and operators of vintage aircraft would be drawn to this community of thinkers and doers, and technicians, mechanics, pilots, instructors and vintage aircraft enthusiasts would be able to live and breathe vintage aircraft in Tillsonburg. This niche project has all the makings of a true industry cluster to which research and development and even the manufacturing of replica aircraft could be added.

In Chart 4.3, we have provided an overview of the various sub-sectors and divisions of a vintage aircraft cluster. TMA should focus on developing each sub-sector by working with tenants who are already located at the airport and are interested in working in this niche market, or by finding new investors to join the cluster.

CHART 4.3 – OVERVIEW OF VINTAGE AIRCRAFT CLUSTER





4.3.2.1 Sub-Sector Definitions

a) Aerial Operations

Air operations would offer various types of flights including aerobatic demonstrations, vintage aircraft tours and rides, participation in air shows, and doing flyovers for different events and celebrations.

b) Training and Education

The Vintage Aircraft Training College (or University) would offer a number of flight training courses including type certification, formation flying and vintage aircraft aerobatics. We also foresee a joint venture with an A&P school to offer type certification for technicians and mechanics for vintage aircraft.

The training and education group could also offer aviation-awareness courses and programs, history-of-aircraft courses, and conferences on vintage aircraft. These courses and programs could target elementary and high school students as well as the general public and specific events or gatherings.

c) Annual Events

The cluster should organize a few annual events to promote itself, generate revenues from air rides, museum visits, promotional clothing and material sales. Examples of events could be: Canadian Harvard Air Show and static display, Vintage Aircraft Fly-in Weekend, Vintage Aircraft Treasure Hunt, T-33 Air Show and Static Display, Vintage Aircraft Annual Outdoor Breakfast, etc. Providing music, food and entertainment would bring in additional revenues.

d) Maintenance, Repair, Overall and Modifications

As a key component, the cluster must offer maintenance, repair, and overall services in the fields of airframes, engines and avionics. The center would also offer modification services for all types of aircraft. Note that the MRO component could be specialized in, but not limited to, vintage aircraft, serving the general aviation clientele as well.

e) Aircraft Restoration and Certification

The core services of this component of the cluster would be aircraft salvage and logistics, assembly and subassembly restoration, complete aircraft restoration and recertification.

f) Purchasing and Sales

The cluster would not be complete without a sales and purchasing centre for vintage aircraft. By establishing this component, the cluster can secure work for the MRO and the restoration and training components, as well as building ties with new owners of vintage aircraft.

g) Museum and Static Display

Providing an interactive experience related to the life of vintage aircraft pilots and crews, the museum would showcase artefacts and memorabilia pertaining to all types of aircraft related to the cluster. The museum would also offer a static display of several aircraft, some of them in interactive mode.



4.3.2.2 Vintage Aircraft Cluster Development Phases

The development of the vintage aircraft cluster is linked with providing potential stakeholders and investors with a clear understanding of the concept and the niche market. To do so we are providing a first glance at the cluster's objectives and development phases.

- a) Cluster Positioning - To become Canada's premier vintage aircraft centre
- b) Objectives
 - To provide qualified professional services to owners and operators of vintage aircraft
 - To brand Tillsonburg Municipal Airport has Canada's vintage aircraft capital
 - To offer educational, training and awareness courses, displays and information to school children and the general public about aviation and vintage aircraft
- c) Key Drivers Associated with the Cluster
 - CHAA will be key partner to launch the cluster
 - The cluster will need a few economic partners⁹ with strong ties in the vintage aircraft sector.
 - The town and the airport will need to invest in airport infrastructure and buildings, but also provide needed political support for the project at the provincial and federal levels (we estimate at least two 20 000 sq ft hangars will be needed to house the museum and aircraft restoration activities in one and MRO and paint activities in the other. TMA will also need to adapt the road network and taxiway network according to the final location of these hangars).
 - Attract other vintage aircraft groups and associations
 - Maintenance, painting, and restoration activities will bring in the most revenues at the beginning
- d) Main Obstacles
Some obstacles the cluster will face to get started:
 - The limited funding many vintage aircraft associations are facing
 - The lack of full time employees limiting the ability of these associations to lead the project
 - Generating enough volume and activities during the first three years
- e) Development Phases
To ensure the structured development of the cluster, we have regrouped the main tasks into three separate development phases.

9 - Economic Partners: Economic partners include private companies or individuals with interest in vintage aircraft. It includes banks and financial groups funding vintage aircraft projects. It includes former vintage aircraft pilots and support personal, Canadian and US Air Force, aerospace manufacturers and services providers and local economic development agencies, employment and government agencies.



Phase 1 – Project Definition - estimated duration: 2 months

During Phase 1, TMA and town leaders should focus on:

- project definition and structuring
- identification of targeted partners and investors
- networking with government agencies and officials
- preparing a business case

At the end of Phase 1, TMA should have obtain government recognition and support for future development of the vintage aircraft cluster. TMA should be ready to market the niche cluster in North America and provide background information on the sector, the airport, and the future growth of the cluster.

Phase 2 – Marketing and Creation of a Steering Committee - estimated duration: 10 months

During Phase 2, TMA and town leaders should focus on:

- presenting the project to targeted aerospace and aviation stakeholders and companies
- marketing the project at various events
- marketing the project to potential clients
- gaining a consensus and forming a steering committee of interested stakeholders and companies
- defining infrastructure requirements with the steering committee, preparing a complete service offer, identifying launch clients and required marketing activities

At the end of Phase 2, TMA should have identified a group of stakeholders and companies interested in setting up operations at the airport in line with the vintage aircraft cluster. The steering committee should group stakeholders and companies within all of the seven sub-cluster divisions.

Phase 3 – Business Plan, Marketing, and Consensus

During Phase 3, TMA and town leaders should focus on:

- finalizing the cluster's business plan
- confirming new investment; start-up operations at the airport and in the community
- pursuing cluster promotion and marketing
- supporting employee recruitment and training
- launching cluster activities and promotion through press conferences

Phase 3 is the conclusion of the process. During phase 3, interested companies should be investing and starting up operation at the airport. The cluster should be gaining momentum and TMA branding starting to be recognized.



We present below an estimated budget for the cost of professional services involved in completing these three phases. Infrastructure and servicing costs are presented in section 4.4.

TABLE 4.4 – VINTAGE AIRCRAFT CLUSTER ESTIMATED BUDGET

Tillsonburg Airport	
Budget Vintage Aircraft Cluster	
	Cost
Phase 1	
Business case	\$ 10,000.00
Project definition	\$ 2,500.00
Identification of targeted clients	\$ 2,500.00
Total	\$ 14,000.00
	Cost
Phase 2	
Cluster marketing	\$ 45,000.00
Steering committee organisation	\$ 15,000.00
Cluster development	\$ 15,000.00
Total	\$ 75,000.00
	Cost
Phase 3	
Business plan	\$ 22,000.00
Investment implantation	\$ 12,500.00
Media relations	\$ 4,000.00
Total	\$ 38,500.00



TABLE 4.5 – ESTIMATE DIVISIONAL DEVELOPMENT TIMETABLE

Vintage Aircraft Timetable

Tasks	2010												2011				2012				2013				2014			
	A	M	J	J	A	S	O	N	D	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
Phase 1																												
Project definition and structuring	■	■	■	■																								
Identification of targeted partners and investors	■	■	■	■																								
Networking with government agencies and officials		■		■		■		■		■		■		■		■		■		■		■		■				
Prepare a business case		■	■	■																								
Phase 2																												
Present the project to targeted aerospace and aviation stakeholders and companies					■	■	■	■	■	■																		
Marketing of the project at various events (see Annex E)					■	■	■	■	■	■																		
Marketing the project to potential clients					■	■	■	■	■	■																		
Gaining a consensus and forming a steering committee of interested stakeholders and companies						■		■		■	■	■																
Defining infrastructure requirements with the steering committee, preparing a complete service offer, identifying launch clients and required marketing activities										■	■	■																
Phase 3																												
Finalizing the cluster's business plan										■	■	■	■															
Confirming new investments and start-up operations at the airport and within the community										■	■	■	■															
Pursuing cluster promotion and marketing										■	■	■	■		■		■		■		■		■		■			
Supporting employee recruitment and training											■	■	■		■		■		■		■		■		■			
Launching cluster activities and promote through press conferences											■	■	■															



4.3.2.3 Absorption Estimates

The projected absorption period of this project was estimated by examining the number of years required to bring the project to maturity. This estimated absorption rate does not take into account any markets that may compete against the project, or any variation in the economic growth of the province of Ontario or of Canada.

This absorption rate was also estimated on the basis of TMA's capacity to market the project and generate interest and a consensus around it. It also takes into consideration the steps required to develop each division and potential growth opportunities.

We estimate the project will absorb about 20% of the total "industrial" land available (8 of 40 acres), and 100% of the "events and museum" land within the next three to five years of the project.

Buildings and property will be required for maintenance and restoration facilities. We foresee the same for education and training. The recruitment of a second or third vintage aircraft group would require new storage and maintenance hangars and an expanded museum.

As a precautionary measure, we are forecasting no indirect or induced growth, thus estimating absorption rate on the potential generated by the vintage aircraft cluster alone.

4.3.3 General Aviation

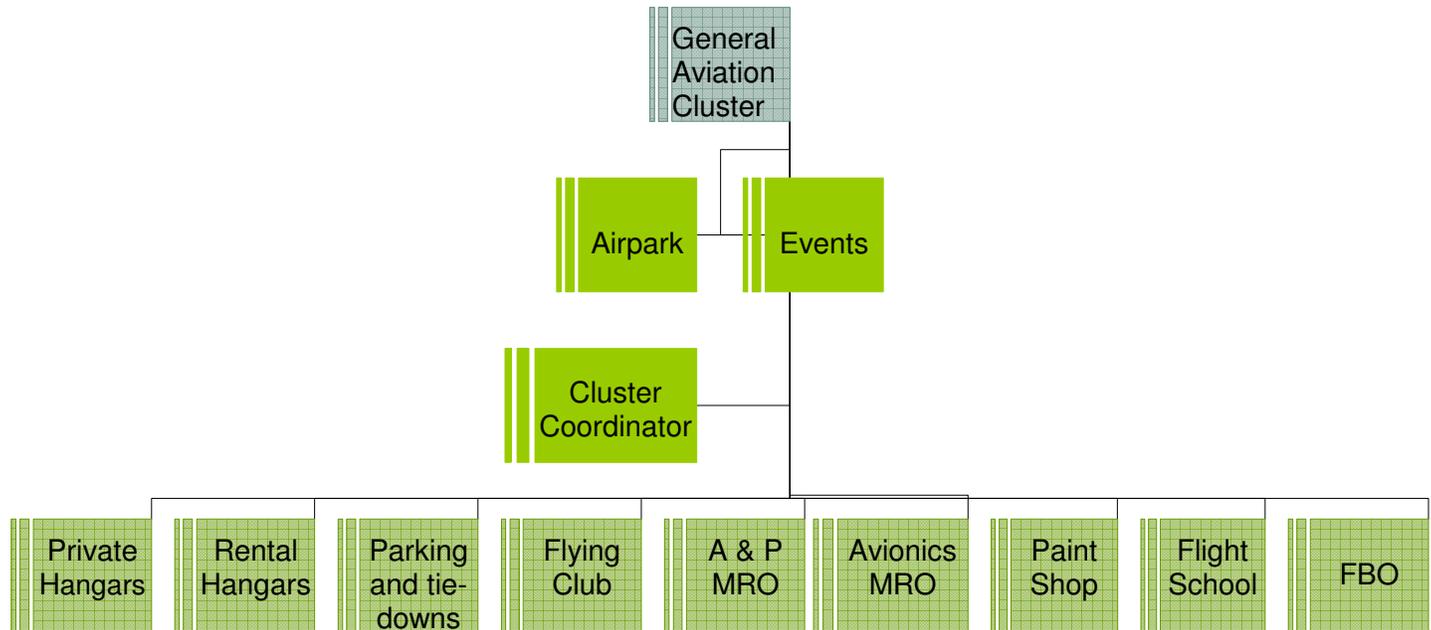
TMA has the potential to be a great general aviation airport and was perceived in this way by most of the people we met, talked to and surveyed. Once new investment has been completed, TMA will offer a long, newly repaved runway, a brand new terminal with restaurant amenities, a pilots' lounge, and room for people to congregate. TMA also has plenty of land available to expand private hangar facilities, add maintenance, completion, and FBO services, expand the ramp to offer more parking and tie-down space, and host various events.

A quick look at the activities impacting surrounding airports suggests the timing is appropriate for TMA to develop a strong GA cluster. We therefore recommend a second cluster project - the positioning of TMA as a full-service GA airport and hub.

Chart 4.6 provides an overview of the activities and business sectors that could make up the



CHART 4.6 – OVERVIEW OF ACTIVITIES AND BUSINESS SECTORS



4.3.2.4 Cluster Development Leadership

Two methodologies can be used to achieve cluster development and overall success. The first involves empowering the present airport and economic development leaders as the key resource to develop the cluster. In this model, TMA employees, Tillsonburg economic development leaders, and the TMA advisory committee would be the key leaders in promoting the cluster (niche project), attracting interested individuals and companies, and helping them to start up their operations at the airport.

The second methodology would be structured around a non-profit entity which would assume the cluster development responsibilities such as promoting the airport to GA pilots and owners, attracting and supporting business partners in each core activity of the cluster, and managing hangars and airpark real estate. One possibility would be for this entity to be remunerated for its work on the basis of a combination of fees and commissions calculated on all new revenues it generates for the airport. This entity could take charge of organizing and managing some events (with the exception of those organized and managed by CHAA), support airport promotion (joint funding TMA/Cluster), and sustain cluster activities on a yearly basis.

On the funding side, structuring the cluster as a non-profit entity would create a legal separation between TMA and the cluster, possibly allowing for each organisation to apply for subsidies and grants separately. The creation of this cluster would also suggest the need for TMA to invest more in recurrent funding for marketing and promotional activities.

The rationale for creating a non-profit entity is based on the core competencies and expertise required to develop the cluster. This expertise should revolve around GA airport promotion and development, a solid network of contacts in the GA and aerospace sectors, and aerospace-related economic development and investment attraction skills.



This entity could be controlled by the airport advisory committee to facilitate the integration of development activities, or under the leadership of an airport and aerospace executive board of directors.

4.3.2.5 Components of the Cluster

The objective of the cluster is to provide the end-user with a full line of services including maintenance, availability of hangars, and events/activities. All of these should cater to the technical needs and personal enjoyment of aircraft owners, operators, and pilots. This general aviation cluster would bridge the gap between the technical requirements of aviation and the personal and life objectives of private owners and pilots.

- a) **Private Hangars**
On airport property, the cluster needs to offer some parcels of land for lease. These parcels should be part of a land plan that permits aircraft owners and operators to build their own hangars as long as they respect the airport's building specifications.
- b) **Rental Hangars**
The cluster should also have the leverage to build and rent hangars on airport premises. The rental fee structure should be planned so as to remain competitive and offer a significant advantage over neighbouring airports. Rental hangars should be available in various sizes and with different choices of services (electricity, heating, water and sewer).
- c) **Parking and Tie-down**
The airport or the cluster could take charge of creating a new parking and tie-down area. A fee structure for short, medium, and long term parking at the airport could be developed for both permanent tenants and visiting aircraft. The area could offer plug-ins, heating, and interior cleaning services as secondary sources of revenue.
- d) **Flying Club**
Congregating, meeting with friends, and sharing aviation experiences are part of the fun of owning a GA aircraft. The cluster should consider creating a new club, or bringing the Tillsonburg Flying Club back to the airport. A club is a dynamic way to promote a friendly, social atmosphere where members can enjoy each other's company, feed off the bubbling and infectious enthusiasm for flying, learn from each other, improve their flying skills and have fun together. The cluster could provide some administrative and logistical services to support club management and activities
- e) **A&P MRO**
The cluster's main industrial role will be to attract, support and promote the development of an airframe and power plant maintenance, repair and overall shop for piston and turbine aircraft.
- f) **Avionics MRO**
Avionics mechanics and technicians are a rare commodity. Attracting such a maintenance center would create a unique synergy at the airport. The cluster should focus on developing an avionics maintenance, repair and overall shop for mechanical and glass cockpit aircraft.



- g) **Paint Shop**
TMA already hosts a renowned paint shop. The present paint facility caters well to small GA aircraft but is not suited for larger GA and BA aircraft. Again, paint shop services, even though more common than avionics shops, are not common to all airports. The cluster must add to the services already available at the airport and extend the types of aircraft, parts or components that can be serviced.
- h) **Flight School**
Support the development of a targeted flight school that would not rely only on local and regional students for its client base. Help promote the flight school, and try to link the school to renowned aircraft and avionics manufacturers.
- i) **Fixed Base Operator**
Work with airport management to ensure a complete line of FBO services (fuel, oil, pilot lounge, ramp personnel, weather information, extended service hours, food/snacks, beverages (coffee, juices, soft drinks, water) and other services appreciated by pilots and aircraft owners.
- j) **Airpark**
The airpark real estate development will be a key addition to the cluster. Moving away from just aviation related activities, the airpark will provide permanent or rental housing to aviation enthusiasts who own an aircraft. The airpark would permanently bring a group of aircraft to the airport, thus favouring the growth of all associated services. Since the airpark is first and foremost a real estate project, we suggest that cluster management help with airpark promotion but leave real estate issues to an experienced developer.
- k) **Events Zone**
This part of the cluster is a rare addition for any GA Airport. Developing a parcel of land to host aviation event activities and static displays would showcase TMA as a unique site developed to cater to general aviation.

4.3.2.6 General Aviation Cluster Development Phases

The development of the general aviation cluster is linked to the objective of attracting a fair number of GA aircraft to the airport for various purposes on a permanent basis. To reach this objective, the cluster must provide a structured service offering and a variety of activities with quality as the main driver. We will now provide a first glance at the objectives and development phases that are necessary for the cluster to achieve this goal.

- a) **Positioning**
 - become a family orientated full-service GA airport and center



b) Objectives

- double the number of aircraft on site within the first two years
- adapt services to cater to clients' needs
- attract strong service providers to sustain new airport branding and image
- organize at least two new GA events per year

c) Key Drivers

Some of the key drivers we believe will impact the launch and success of the cluster are:

- locate and hire an experienced GA cluster coordinator; structure an airport advisory committee to provide guidance and support
- prepare a strong marketing plan targeted at GA owners and pilots; prepare associated budgets
- prepare a business case showcasing TMA and the cluster to identify and attract targeted service providers (business case)
- ensure the beautification of TMA, the quality of its services, and its overall image

d) Main Obstacles

The cluster will also have to overcome some obstacles to succeed:

- no instrument (IFR) approaches – promote the upcoming upgrade
- runway 26 threshold
- the need to create a feeling of greater energy at the airport - more colour (banners, flags)
- older airport image, variable service offerings, and structure taxiway and roadway network - block access through the main ramp and announce future infrastructure upgrades

e) Development Phases

To ensure the structured development of the cluster, we have grouped the main tasks into a three year schedule.



Year 1

For the first year, we suggest concentrating most of the efforts on the planning of the various activities and projects and launching the marketing and investment-attraction campaigns.

- hire cluster coordinator
- identify targeted companies and attract new investors
- identify and select aviation GA events
- prepare a TMA marketing plan to attract GA aircraft owners and operators
- launch TMA marketing campaign
- plan airport beautification
- plan and finance construction of rental hangars and launch pre-sales campaign
- offer land parcels to build private hangars

Year 2

The second year would carry its fair share of the main undertakings with the cluster hosting its first two aviation events and building a new row of rental and private hangars.

- build new T-hangars for rental purposes
- locate and select a real estate developer for airpark project – discuss and finalize the airpark concept
- upgrade airport beautification
- organize GA aviation events
- attract new flying club or recreate the a flying club
- plan and finance tie-down and parking area
- pursue TMA marketing campaign
- pursue investor attraction activity
- launch airpark marketing and pre-sales campaign

Year 3

The third year also involves the completion of major projects including the construction of the airpark and the tie-down area.

- airpark development and start of construction
- build tie-down and parking area
- pursue TMA marketing campaign
- at the end of year 3, prepare a new three-year development plan in line with results and cluster objectives

Carrying out this three-year planning will generate costs for the cluster, TMA, and associated partners (town, township, county, provincial & federal governments, private sector). Provided below is a budget estimating the various costs linked to years 1, 2 and 3 of the GA cluster development plan.



TABLE 4.7 – GENERAL AVIATION CLUSTER ESTIMATED BUDGET

Budget General Aviation Cluster		
Year 1	Revenues generators	Cost
Cluster office		\$ 10,000.00
Cluster Human Resources (CEO)		\$ 45,000.00
Marketing plan		\$ 15,000.00
Marketing campaign		\$ 25,000.00
Hangar construction planning and presale		\$ 10,000.00
Investment attraction planning		\$ 5,000.00
Investment attraction		\$ 10,000.00
Events selection and planning		\$ 5,000.00
Airport Beautification planning		\$ 2,500.00
	Total	\$ 127,500.00
Year 2		Cost
Cluster office		\$ 10,000.00
Cluster Human Resources (CEO)		\$ 45,000.00
Build 10 new T-hangars for rental purposes	Yes	(A)
Choose a real estate developer for airpark project – finalize the airpark concept		\$ 5,000.00
Upgrade airport beautification		\$ 5,000.00
Organize GA aviation events	Yes	\$ 25,000.00
Attract new club or recreate the Tillsonburg Flying Club	Yes	\$ 2,500.00
Plan and finance tie-down and parking area		(A)
Pursue TMA marketing campaign		\$ 20,000.00
Pursue investor attraction	Yes	\$ 10,000.00
Launch airpark marketing and presale campaign		\$ 10,000.00
(A) - see Needs and Services budget Art 4.4	Total	\$ 132,500.00
Year 3		Cost
Cluster office		\$ 10,000.00
Cluster Human Resources (CEO)		\$ 45,000.00
Airpark development and start of construction	Yes	\$ -
Build tie-down and parking area	Yes	(A)
Pursue TMA marketing campaign		\$ 10,000.00
Prepare development plan in line with results and cluster objectives		\$ 15,000.00
	Total	\$ 80,000.00



4.3.2.7 Absorption Estimates

The projected absorption period of this project was estimated by examining the number of years required to bring the project to maturity. This estimated absorption rate does not take into account any markets that may compete against the project, or any variation in the economic growth of the province of Ontario or of Canada.

This absorption rate was also estimated on the basis of TMA's capacity to market the project and generate interest and a consensus around it. It also takes into consideration the steps required to develop each division and potential growth opportunities.

We estimate the cluster will generate the construction of a minimum of 20 new private or rental hangars covering approximately 3500 square metres (37,675 sq ft) of the general aviation zone. GA cluster activities will also absorb 20% of the airpark (10 houses / 50 lots project) and an estimated 2 acres of the industrial zone by attracting new maintenance and avionics shops and hosting an expanded paint shop.

The tie-down and parking area will cover 100% of the proposed site, and future expansion to the west should be integrated into the future land-use plan. Flight school activities are a big question mark and might not lead to any new buildings unless they attract international students in coming years.

Events will use 100% of the event zone, and additional space could be considered if the events reach their objective of attracting aviation enthusiasts and the general public.

As a precautionary measure, we are forecasting no indirect or induced growth, thus estimating absorption rate on the potential generated by the general aviation cluster alone.

4.4 Related Needs, Services, and Budget

The costs of the various projects and activities in both clusters are estimated costs. The space allowed for each project is in line with each zone chart. The costs were provided by engineering firm CIMA+. All prices provided by CIMA+ include a 25% contingency fee. Note that all the projects listed below are to be considered on a "need only" basis.

At this time we have no estimated costs for providing public utilities (water, sewage) to airport tenants. The same is true for industrial 3-phase electricity.



TABLE 4.8 – GENERAL BUDGET ESTIMATES

Tillsonburg Airport			
BUDGET General Aviation Zone			
Infrastructure work	Space	Cost	Total
Fencing airport perimeter (in feet)	26,000	\$ 14.00	\$ 364,000.00
Tie-down zone 16 parking spaces (sq metres)	3,500	\$ 62.50	\$ 218,750.00
Taxiway B	50	\$ 1 500.00	\$ 75,000.00
Taxiway F expansion (in metres)	165	\$ 1 500.00	\$ 247,500.00
Taxiway D (in metres)	100	\$ 1 500.00	\$ 150,000.00
Taxiway F (in metres)	200	\$ 1 500.00	\$ 300,000.00
Taxiway G (in metres)	200	\$ 1 500.00	\$ 300,000.00
Private hangars	10	\$ 40,000.00	\$ 400,000.00
Private access road barriers	1	\$ 20,000.00	\$ 20,000.00
Private access road (in metres)	250	\$ 600.00	\$ 150,000.00
		Total	\$ 2,225,250.00
BUDGET Industrial Zone			
Infrastructure work	Space	Cost	Total
Industrial Hangars with access to runway (sq metres)	1,800	\$ 1,200.00	\$ 2,160,000.00
New industrial road (in metres)	500	\$ 900.00	\$ 450,000.00
Rehabilitation of Cranberry Line (in metres)	225	\$ 900.00	\$ 202,500.00
Taxiway D East extension (in metres)	100	\$ 1,500.00	\$ 150,000.00
		Total	\$ 2,962,500.00
BUDGET Museum and Event Area			
Infrastructure work	Space	Cost	Total
Museum + office + hangar - static display	1,800	\$ 1,250.00	\$ 2,250,000.00
Event Ramp (in sq metres)	9,000	\$ 62.50	\$ 562,500.00
Parking expansion (in sq metres)	1,000	\$ 62.50	\$ 62,500.00
Taxiway C (in metres)	50	\$ 1,500.00	\$ 75,000.00
		Total	\$ 2,950,000.00



5. Analysis of the Airpark Market

In the United States, airparks have a long history especially in the southern states but can also be found in most other states. They are also present in Canada to a lesser extent, but the concept is spreading.

An airpark or fly-in community is defined as "a housing development connected to an airport via taxiways". This arrangement enables homeowners to taxi their planes between their homes and the airport while using their home lot to park and/or store the aircraft.

The airpark or fly-in community concept was developed by McKinley Conway in the late 60s. He described the concept as follows: "Fly-in communities are mostly planned along the lines of ribbon development, with the runway as its most important traffic artery and Main Street. There are two types of houses, that is to say houses that are directly connected to the runway and houses that are connected to the runway via taxiways so that residents can manoeuvre their planes onto the runway. The layouts of most fly-ins resemble those of suburban settlements. They are, however, long-distance suburbs, since inhabitants usually have to span great distances between their community and the city via airplane. (Conway, H. McKinley, *The Airport City. Development concepts for the 21st century*, Atlanta, 1977.)

The concept of a fly-in community is very simple. It is a neighbourhood whose residents either enjoy flying as a hobby, or work far away and fly to work. Basically, the airport runway is situated in the middle of the community, and the houses are located around the airport. So when a resident lands, he or she can drive the plane right up to their residence or into their airplane garage. Picture a regular airport surrounded by affluent residences instead of large commercial buildings.

Fly-in communities and airparks are found in a variety of locations and styles. For example, the Dallas airpark (see picture 5.1) is located right next to major commercial buildings and right in the middle of a major city. However, other airparks are located in secluded areas far out in the country (see picture 5.2). Airparks are also designed in different ways. The most common design is to have residences situated around the actual runway, but some airparks do offer a different style.



PICTURE 5.1 – AIR PARK DALLAS





PICTURE 5.2 – COUNTRY SIDE AIRPARK





5.1 Benchmarking of Airparks

The following tables compare seven airparks located in North America. These particular airparks were chosen because they most closely resembled the general area of Tillsonburg - near major centers, in a rural area, similar population and geography. Of course not all of these criteria could be met perfectly since the number of airparks is somewhat reduced.

TABLE 5.3 – GENERAL INFORMATION

City	Prov/ State	Pop.	Airpark name	City nearby/Pop	Runway		Services
					Length	Width	
La Chute	QC	11 832	Lachute Airpark	Montreal, QC 3 316 000	4 000	100	100LL, JA-1, storage, servicing/minor repairs, major repairs, parking, tie-downs, plug-in
Harbor Springs	MI	7 647	Sullivan's Harbor Springs Airpark	None	4 157	75	100LL, JET-A, tie-downs
Linden	MI	13 361	Horizon Lakes @ Linden Airport	Detroit, MI 3 900 000	4 000	75	100LL, hangars, tie-downs, minor airframe and engine repairs.
Trenton	SC	17 574	Twin Lakes Executive Air	Augusta, GA 535 000	4 000	60	No services. Residents fly to main regional airport for maintenance and fuel.
Gilbert	SC	14 995	Whiteplains Plantation	Columbia, SC 452 000	3 000	35	No services. Residents fly to main regional airport for maintenance and fuel.
Mooreville	NC	18 023	Lake Norman Airpark	Statesville, NC 24 000	3 147	40	100LL, hangars, tie downs, major airframe and engine repairs
Carp	ON	1 500	Tailwind Estates	Ottawa 1 130 761	3 938	98	100LL, JET-A, hangar for short & long term, tie-downs, GPU, electrical plug-ins.

- NOTES:
1. All airports benchmarked had paved runways and none had approach systems
 2. Lots varied from one airpark to another – the starting size for most was one acre



TABLE 5.4 – OPERATIONS TABLE

Airpark	Houses/Lots	Access	Type	Created	Developer	Reason for choosing this Airpark	Infrastructure
La Chute	30 lots 10 reserved	2 lane street Gravel and paved streets within	Sold Condo Style 200 \$ annual fee	2009	Logi Case inc & Gelco Construction Inc.	Paved and lighted runway and full services airport	All
Harbor Springs	10 lots 1 occupied	2 lane highway Paved streets within	Could not get further details				
Linden	87 lots 21 occupied 23 reserved	2 lane city street Paved streets within	Could not get further details				
Trenton	60 lots 30 occupied	2 lane highway Paved streets within	Sold Condo style 300 \$ annual fee	1983	No developer	Inexpensive	Electricity No sewage No water for most Some have access to city water
Gilbert	69 lots 45 occupied	2 lane highway Paved streets within	Sold Condo Style 363 \$ annual fee	1999	Neil Bonacomb	Paved runway, reasonable covenants, above average houses	Electricity, sewage, water
Mooresville	48 lots 40 occupied	2 lane street Paved streets within	Could not get further details	1994	Could not get further details		
Carp	33 lots	2 lane highway Paved streets within	Could not get further details	2006	West Capital Developments	Paved and lighted runway, full services airport and proximity to Ottawa	All



5.1.1 Analysis of airpark benchmarking

All the airparks studied were located in small communities. They all had runways ranging from 3000 to 4100 feet in length and 35 to 100 feet in width. In terms of services, only 50% of the airports provided the full complement of aviation services (fuel, MRO, tie-downs, storage, plug-in). Some of the remaining ones had no services at all, not even fuel.

These airparks varied widely in size. Most showed occupancy rates averaging 50%, and housing units came in various styles (condo, single homes, luxury homes, rental properties). All properties had to pay an airport fee (condo rate). Paved runways were preferred by pilots and owners, and public services varied widely from one airpark to another. Most airparks surveyed were created less than 15 years ago, and the trend has gained momentum in the US and Canada more recently. Most of the airparks have been promoted by real estate specialists.

In comparison, TMA offers all the key airport services, is not far from larger urban communities, can provide access to a paved runway that in length and width surpasses all those studied, and has a public road and electricity close by. The only elements at TMA which must still be defined are the type of housing, the cost of the property and the selection of a real estate developer.



5.2 Survey of Pilots and Aircraft Owners

The private pilot survey was conducted from February 1-23. We obtained the sample of pilots based at TMA with the help Annette Murray, the airport manager. For the list of pilots based outside of TMA, we contacted Kevin Psutka, the president and CEO of the Canadian Owners and Pilots Association. See the complete list in Annex B.

Total Sample	Surveyed	Did not return call	Wrong number
43	25	15	3

Rate of response 62% (25 on 40 calls)

Here are a few general statistics about the pilots surveyed. The results were divided by pilot location: 1) pilots based at TMA and 2) pilots not based at TMA.

	Tillsonburg Airport pilots	Non-Tillsonburg pilots
Number of pilots surveyed	19	6
Own a private license	13	1
Own a commercial license	6	5
Single aircraft owner	10	4
Multi-aircraft owner	8	1
Aircraft in a hangar	16*	5
Aircraft outside	3	1
Leased hangar	10*	4
Owned hangar	6*	0
Maintenance done at Tillsonburg	7 of 19	0 of 6

* These numbers relate to answers from pilots and not the number of aircraft. Two pilots who are owners of the same aircraft may have answered the survey.

Maintenance: 37% of the pilots surveyed had their aircraft maintenance done at TMA. The following is a breakdown of the other maintenance facilities used by the surveyed pilots:

- 2 respondents have their maintenance done in Brantford
- 4 respondents have their maintenance done in Delhi
- 2 respondents do their maintenance themselves (homebuilt aircraft)
- 4 respondents have their maintenance done in Stratford
- 3 respondents have their maintenance done at different places
- 1 respondent has his maintenance done in Elmira
- 7 respondents have their maintenance done in Tillsonburg

As with most surveys, some questions generated a wide range of answers whereas others produced very few. The general comments and answers resulting from our survey are summarized below and are listed in order of importance.



Q - What are the major challenges facing general aviation in southwestern Ontario?

The first comment referred to the situation at London Airport where communication problems caused by foreign students are creating a real safety issue due to the difficulty they have in understanding and speaking English.

The second comment was related to the quality of GA airports and deficiencies in the services offered, such as operating hours that are too restrictive, insufficient restaurants, and lack of courtesy cars for visiting pilots.

Locally, airports are ageing, and they need major investment to maintain their infrastructure. Steps should be taken to improve or update landing systems. Controlled air space is being extended and is pushing GA away. This should be seen as an opportunity because private pilots are being forced to abandon larger airports and are searching for more accommodating airports.

The lack of avionics technicians is a serious problem throughout Canada and the situation in southwestern Ontario is no different. If TMA can acquire the services of an avionics technician, it would stimulate traffic and attract pilots based elsewhere. There are very few GA hangars available in southwestern Ontario, and those that are available go for a much higher price than those at TMA.

Rank	Trends
1	Safety issue: foreign students
2	Finding airport that is GA friendly
3	Airfields are ageing and need investment
	Control zones are getting larger
4 (tied)	Lack of avionics technicians
	Need for more training facilities
	Need for more hangar space

Q - What are the major strengths of Tillsonburg Municipal Airport?

The answers we received indicated that TMA was going in the right direction with its airport, and pilots expressed appreciation for the investment made to date and the lengthening of the runway. The new terminal building will be more than welcome to pilots, and the restaurant will be a big plus. Comments from respondents indicated that restaurant and restroom services at local airports were hard to find. Other comments described TMA as a friendly airport, with warm reception, and good fuel prices.

The Harvard Association was seen as a big plus for the airport and an important attraction that should be developed. Those comments were common to pilots located both at TMA and elsewhere. Private pilots also saw Tillsonburg as an airport with a lot of potential and with plenty of space to construct private hangars. Making hangar space available at a reasonable rate is an element TMA should work on and promote. This was considered to be excessive by most pilots. Finally, Spectrum Aviation received high marks as a specialist in painting aircraft, definitely a valuable asset to promote.



Rank	Trends
1	New runway and terminal building
2	Friendly airport Harvard Association
3	Good fuel price Space available to grow
4	Proximity to highway Not too crowded
5	Excellent paint shop Hangars available at a good price

Q - What services should be added or need improvement?

Most of the respondents mentioned their dissatisfaction with snow removal from the runway during the winter. Other services were thought to be very good during business hours, but people have commented that these services are not available after 5 PM which has a negative impact on visiting pilots. A call-out fee or a self-service fuel pump with credit card payment could be considered.

The situation with the trees at the end of runway 08 is definitely an irritant. One person stated that this situation would scare any business jet crew and move them to land elsewhere. This brings us to the subject of a better approach. The night approach does not seem to be easy for many pilots. A GPS approach would be much appreciated by pilots. Many respondents said that a good restaurant always attracts visitors and increases air traffic especially considering that they are a rare commodity at local airports. Regarding flying schools, respondents observed that students were interested in the same time slots (from 4 to 7 pm), so one aircraft and one instructor would not be enough.

Rank	Trends
1	Winter cleaning of runway
2	Increase hours of operations
3	Get the trees cut at end of runway
4	Better runway approach A good restaurant to attract
5	A good flying school
6	Get avionics on the airport

Q - Are there enough hangars at Tillsonburg Municipal Airport?

Answers were clearly divided between people who thought there were enough hangars, and those who thought the airport should anticipate growth. Two respondents said that TMA should position itself as an alternative for frustrated tenants from Brantford and Kincardine. One said that winter storage should be promoted if hangar space were available. Their answers are broken down as follows:

- 10 respondents said “Yes”



- 8 respondents said “Yes” but should anticipate a growth
- 4 respondents said “No”
- 1 respondent said he did not know

Q - Would you be a potential buyer for a hangar at Tillsonburg Airport?

One of the pilots who was interested in buying is presently located at Brantford Airport, and three others are from TMA. Two other pilots located at TMA expressed interest in renting hangar space.

- 3 respondents said “Yes”
- 1 respondent said “Possibly”
- 2 respondents would be interested in renting hangar space

Q - Are you aware of anyone who would be interested in moving to TMA?

Two respondents (Air Canada Pilots with GA aircraft) mentioned that Toronto-based Air Canada pilots are moving to southwestern Ontario and might be interested in locating their private aircraft at TMA.

Q - What do you think of the idea of establishing an airpark at TA?

Some respondents had their doubts and expressed mixed feelings on the subject. They argued that this concept would not be as popular as in the U.S.A. because our four seasons do not permit 365 days a year of flying. In addition, the limited number of tourist attractions in the area and the ageing population could make the idea less attractive. Nevertheless, they all agreed that the concept was fantastic.

Other respondents were in favour of an airpark, and these noted that Tillsonburg Airport had the space to develop an airpark which could respond to a need since there is no project of that kind in the area. Moreover, the geographic location of the airport and its proximity to highways would make the concept easy to sell. According to some of the respondents, an airpark would attract pilots who are close to retirement. They felt that it would be worth spending the time to investigate this opportunity but in a very professional manner. The project would have to be developed by experts in that field. Oxford County would also benefit by supporting the project due to the higher tax revenues it would bring them. One respondent said a lot of Air Canada pilots would be interested in such a project. Respondents not in favour thought that the authorities would never allow the project, and that winter conditions would be a real turn-off.

- 5 respondents were doubtful
- 12 respondents were in favour
- 2 respondents were not in favour

Q - Would you be interested in buying a property in an airpark at Tillsonburg Airport?



- 3 respondents said “Yes”
- 1 respondent said “to be discussed”

Q - Do you have any suggestions regarding the development of Tillsonburg airport?

We decided to keep this section in a verbatim format. The answers are divided into four categories: projects, equipment and infrastructure, services at the airport, and marketing.

Projects:

- flying clubs and schools - get a college affiliation; it is too costly (20K), so many airports stopped having one
- to attract more visiting pilots, we should think about creating a real Harvard Museum
- if there is a lot of real estate around, an airpark could be a good idea; also keep in mind that the closing of Buttonville will mean a big displacement of aircraft owners; Oshawa and Tillsonburg could be big winners with a good strategy
- if Buttonville shuts down its operations, there might be a good opportunity for those who will have to relocate - why not Tillsonburg if services and infrastructure continue to improve; Why? – Alternatives are Oshawa, but it has restrictions (associated with YYZ airspace), Kitchener-Waterloo has landing fees (\$\$), London has terrific facilities, but it's costly if you don't refuel, buy a meal, have to pay parking fee...
- become a cargo hub and port of entry for eco-tourism in southern Ontario
- why not have a cargo terminal, duty-free, custom clearance
- develop a commercial zone for businesses not necessarily in aviation sector but that need quick access to the airport
- opportunities for executive jets and business passengers but custom clearance would then be a must; If landing fees better than YXU, could be appealing, but management of the airport would have to change its thinking: insurance, regulation, etc;

Equipment and infrastructure:

- GPS and night approach improvement in order to get executive jets to land at Tillsonburg
- improve access to hangars

Services at the airport:

- get the son of the mechanic on board since he's specialized in avionics; he currently works in Kitchener
- avionics could be great; It could attract other pilots and make Tillsonburg more known instead of going to Brantford

Marketing:

- The county would benefit from getting more involved. The airport should be more publicized with promo campaigns;



5.2.1 Summary of the Survey to Pilots and Aircraft Owners

The survey highlights the very positive and favourable opinion that pilots and aircraft owners have of TMA. Most of them saw real opportunities for development at TMA mainly through the construction and rental of new private hangars. The new extended runway and airport terminal are welcome additions to the airport. As mentioned previously in this report, snow removal in the winter and extended hours for services were the two main areas of complaint. Overall, the pilots surveyed indicated that the airport should be increasing their marketing and promotion efforts. Concerning the airpark, the survey revealed mixed opinions. Some did not believe that TMA was an adequate location for such a project, citing mainly the lack of tourist destinations in the vicinity. If such a project were to move forward, surveyed pilots suggested the project be undertaken by an experienced real estate developer together with TMA or the town of Tillsonburg. Three pilots expressed interest in purchasing a property in the airpark, and a fourth one needed a bit more convincing.

5.3 Airpark Feasibility

The information gathered from the focus group, desk research, and surveys indicates that the concept of an airpark project at Tillsonburg Airport left many participants interested but doubtful of the success of such an undertaking. Thus it would be difficult at this time to confirm strong interest in this project, and the feedback received needs to be considered in perspective.

The comments and feedback were obtained during open conversation or over the phone during focus groups, private interviews, or phone surveys. At no time during these activities were the participants given any detailed information on the scope of the project, the type of houses it would include, or cost information. Buying a property in an airpark/fly-in community is similar to buying a house; usually before making any decision the future owner wants to see the model home, the housing complex layout, the services offered and the cost.

Therefore the opinions expressed are to be considered as primarily in the realm of personal perceptions linked to the experiences, financial situation and future life projects of each individual. We also sensed, during these conversations, that many did not have a clear understanding of the airpark/fly-in community concept (lack of knowledge on the type of airpark model, their locations throughout North-America and the rules and regulations governing these parks).



Our desk research demonstrated first and foremost that airpark/fly-in communities are real estate projects targeted at a specific clientele. Some airparks are very high-end communities with luxurious houses and large lots. Others offer a mix of townhouses and estate residences, and some even offer condominiums and rental housing (see picture below).

PICTURE 5.5 – AIRPARK HOUSING EXAMPLE



Most successful airparks are driven by real estate developers who have a good knowledge of housing and community trends. Looking at the bigger picture, some developers offer a full lifestyle environment, enabling tenants and owners to work, live, and play within the airport's perimeter.

One such example is the West Capital Investment Project at Carp Airport in Ontario (see picture 5.6) which encompasses an airpark/fly-in community sector, a business park sector and a commercial sector.



PICTURE 5.6 – WEST CAPITAL DEVELOPMENT – CARP AIRPORT

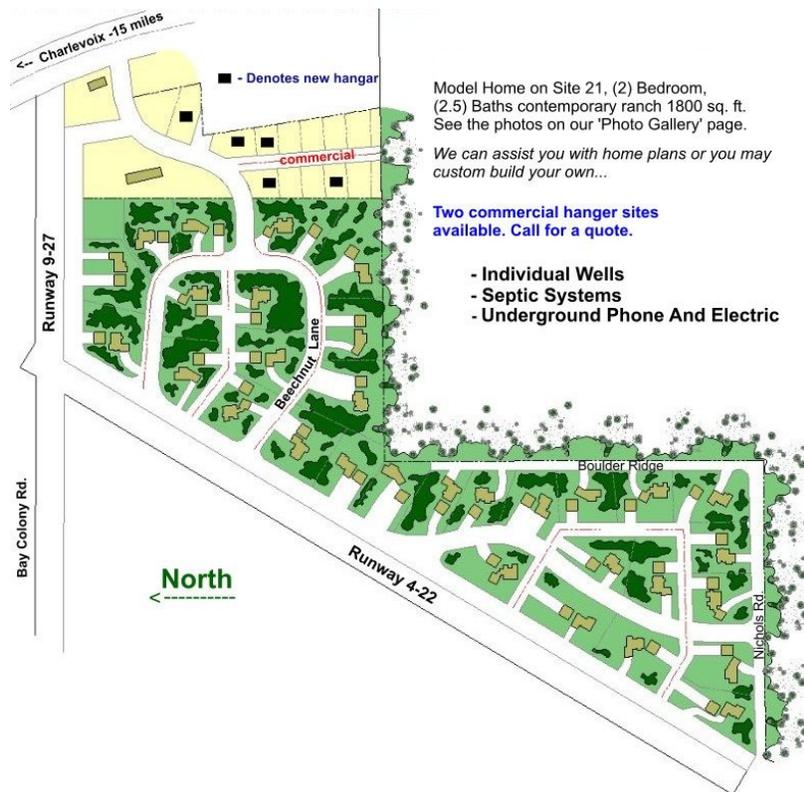


Other airparks are limited to “live and play”. The largest and most famous airpark in the world is the Spruce Creek Fly-in Community in Florida where the developer developed a mixed-use fly-in and a normal residential complex. The fly-in community surrounds the Spruce Creek Airport which offers one paved runway that is (5/23) 4,000 feet long. The airport also offers various storage hangars and MRO/FBO services.

The residential sector was developed around an 18 hole golf course which borders almost half of the runway. So Spruce Creek residents can find houses located around the taxiways on the airpark side and houses next to the fairways on the residential side. Aircraft and vehicles have a separate road network, and special authorisation is required for vehicles to transit on the taxiway (see picture 5.7).



PICTURE 5.8 – TORCH LAKE AIRPARK



5.3.1 Tillsonburg Airpark

Looking at these examples and others, would it be reasonable to conclude that Tillsonburg Airport could develop and maintain an airpark?

If we analyze this question in the light of the airport's SWOT analysis, Tillsonburg Airport fares a lot better than many airports that already have an airpark. Tillsonburg is a full-service airport with VFR approach systems, a new terminal, 3 runways including a paved one that is 5500 feet long and 100 feet wide, both types of fuel, a paved ramp, available hangar space, and several annual aviation events.

The challenges for a Tillsonburg Airpark are the absence of a major tourism attraction in the area (within 10 kilometres) and its distance by road from any major urban center. We do not believe that these factors will be decisive if the project is sufficiently attractive in itself.

In view of the foregoing, we recommend that Tillsonburg Airport move forward in the creation of an airpark. Even though many interviewees expressed doubts about the project, a group of 4 or 5 individuals did indicate their interest in purchasing a house if the airpark were created, and we believe the airport has more to offer than many others that are trying to create similar projects.



We recommend that Tillsonburg Airport and community leaders analyze this project by taking the steps listed below with the perspective of placing a well-structured and well-planned airpark project on the market.

In the development of this project, neither the town, nor the airport should consider assuming the place of an experienced real estate developer. The airport should find and retain the services of an interested, experienced, real estate developer with whose assistance it should finalize the choosing of the land parcels for the project (see our recommendations below). The parcel of land we recommend covers approximately 100,000 square metres (24,7 acres) which would allow for around 50 lots of 2000 square metres each (0,5 acre).

- have the developer prepare an airpark layout plan and choose the type of housing
- ensure airpark architectural and construction guidelines conform to airport guidelines and vice-versa (supplied as an attachment to this document)
- ensure that the project harmonizes with local infrastructure and environmental laws
- have the developer prepare targeted airpark branding
- work with South Oxford Township on a financial agreement

As an example, we present a closer look at the airpark sector of West Capital Development at Carp Airport (On). The first stage of the project is modest. It offers parcels of land with or without aircraft hangars. Some communal hangars have been located close to the houses but not directly on each property.

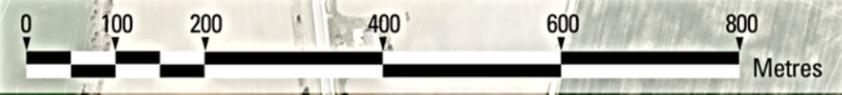
PICTURE 5.9 – CARP AIRPORT PROJECT





4 Airpark Zone 1

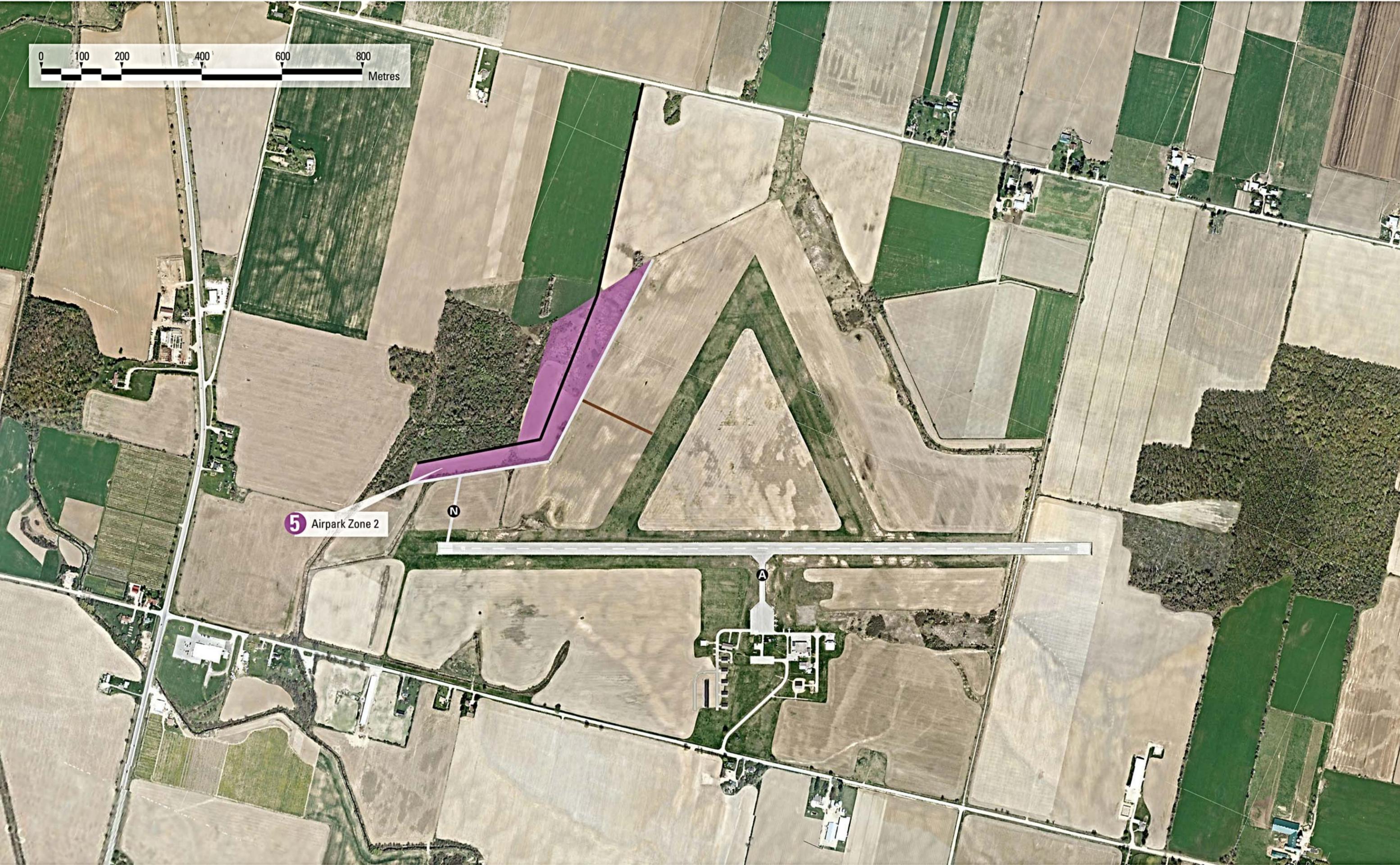




5 Airpark Zone 2

N

A





5.4 Related Needs and Services, and Budget

To determine the various services, needs and associated budgets, we based our research on the Article 5.3 recommendation of transferring the development of the airpark to the private sector. By doing so, the Airpark will reduce its financial involvement and keep any financial risks associated with the development of the project to a minimum.

This approach would also help the town, township, and airport focus on their core activities and not compete with private residential developers. We suggest that the town, township, and airport concentrate on the following tasks:

- provide zoning modification if required
- develop airpark architectural and construction guidelines
- develop airpark rules and regulations governing airport access and services including a fee structure
- evaluate airport insurance, safety, and security issues
- help fund marketing effort for the airpark
- obtain construction permits

Concentrating on these core competencies would leave the development and construction activities to the private sector. Consequently, we suggest the developer be responsible for:

- preparing an airpark layout plan
- suggesting types of housing and preparing architectural plans
- being involved with the development of airpark architectural and construction guidelines as well as airpark rules and regulations
- marketing the project, attracting customers; sales and negotiations
- building the road and taxiway network
- building all housing units
- bringing in all services (electricity, water well, septic tank, telephones)

When establishing airpark rules and regulations, airport services will need to be addressed. We recommend that airpark tenants receive the following services:

- taxiway snow removal
- runway snow removal
- IFR approaches

5.4.1 Budget

Provided that our previous suggestions are accepted, the direct costs to the airport should be limited to those associated with services, and the cost of those services should be offset by a monthly service fee (condominium fee) charged to each airpark tenant.

Under this scenario, the only expense the airport would need to cover would be the runway approach upgrade to GPS which is estimated at \$ 50,000.



6. Governance Models

6.1 Introduction

Airport governance models and structures have evolved over the years to reflect the evolution of airport activities. These models have been adapted to suit the type, size, impact, and role airports play within their community. As such, governance models for Canadian NAS airports are very different from those of local and regional airports.

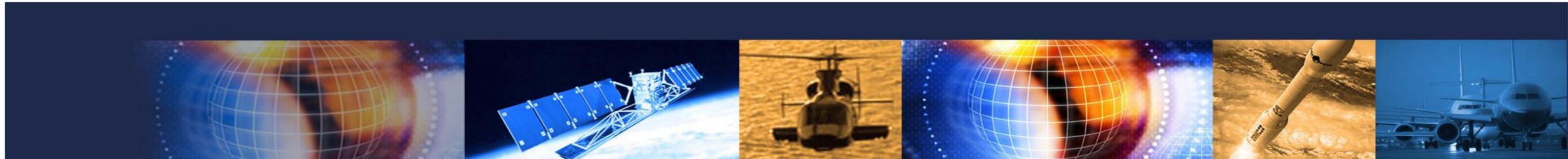
In the course of this mandate, we were asked to study the governance models of local and regional airports in Ontario. To carry out this task, a phone survey of twelve local/regional airports in southern and eastern Ontario was conducted. The survey focused on identifying the management and decision making structure of each airport, the strengths and weaknesses of each structure, and the way the structure impacted airport finances.

At each airport, the airport manager was the contact person who answered the survey. Only one airport chose not to answer our request for information.

The fourteen airports surveyed were:

- Chatham-Kent Airport
- Brantford Airport
- Cochrane Airport
- Elliot Lake Municipal Airport
- Goderich Municipal Airport
- Kincardine Airport
- Lake Simcoe Regional Airport
- Muskoka Airport
- Niagara District Airport
- Oshawa Municipal Airport
- Parry Sound Area Municipal Airport
- Pembroke Airport
- Peterborough Airport
- Stratford Municipal Airport

All of these airports are general aviation and business aviation airports located in small-to-middle-sized communities. You will find the answers to our survey in Chart 6.1.



Airport	Owner	Management	Decision structure	Who is on the committee(s)	Financing	Strengths	Weaknesses
Tillsonburg Municipal Airport	Town of Tillsonburg	Town of Tillsonburg	Development Commissioner	9 member advisory committee including 3 pilots, an accountant, one Town counsellor and Town appointed individuals	City Budget All airport revenues go to the city budget.		
Chatham-Kent Airport	City of Chatham-Kent	By Sontair Ltd	Director of public works	No Committee	City Budget All airport revenues go to the city budget.	Municipality owned, more help for projects	Municipality gets involved too deeply Too long to get money for large projects
Brantford Airport	City of Brantford	Operated by the City of Brantford's Property Management Department and managed by the Brantford Flying Club.	Property Management Director City of Brantford	No committee	City to offset any short fall	City manages all hangars and surrounding properties. City economic development offices promotes the airport and attract new tenants	Some non-aviation industries located at the airport. City hall reacts slower than a private company
Cochrane Airport	Town of Cochrane	Contracted to local firm	Director of Economic Development	Airport committee was dissolved a few years ago	Integrated in the Town annual budget	Work with an independent management company provides quality services, sustained experience and quality services	City Council is less aware the day to day operations and City counsellor have no or very little airport /aviation experience
Elliot Lake Municipal Airport	City of Elliot Lake	City of Elliot Lake	Manager of City Operations	No Committee	City Budget All airport revenues go to the city budget.	Municipality owned, more help for projects	Municipality gets involved too deeply Too long to get money for large projects
Goderich Municipal Airport	Municipality of Goderich	Municipality of Goderich	Chief administrating officer	No Committee	City Budget All airport revenues go to the city budget.	Can go directly to city council	City has very little money for such an equipment
Kincardine Airport	Municipality of Kincardine	Evans Aviation	Chief administrating officer	Advisory Committee CAO non voting Arpt Mgr non voting 2 members municipal council 4 members of the public	Municipal budget All airport revenues go to the city budget.	Because committee is from the public, interest from pilots and owners helps. Will be more inclined to participate in events.	Maybe a little complicated to get money but very far from a major problem.
Lake Simcoe Regional Airport	Corporation of the City of Barrie and Township of Oro-Medonte	Corporation of the City of Barrie and Township of Oro- Medonte	Chief administrating officer	Was a commission not long ago but was cancelled. New board structured being looked at	City budget All airport revenues go to the city budget.	New system, hard to evaluate but can already note that one very good point is that it has total autonomy from city council	System too new to evaluate but note that for now, time consuming to influence city in putting more assets in the facility.
Muskoka Airport	District Municipality of Muskoka	Municipality	Commissioner of planning and economic development	No Committee	City Budget All airport revenues go to the city budget.	Easy to get sufficient funding, and will support the infrastructure 50% of airport earnings go into a fund for future major work or repairs	Municipal Act – limiting free hand on operations i.e. cannot offer discounts



Airport	Owner	Management	Decision structure	Who is on the committee(s)	Financing	Strengths	Weaknesses
Oshawa Municipal Airport	City of Oshawa	Total Aviation & Airport Solutions	Director of economic development	No Committee	Airport revenues subsidized by the City Budget to compensate losses.	Being managed through civilian contract, staff can do more contrary to municipal staff which would be less efficient	Deliverables to the management must be very clear. Has to follow city protocol to make purchases.
Pembroke Airport	Pembroke and Area Airport Commission	Airport Commission	Airport Commission Board	1 member from 4 municipalities Pembroke 2 Petawawa 2	Airport Operations plus each municipality puts in money (DND pays for unlimited use for C130 & Bell 412)	None	None
Peterborough Airport	City of Peterborough	City employee is manager but operations are contracted	Director of Planning and Development	No Committee	City budget All airport revenues go to the city budget.	Direct access to decision making instances	Not being on site and having continuity
Stratford Municipal Airport	City of Stratford	Contract management	Director of economic development	No Committee	City Budget All airport revenues go to the city budget.	Because it is contract management, no city employee are involved, so no union problems	No bad points
Parry Sound Area Municipal Airport	Town of Parry Sound and Township of Seguin	Airport employee	Airport Commission	6 person committee Chair is Township counsellor 3 and 3	Own revenues plus small portion of levies from the township and the town	The governance model works well at this airport because committee members are interested and active	Many people involved. Members are voted, so, if changes occur it could mean distraction to the model
Niagara District Airport	Town of Niagara on the Lake	Airport Employee	Airport commission	NL – 1 councillor StC – 1 councillor NF – 1 councillor NL – 1 citizen NF – 2 citizens StC – 3 citizens	Revenues for operations and cities complete with a per capita amount	Easier to get funds	Shortage of staff personnel



6.2 Analysis of the Survey

Of the fourteen airports surveyed, all were owned by and named after the cities or towns they were located in. In terms of management structure, seven of the fourteen airports subcontracted airport management to the private sector. These management companies were usually small organizations comprised of a few individuals with a good aviation and airport background. They coordinated most fixed basic operational tasks (refuelling, services to pilots, aircraft parking and towing) as well as airport administration, airport security, airport promotion, with some also doing investment attraction.

In most cases, airport managers had to report to a senior city or town employee. These senior city employees had been given responsibility for their respective airports and have to manage them in accordance with city or town regulations, bylaws, and city council decisions. Only four airports still had an advisory committee, while two other airports had cancelled airport committee activities recently. The remaining committees were formed primarily by a city councillor and a representative. In terms of funding, all airports were supported financially by their respective city or town.

All of the municipal airport owners provide annual funding for the airport or cover any shortfalls.

The airport managers were also asked to identify the various strengths and weaknesses of their governance model.

Among the strengths:

- contracting private management companies precludes any labour or union issues
- private management companies are more responsive than city employees and more open to variable hours
- being a city-owned airport makes it easier to talk to the decision makers directly
- being city-owned helps secure annual funding
- having private representatives on the airport committee provides experience that city councillors do not usually have

Among the weaknesses

- cities and towns are slower to make decisions
- many documents and considerable paperwork are required
- cities and towns offer less latitude in managing airport fees
- most city and town councillors have little knowledge of airport operations, activities and challenges

Table 6.1 includes information about TMA to facilitate comparison with the other airports. The main overall differences are:

- airport operations are carried out by employees of the town of Tillsonburg
- the airport still has an active advisory committee that meets four times per year on the average



6.3 Recommendations to TMA

Based on the above-mentioned analysis of the surveyed airports and our experience with airports throughout North America, TMA's governance model is in line with the models used by most city and town owned airports. Our recommendations, which are in accordance with the Development Plan found in Sections 4 and 5, are presented below.

6.3.1 Ownership

If the airport is to become a gateway for tourism and a true economic asset, we recommend the ownership structure of TMA be maintained. This would provide the town with the flexibility to structure future growth at the airport while raising awareness of its development plan and successes. The airport has maintained a regular growth rate over the last eight years, and the new investment made during the past year should soon bring greater activity to the airport and provide some return on investment

6.3.2 Airport Governance

We recommend that the airport advisory committee be maintained and refreshed. The advisory committee board should be composed of members from the following categories:

- a) Airport tenants (at least 2 or 3)
- b) Pilots or former airport managers (2-3)
- c) Representatives from the Department of National Defence (1)
- d) Representatives from the Ontario Provincial Police (1)
- e) Town councillor (1)
- f) Southwest Oxford Township councillor(1)
- g) Ontario Ministry of Transport (1)
- Non-voting members:
- h) Director of economic development
- i) TMA airport manager
- j) Oxford County representative

The advisory committee members must be aware of their mandate to support airport management and Tillsonburg economic development efforts to market the airport, attract new private and industrial tenants, and support the development of both identified clusters. The town of Tillsonburg should appoint senior airport and aviation members to the committee, and airport leaders should leverage the knowledge and assistance of these members to foster growth opportunities for the airport.



6.3.3 Airport Budget and Funding

We recommend that the town of Tillsonburg try to reach an agreement with Southwest Oxford Township whereby the town can obtain a share of municipal taxes to help cover a part of its investment in the airport. The town would have to cover any shortfalls, but sharing taxation revenues and revenues generated by new tenants and additional airport activities could reduce the financial gap. Oxford County should also be asked to participate in specific growth projects that support the county's economic diversification and branding.

6.3.4 Airport Management

We recommend that management of the airport be left under the leadership of Tillsonburg employee. However, solutions must be found quickly to address the issues of expanded operating hours (primarily during the peak summer season) and snow removal. The growth of airport activities will most certainly require the hiring of additional employees to maintain the quality of services.

It would also be necessary for the airport manager to move away from daily operations and towards a more strategic development approach. Future tasks will involve more promotion, more marketing, more investment attraction, more negotiation and more public relations.

6.4 Governance model Conclusion

TMA is in good hands. Surrounding its leaders with key partners will help foster airport development. Many opportunities lay ahead and structuring airport governance, management, funding, and operations will be a *sine qua non* to success.



7. Conclusion

The Tillsonburg Municipal Airport Business Park and Airpark Market Analysis and Feasibility Study mandate was launched in December, 2009, with the objective of providing strategic information on aerospace and aviation markets and trends, and an assessment of the airport's strengths, weaknesses, opportunities and threats. To achieve these objectives, Explorer Solutions examined previous studies and plans prepared for the airport and the local economic development bureau. We also organized focus groups and private interviews with key airport, industry and community leaders. Desk research, phone surveys, southern Ontario airport benchmarking, and a review of bylaws impacting the airport completed the activities linked with the gathering of information.

From the early stages it became evident that there was a strong desire to grow Tillsonburg Municipal Airport. Airport and town leaders have been closely involved with the project and have focused on a long term vision aimed at structuring, branding and driving the development of activities at the airport. It also became evident that TMA would face a strong challenge from many larger airports which have regular commercial and charter flights, industrial zones with established aerospace manufacturers, flight schools and maintenance shops. These airports are all (4) located within a 100 km. radius of Tillsonburg.

TMA also faces public utility constraints (no sewage and water) which create a situation that to some extent limits its ability to attract certain types of investment projects, or would require extremely high development costs to remedy. To be considered as well are county bylaws which permit aviation related activities at the airport although some proposed projects might be considered borderline under these bylaws.

Taking these elements into consideration, we decided to present a more down-to-earth report targeting very specific aviation and aerospace activities well adapted to TMA's strengths and weaknesses. We concentrated our efforts on bridging the gap between providing macro data on aviation and aerospace trends and potential markets on the one hand, and structuring a real economic development cluster targeting identified niche sub-sectors of aerospace and aviation well suited for TMA on the other.

Looking at the SWOT, the airport is well managed by a group of involved individuals distinguished not only by their job skills and ethics but by their passion as well. The airport's main strengths are the availability of land for development, no landing fees, low fuel prices, the new expanded runway, the new terminal, a good-sized cluster of GA aircraft, and first and foremost, the Canadian Harvard Aircraft Association as its main tenant. The weaknesses of main concern are the threshold affecting the new runway, the lack of marketing and promotional tools, the absence of IFR approaches and weather equipment, and the inadequate roadway and taxiway systems in the general aviation zone.



In terms of opportunities, TMA should focus on CHAA's willingness to grow its activities, the proximity of another vintage aircraft group that has mentioned its interest in TMA, and the plan of Spectrum Aviation to increase its activities. These three projects would favour the development of a vintage-wing niche at TMA.

Among other opportunities, the growing concern about the security of aerial operations at the London and Region of Waterloo airports linked to the presence of many flight schools and student pilots would contribute to attracting private pilots and aircraft owners. As for threats, we believe the main threat to TMA will be the competing southern Ontario airports. TMA must differentiate itself from the other airports while maintaining a proactive stance in attracting investment and aircraft.

Based on the SWOT analysis, our main recommendations are for TMA to quickly address the runway threshold issue, to find ways to help CHAA grow, and to develop marketing and communication tools to support attraction and promotion activities.

Our benchmarking of southern Ontario airports revealed the very low number of hangars available throughout the region. It also showed that about 50% of all benchmarked airports offer more aviation services (full MRO), flight schools, and charter flight operators than TMA. However, TMA remains attractive due to its runway length, land availability, low fuel price, and hangar availability.

From the information gathered, we have suggested two specific niche aerospace and aviation sub-sector clusters. First and foremost is the development of a vintage aircraft cluster encompassing seven different core activities ranging from aircraft maintenance and restoration to a museum and static display. This cluster is the driving force behind TMA's development plan, one that opens up the door to a far greater line of work and activities than those available at other airports which offer only a museum and an aircraft display. Adequately positioning this cluster will brand TMA as Canada's premier vintage aircraft centre.

The second proposed cluster is based on strengthening and growing something that TMA already offers - a great general aviation airport. Once again, the proposed format is to create a specialized cluster dedicated to pilots and owners of general and business aviation aircraft. Offering flight training, maintenance, event planning, and even housing, the GA cluster will focus on creating an aviation-lifestyle environment for aviation enthusiasts.

One of the special components of the GA cluster is the creation of an airpark on the airport's grounds. Even though some objections were raised about the value and real potential of an airpark, in the end, and even without a project layout or concept presentation material, a number of pilots expressed interest. Our recommendation is that the airpark not focus on offering high-end residences but offer a more affordable middle-cost type of housing. This project would have a positive impact on growing GA activities at the airport (with associated revenues) and strengthening the aviation-lifestyle environment.



Finally, the airport's governance structure was evaluated, and other Ontario (primarily), Quebec, and U.S. airports were benchmarked. Our findings indicated that most local and regional airports were owned by the local town, city, or county. Pilots and airport tenants confirmed that airports owned by towns or counties showed more stability and continuity in rendering services. The benchmarking also confirmed that most airports had neither a board of directors, nor an advisory committee, but those that did, felt that they were getting greater support. Advisory committee members should be chosen from among pilots and aircraft owners, other airport tenants, town councils, and the economic development, real estate, and marketing sectors.

Overall, Tillsonburg Municipal Airport is poised for growth. With strong leadership, both locally and at the airport, TMA has the infrastructure and space needed to attract targeted investment projects and more GA activities.

Christian Perreault, *MMI*
Associé principal
Explorer Solutions



Annex A – Companies Surveyed

Name	Location	Business Type	Result on call
Adler Aviation	Kitchener/Waterloo	Charter	Declined to be interviewed
Aero Academy	London	MRO & School	Left message
AFS Aerial Photography	London	Aerial Photography	Did have the time to answer
Air London Inc.	London	Charter	Owned by Diamond Aircraft
AV-Base Systems	London	Maintenance software	Left message
Av-Tech Services	London	Hangars	No more in business
B & B Aircraft Services	Goderich	MRO	not interested to answer, going to retirement
B & W Aviation Shell aerocenter	London	FBO	Said he will return the call
Blue Bird Flight Academy	London	School	Survey completed
Brant-Aero	Brantford	MRO	Survey completed
Brantford flying Club	Brantford	School	removed from list because it is the airport operator
Crosswind Aviation	London	School	Survey completed
Diamond Aircraft	London	Aircraft fabrication	left message
Eaglerock Aviation (FBO)	St. Catharines	FBO	Left message
Empire Aviation	London	MRO	Is now owned by Maylan Flight Academy
Evans Aviation	Kincardine	MRO	Survey completed
Evergreen Air Harbour	London	MRO & hangar	Survey completed
Executive Aviation Fuels Esso Avitat	London	FBO	left message
Flight Exec	London	MRO & Charter	Left message
Flightpath Charter Airways	Kitchener/Waterloo	Charter	Left message
Fox Aviation	St. Catharines	Charter	Left message
Genaire	St. Catharines	Equipment manufacturer	Survey completed
Gilbert Custom Aircraft	Brantford	MRO	Survey completed
Goderich Flight center	Goderich	School	Wrong number
Great Lakes Helicopter	Kitchener/Waterloo	Charter	Left message
Hi-Tech Controls	London	Non-aviation	Removed from list
Huron Aviation (FBO)	Sarnia	FBO/Charter	Left message
Kitchener Aero Avionics	Kitchener/Waterloo	MRO	respondent to be back in March
Kovachik Aircraft Services	Burlington	MRO	Left message, Same as Spectrum
Maylan Flight Academy (London) Ltd.	London	School	Declined to be interviewed
National Helicopters	St. Catharines	Charter	respondent to be back end of february
Nelles Aviation	Brantford	MRO	Survey completed
Niagara Air	St. Catharines	Charter	respondent to be back end of february



Annex A – Companies Surveyed (follows)

Nixon Air Service Ltd	Simcoe	MRO	Survey completed
Northwind Aviation and Marine	London	MRO	Left message
Rotor Services	Kitchener/Waterloo	MRO	Survey completed
MD-RA Inspection Services	London	Recreational Aviation Inspection	Survey completed
Sky Harbour	Goderich	Paint shop	Declined to be interviewed
Skydominium	London	Unknown	respondent to be back in March
Sontair Limited	Chatham-Kent	MRO/Charter	Was removed from list because airport operator
Spectrum Airways	Burlington	Charter	Left message, Same as kovachik
St. Catharines Flying Club	St. Catharines	Charter	Survey completed
Stratford air services	Stratford	School	Survey completed
Tri-City Aero	Kitchener/Waterloo	MRO	Survey completed
WaterlooWellington Flying Club	Kitchener/Waterloo	School	Survey completed
Woodstock flying club	Woodstock	School	Left message
XU Aviation	London	MRO	Declined to be interviewed



Annex B – Pilots Surveyed

Name	Airport base	Status
Philip Quinlan	Brantford	Left message
Barry McLuhan	Tillsonburg	Left message
Bill Kirkland	Tillsonburg	completed
Bill Shepard	Tillsonburg	Left message
Bob Hollister	Tillsonburg	completed
Claude Archambault	Tillsonburg	completed
Dan Cameron	Tillsonburg	completed
David Brandon	Tillsonburg	completed
Dick Wolfe	Straford	completed
Doug Bailey	Tillsonburg	completed
Dr. David & Anita Hillner	Tillsonburg	Left message
Dr. Gerry Rowland	Tillsonburg	completed
Dr. Rob Bamford	Tillsonburg	Left message
Dr. Terry Boys	Tillsonburg	wrong number
Ernie Riddle	Brantford	completed
Euclid Benoit	Tillsonburg	completed
Gary Wilson	Tillsonburg	Left message
Gord Baxter	Tillsonburg	wrong number
Grant Mitchell	Tillsonburg	Left message
Hans Ulrich Usam	Kitchener	completed
Harvey Roddick	Tillsonburg	completed
Henry Atkinson	Tillsonburg	completed
Jason Wills	Tillsonburg	Left message
Jay Curtis	Tillsonburg	completed
Jean Guy Trottier	Tillsonburg	completed
Jeff Dean	Tillsonburg	wrong number
Jim Deluce	Tillsonburg	Left message
John Higgins	Tillsonburg	Left message
Keith Dorken	Stratford	completed
Larry Anger	Tillsonburg	Left message
Linda Johnson	Tillsonburg	completed
Lionel Ulrich	Tillsonburg	completed
Merv Davis	Tillsonburg	completed
Paul Hayes	Buttonville	completed
Ray Martin	Tillsonburg	completed
Reid & Michelle McCall	Tillsonburg	Left message
Richard Lee	Tillsonburg	Left message
Richard Van Maele	Tillsonburg	completed
Robert Ogilvie	Brantford	completed
Robert Steidl	Tillsonburg	completed
Roland Van der Haeghe	Tillsonburg	Left message
Troy Chute	Tillsonburg	completed
William Londono	Tillsonburg	Left message



Annex C – Funding Pipeline

C.1 Southern Ontario Development Program

The Southern Ontario Development Program (SODP) was established as a core program of FedDev Ontario. It will build upon the assets and strengths of communities to create an environment where businesses can thrive, and maximize Southern Ontario's potential to succeed in the knowledge-based economy.

Funding under this program will go towards projects that can stimulate local economies and enhance the growth and competitiveness of local businesses and communities. Approximately \$100 million has been allocated to the SODP in 2009-10, including the following:

Nearly \$63 million through a general intake process; up to \$20 million through an intake for the food and beverage processing sector; \$15.75 million for the Canadian Manufacturers and Exporters' (CME) SMART Program to fund an estimated 300 projects that will help small- and medium-sized manufacturers increase their productivity and competitiveness in the global economy; and \$1.6 million for the Ontario Chamber of Commerce's Export Market Access Program to help southern Ontario businesses that would like to increase their sales internationally.

C.1.1 Community Futures Program

The Community Futures (CF) Program supports 61 Community Futures Development Corporations (CFDCs) in Ontario— FedDev Ontario serves 37 in rural Eastern and Southern Ontario. The remaining 24 CFDCs located in the North are served by FedNor.

CFDCs offer a wide variety of programs and services supporting community economic development and small business growth.

In particular, they provide:

- Strategic community planning and socio-economic development;
- Support for community-based projects;
- Business information and planning services; and
- Access to capital for small- and medium-sized businesses and social enterprises.

These community-based, not-for-profit organizations are staffed by professionals and are each governed by local volunteer boards of directors familiar with their communities' needs, concerns and future development priorities.

Source: http://www.feddevontario.gc.ca/eic/site/723.nsf/eng/h_00041.html



C.1.2 Economic Development Initiative

Over the next few years (ending March 31, 2013), FedDev Ontario will invest \$4.4 million through the Economic Development Initiative (EDI) to support business and economic development activities that encourage sustainable growth in Ontario's Francophone communities (the official language minority community in Ontario), in two priority areas: Community Strategic Planning activities that enhance the economic base and competitiveness of Francophone communities and small- and medium-sized enterprises (SMEs); and Business and Economic Development activities that respond to the needs, and foster economic growth of Francophone communities in sectors such as Francophone tourism, cultural, knowledge-based and manufacturing industries. This priority area will also support Youth Internships.

EDI supports the Roadmap for Canada's Linguistic Duality action plan, which aims to strengthen linguistic duality, reinforce Canada's national identity and provide economic benefits for all Canadians.

The second Economic Development Initiative intake ending on September 16, 2009 is now closed. Applications are undergoing due diligence and we are unable to comment on the status of your application at this time. Successful Northern Ontario applicants will be notified by FedNor, while successful Southern Ontario applicants will be notified by FedDev Ontario.

A public announcement on any future intake for applications under EDI will be made once details are finalized.

Should you have questions or inquiries with regard to the Economic Development Initiative in Ontario, please contact the designated FedDev Ontario Officer in Southern Ontario.

I. Eligible Recipients

Recognizing that EDI is designed to meet the needs of Ontario's **Francophone communities** (the official language minority communities in Ontario), eligible recipients would normally include Francophone or bilingual organizations that are located in Southern Ontario and provide programs or services in French to the Francophone community. For example, this could include community economic development corporations, not-for-profit organizations and sector associations, post-secondary institutions that offer full-time programs of study in French, and municipalities that serve the Francophone community.

II. Eligible Activities

Eligible activities include incremental business and economic development activities. This would normally include activities undertaken in French by, or for the benefit of, a Francophone client group.



A) Community Strategic Planning

Eligible activities are those that enhance the economic base and competitiveness of Ontario's Francophone communities, including:

- ◆ strategic and community planning;
- ◆ community mobilization and networking;
- ◆ feasibility studies;
- ◆ business planning;
- ◆ marketing studies; and,
- ◆ export market research.

Some examples of projects:

- ◆ research development of a multi-service model to coordinate Francophone services;
- ◆ development of a French-language visitor's strategy; and,
- ◆ business and industry sector studies and business plans

B) Business and Economic Development

Eligible activities are those that respond to identified needs and foster the economic growth of Francophone communities in sectors such as tourism, as well as cultural, knowledge-based and manufacturing industries, including:

- ◆ developing economic and business skills;
- ◆ integrating Francophone immigrants into the business and economic development community;
- ◆ enhancing access to economic and business information and services (e.g. awareness and promotion of French as an asset for economic and business development);
- ◆ promoting Francophone youth internships and entrepreneurship initiatives (e.g. young entrepreneur days or business plan competitions that celebrate and value Francophone youth entrepreneurship);
- ◆ developing and expanding export markets; and,
- ◆ supporting innovation, applied research and development and commercialization.

Eligible activities for Youth Internships in economic development organizations are those that enhance the economic base and competitiveness of Ontario's Francophone communities, respond to their needs and foster sustainable economic growth.

Eligible Youth Intern Criteria:

- ◆ participants will be unemployed or underemployed youth (persons under the age of 30);
- ◆ participants will have graduated within the last three (3) years with a degree, diploma or certificate from a recognized post-secondary institution;
- ◆ participants will be legally entitled to work in Canada;



- ◆ participants will not have previously participated as a youth intern in any other federal or provincial internship program with pay for a period of six (6) months or more;
- ◆ participants will not be related to members of the directors, officers or managers of the recipient unless prior written consent is obtained from FedDev Ontario.

The work experience must also meet **one or more** of the following criteria:

- ◆ workplace uses French in day-to-day internal operations;
- ◆ work activity involves generating French text, video, audio or web-based information; and/or
- ◆ participants are required primarily to use French for external activities or in responding to external demands (e.g. customer service, communications).

III. Eligible Costs

Only costs that are reasonable, incremental and that relate directly to the eligible project activities will be eligible. By way of example, eligible costs may include non-capital and minor capital costs, including but not limited to:

- ◆ consulting and/or professional fees;
- ◆ marketing and advertising costs;
- ◆ minor non-capital acquisitions (i.e software, items under \$1,000);
- ◆ travel and meeting costs;
- ◆ salary and statutory employee benefit expenses (for Youth internships only); and
- ◆ materials and supplies.

Eligible costs for **Youth Internships** are the incremental salary for the full-time intern and statutory employee benefit expenses incurred by the organization.

The salary for intern and employee benefits are eligible costs where there is an “Employer-Employee Relationship.” Such relationship exists when a verbal or written agreement is in place in which an employee agrees to work on a full-time basis for an employer for a specified period of time, in return for salary or wages.

IV. Ineligible Costs

Costs that are deemed unreasonable, not incremental and not directly related to the eligible project activities will be ineligible. Other ineligible costs include:

- ◆ major infrastructure and major capital acquisitions such as land, building and related construction;
- ◆ information and communications technologies (ICT) infrastructure (e.g. broadband);
- ◆ ongoing staff salaries and administrative/operational activities that are considered to be part of the regular operations of the applicant or its partners;
- ◆ direct financing to SMEs (Note: activities administered through a not-for-profit organization for the benefit of a group of SMEs could, however, be eligible for support); and,



- ◆ in-kind contributions.

Funding

- ◆ EDI can provide up to \$100,000 for Community Strategic Planning and Business and Economic Development projects (normally to a maximum of 50% of eligible costs).
- ◆ EDI can provide up to 90% (to a maximum of \$27,500) of eligible costs for Not-for-Profit Youth Internships for a period of up to 12 months or 52 weeks.

Source: http://www.feddevontario.gc.ca/eic/site/723.nsf/eng/h_00098.html

C.1.3 Community Adjustment Fund

The Government of Canada's Community Adjustment Fund (CAF) is a two-year \$1-billion economic stimulus measure announced as part of Canada's Economic Action Plan.

The purpose of this initiative is to act quickly to help minimize the impacts of the global economic downturn by creating employment opportunities. It will also assist communities, particularly those with a reliance on resource-based industries and the manufacturing sector, to adjust and restructure their economy.

FedDev Ontario is responsible for delivering CAF in southern Ontario. In 2009–10, funding was allocated as follows:

- \$102.2 million for an intake process for projects in southern Ontario;
- \$30 million for Community Futures Development Corporations; and
- \$17.5 million to be delivered by National Research Council Canada's Industrial Research Assistance Program (NRC-IRAP).

In 2010-11, CAF is providing \$127.8 million for projects in southern Ontario, via an intake process.

Should you have questions or inquiries with regard to the Community Adjustment Fund in southern Ontario, please contact us.

Intake One

On May 14, 2009 the Government of Canada launched the Community Adjustment Fund (CAF) in Ontario, a two-year \$1-billion economic stimulus measure announced as part of Canada's Economic Action Plan.

The first intake of CAF in Southern Ontario has been completed, and 90 projects were awarded nearly \$102 million. A complete list of approved projects is available online.

Please refer to the links in the right-hand menu for information on CAF's first intake.



Eligibility

Nearly 600 applications with total requested funding of more than \$750 million were received during the first intake of CAF in Southern Ontario, which opened on May 14, 2009, and closed on June 12, 2009.

The eligibility and selection criteria for the first intake are outlined below.

Eligible Communities

Projects in Ontario communities with a population of less than 250,000, including First Nations, will be eligible for support and would be given higher priority if the community:

- ◆ is rural* and supported by a single industry;
- ◆ has experienced an increase in Employment Insurance beneficiaries equal or greater than 20% over a one-year period; and
- ◆ has experienced major layoffs resulting in significant job losses.

* For the purposes of the Community Adjustment Fund, rural means any community with a population of 100,000 or less.

Eligible Applicants

Eligible Applicants in the communities defined above, are individuals or legal entities and include:

- ◆ non-profit organizations;
- ◆ post-secondary institutions;
- ◆ co-operatives;
- ◆ Indian Bands, as represented by their Chief and Council; and
- ◆ municipal governments and municipally-created organizations.

Selection Criteria

For the purposes of CAF, a project must meet all of the following criteria:

- ◆ the project can start quickly;
- ◆ it can be completed within the CAF timeframes* with no obligation for continued financial support; and
- ◆ it is incremental (i.e. not intended to replace existing funding).

* In Southern Ontario, projects must be completed by March 31, 2010.

In Northern Ontario, projects must be completed by March 31, 2011.



Priority will be given to projects that:

- ◆ generate immediate employment (beginning as early as summer, 2009);
- ◆ create the most jobs per dollar invested;
- ◆ leverage funds from the province and other funding partners;
- ◆ build on collaboration agreements already in place (e.g. federal-provincial agreements and existing programs); and
- ◆ provide a legacy of longer-term ecological and/or economic benefits.

Projects approved under CAF shall:

- ◆ not increase slaughter house capacity;
- ◆ not counter with obligations set out under the Softwood Lumber Agreement; and
- ◆ not provide for direct assistance to workers.

The Community Adjustment Fund is designed to complement existing government programs and services. Projects eligible for funding under other existing federal infrastructure programs will be ineligible for CAF funding.

Eligible Costs

Eligible costs must be incremental and directly associated with the identified projects. They must be considered reasonable and necessary for the completion of the project. Examples of eligible costs include labour, operating, materials, capital expenditures, consultants, travel, research and development, administrative expenses, and any other costs which are deemed by the Department to be reasonable and required to complete the project. Eligible operating/overhead costs will not exceed 10 per cent of the total costs of the proposal.

Ineligible Costs

The following costs are not eligible for the purposes of the Fund:

- ◆ costs of membership in a professional body;
- ◆ fines and penalties;
- ◆ capital depreciation;
- ◆ non-incremental wages and/or fees for administrators;
- ◆ land or vehicle purchase;
- ◆ the tax on goods and services (GST) and any Ontario sales tax eligible for repayment or input tax credit;
- ◆ the applicant's current debts;
- ◆ any costs that are not incremental to the applicant and directly related to the project.



Maximum Support

The total amount of CAF funding provided for a specific project will generally be based on the amount that is required to ensure that the project proceeds, in keeping with the expected results and benefits to the community.

Ongoing or normal operating costs of the Recipient are not eligible costs under this program.

Intake Two

On December 15, 2009, the Government of Canada launched the second intake of the Community Adjustment Fund (CAF) in southern Ontario. More than \$127 million was allocated for projects under this phase of the program.

Projects have been assessed and approved projects will be announced over the coming weeks. Please refer to the links in the right-hand menu for information on eligibility and selection criteria.

Program Guidelines

1. Introduction

Intake Two of the Community Adjustment Fund (CAF) in southern Ontario will support projects in and around affected communities such as resource-based and manufacturing communities depending on a single industry, as well as communities affected by the economic downturn.

New for Intake Two:

- ◆ commercial enterprises (with a focus on small- and medium-sized enterprises, defined as having up to 1,000 employees) have been added as eligible applicants;
- ◆ projects must be completed by March 31, 2011;
- ◆ a business plan or business case must be submitted in support of the application; please refer to the templates provided on the website; and
- ◆ for ease of applying and to allow for the uploading of larger attachments, you can now submit your application online.

2. Eligible communities

To be eligible for CAF support, projects must be located in a southern Ontario community* that has a population of less than 250,000 and

- ◆ has experienced an increase in Employment Insurance beneficiaries equal to or greater than 20 per cent over a one-year period; or
- ◆ has experienced major layoffs resulting in significant job losses and has a lack of alternate employment opportunities.



Priority will be given to communities that have a population of 100,000 or less and are supported by a single industry.

*Southern Ontario is defined as including the following 2006 Statistic Canada Census Divisions: 1 Stormont, Dundas and Glengarry; 2 Prescott and Russell; 6 Ottawa; 7 Leeds and Grenville; 9 Lanark; 10 Frontenac; 11 Lennox and Addington; 12 Hastings; 13 Prince Edward; 14 Northumberland; 15 Peterborough; 16 Kawartha Lakes; 18 Durham; 19 York; 20 Toronto; 21 Peel; 22 Dufferin; 23 Wellington; 24 Halton; 25 Hamilton; 26 Niagara; 28 Haldimand-Norfolk; 29 Brant; 30 Waterloo; 31 Perth; 32 Oxford; 34 Elgin; 36 Chatham-Kent; 37 Essex; 38 Lambton; 39 Middlesex; 40 Huron; 41 Bruce; 42 Grey; 43 Simcoe; 46 Haliburton; and 47 Renfrew.

3. Eligible applicants

To qualify under CAF an applicant must meet one of the following criteria:

- ◆ is a commercial enterprise (with a focus on small- and medium-sized enterprises (SMEs), defined as having up to 1,000 employees),
 - the focus of this program will be on existing businesses with a proven track record (that can provide at least one year's worth of financial statements) that are seeking to expand, modernize, innovate, and/or improve their competitiveness.
- ◆ is an SME group or association;
- ◆ is an incorporated not-for-profit organization whose primary mission is business support or economic development;
- ◆ is an organization or institution dedicated to the promotion and dissemination of knowledge and know-how, including colleges, polytechnic institutes, universities or post-secondary teaching institutions;
- ◆ is an Aboriginal organization;
- ◆ is a municipality or municipal organization; or
- ◆ is a cooperative.

Note: Business start-ups will not be supported.

4. Ineligible sectors

Sectors that are ineligible include:

- ◆ retail/wholesale;
- ◆ real estate;
- ◆ government services;
- ◆ accommodation and food services; and
- ◆ services of a personal or social nature.

5. Eligible projects

To be eligible for support, projects must be:

- ◆ completed by March 31, 2011 with no obligation for continued spending; and



- ◆ incremental (i.e., investment from CAF will allow the work to start sooner, broaden the scope of the project, or allow the completion of a project that otherwise would not be completed).



Examples of eligible projects include:

- ◆ expansion of SME production capacity, production technology, access to markets, and other SME projects that improve a business's competitiveness;
- ◆ support of SME development by not-for-profit organizations;
- ◆ support/enhancement/development of business incubators;
- ◆ construction/expansion/improvement of technology and innovation centres;
- ◆ technology commercialization projects by universities, colleges, polytechnic institutes and post-secondary teaching institutions;
- ◆ improvement/expansion/construction of transportation infrastructure where a clear case for business development can be made;
- ◆ improvements to community-owned tourism facilities (conference centres, exhibition halls); and
- ◆ revitalization and development of downtown core and waterfront areas.

6. Ineligible projects

Ineligible projects include:

- ◆ business start-ups (defined as entities that cannot provide at least one year's worth of financial statements);
- ◆ mergers and acquisitions;
- ◆ restructuring businesses;
- ◆ projects that increase slaughterhouse capacity;
- ◆ projects that do not conform with Canada's obligations set out under the Softwood Lumber Agreement, NAFTA, or other trade agreements;
- ◆ projects that provide direct assistance to workers; and
- ◆ projects that are eligible for funding under existing federal infrastructure programs, if funding from these programs is available.

7. Funding Available

Under the second intake, \$127.8 million will be made available to eligible projects. Financial assistance awarded under this program is provided in the form of contributions, which must have a leveraging effect and a direct economic impact on the region and must comply with the provisions of the Treasury Board's Policy on Transfer Payments.

Contributions to commercial enterprises are repayable. Contributions to non-profit organizations or municipalities for projects that are not profit generating are generally non-repayable.



For capital projects, up to 50 per cent funding is available. For non-capital projects, up to 75 per cent funding is available. These funding limits represent thresholds for total government assistance including federal, provincial and municipal contributions.

These funding limits do not apply to:

- ◆ municipalities, not-for-profit groups and Aboriginal recipients;
- ◆ non-commercial projects from for-profit organizations; or
- ◆ projects where total government assistance is \$100,000 or less.

In the above cases, applicants will normally be expected to contribute a minimum of 10 per cent of the eligible costs of the project. Funding limits will be determined on a case-by-case basis based on demonstrated financial need for the implementation of the project, taking into account the financial capacity of the proponents to invest their own funds and to access traditional commercial financing sources.

Project proponents must commit to measure and report on the results obtained through the implementation of projects funded by FedDev Ontario.

8. Eligible costs

To be considered an eligible cost, expenses must:

- ◆ be directly related to the project;
- ◆ be deemed reasonable and necessary for project execution; and
- ◆ be incurred after the project has received the Agency's approval.

Agency priorities, policies and guidelines are taken into account in the analysis of costs.

9. Ineligible Costs

The following costs are not eligible:

- ◆ cost of membership in a professional body;
- ◆ fines and penalties;
- ◆ capital depreciation;
- ◆ non-incremental wages and/or fees for administrators;
- ◆ land or vehicle purchase;
- ◆ the tax on goods and services (GST or any similar tax) and any Ontario sales tax eligible for repayment or input tax credit;
- ◆ the applicant's current debts;
- ◆ any costs that are not incremental to the applicant;
- ◆ any costs that are not directly related to the project; and
- ◆ ongoing or normal operating costs.



10. Capital projects

Up to 50 per cent funding is available for eligible costs which include:

- ◆ machinery and equipment needed for the project;
- ◆ working capital requirements related to an expansion project;
- ◆ site improvements such as land clearing and paving required for the project;
- ◆ leasehold improvements required for the project;
- ◆ leased equipment and expenditures under conditional sales contracts;
- ◆ infrastructure (such as water and sewer) required for a specific business development initiative;
- ◆ intangible assets such as patents, trademarks and licenses;
- ◆ start-up costs such as insurance and interest capitalized during construction; and
- ◆ the construction or acquisition of a building.

11. Non-capital projects

Up to 75 per cent funding is available for eligible costs which include:

- ◆ **Marketing:** Includes the development of a marketing plan, the hiring of marketing expertise to implement the plan, and related marketing activities such as labelling, packaging, promotional materials, advertising, product demonstrations and participation at trade shows.
- ◆ **Training:** Includes the development of a training plan, the hiring of training expertise to implement the plan and related activities such as training materials, seminar fees, and wages during the time that employees received off-the-job training.
- ◆ **Productivity/Quality Improvement:** Includes the development of a productivity or quality improvement plan, the hiring of expertise to implement the plan, and related activities such as obtaining a recognized quality certification such as ISO, and the cost of needed technical equipment.
- ◆ **Innovations:** Includes costs related to researching and developing new or improved products, services and processes such as the labour costs of expertise, materials, special equipment, testing and patents.
- ◆ **Consultant Advice:** Includes the cost of hiring a qualified consultant to prepare a business plan, feasibility study, investigate licensing opportunities, conduct a venture capital search, technology transfer search or provide advice to improve your business skills.
- ◆ **Contract Bidding:** Includes the cost of improving your competitive ability to bid on and acquire public and private sector contracts.
- ◆ **Business Proposal Development:** Includes the cost of turning your idea into a viable business proposal, for example, the completion of feasibility study, prototype development, and gathering information on markets and raw material suppliers.
- ◆ **Business Support:** Not-for profit organizations may qualify for assistance towards activities that support the business community, entrepreneurship or economic development.



12. Project assessments

The objective of CAF is to provide economic stimulus to mitigate the short-term impacts of the economic downturn by creating employment opportunities and to address transitional and adjustment challenges in restructuring communities.

In order to meet this objective, projects will be assessed based on the degree to which they contribute to the expected outcomes of:

- ◆ job creation or preservation;
- ◆ the creation, expansion or strengthening of a business; and
- ◆ the enhancement of competitiveness and sustainability of communities and businesses.

Priority will be given to projects that:

- ◆ create immediate and sustained employment;
- ◆ create the most jobs per dollar invested;
- ◆ build on collaborative agreements already in place (e.g., federal-provincial agreements and existing programs);
- ◆ provide a legacy of longer-term ecological and/or economic benefits; and
- ◆ demonstrate leveraging of other sources of financing.

Projects will also be assessed against the following criteria:

- ◆ ability to start quickly and be completed by March 31, 2011;
- ◆ diversification of local economy;
- ◆ compatibility with CAF objectives;
- ◆ economic impact of the project;
- ◆ long-term economic viability of the project;
- ◆ incremental nature of the assistance;
- ◆ demonstrated financial need for implementation of the project, taking other existing funding sources into account;
- ◆ demonstrated evidence that the project meets a recognized need and significantly contributes to a region's economic development;
- ◆ applicant's management capacity;
- ◆ viability of the enterprise or organization;
- ◆ applicant's financial contribution to the project;
- ◆ level of risk involved; and
- ◆ undue adverse impacts on competition.

FedDev Ontario will take other federal government funding into consideration when determining eligibility under this program. Only in exceptional circumstances will CAF funds be used to support projects that are eligible for funding under other federal government programs.



13. Environmental Assessment

All projects receiving federal funding must be reviewed under the Canadian Environmental Assessment Act and may require a federal environmental assessment in addition to any provincial or municipal assessment already conducted.

14. Application Process

Applications will be accepted until January 18, 2010 at 3 p.m. Multi-year projects will not be considered. Please refer to the How to Apply section of the Fed Dev Ontario website at www.southernontario.gc.ca for information and instructions on the application process.

Source: http://www.feddevontario.gc.ca/eic/site/723.nsf/eng/h_00100.html

C.2 Other Programs - “Sunsetting” Programs

Infrastructure Canada manages the following infrastructure programs, which are established initiatives scheduled to wind down (“sunset”) over the next several years.

- Public Transit Fund
- Municipal Rural Infrastructure Fund
- Canada Strategic Infrastructure Fund
- Border Infrastructure Fund
- Infrastructure Canada Program

C.2.1 Canada Strategic Infrastructure Fund

The Canada Strategic Infrastructure Fund (CSIF) has been helping to support large-scale projects of major federal and regional significance in areas that are vital to sustaining economic growth and enhancing the quality of life of Canadians.

CSIF projects support infrastructure in the following five investment categories:

- Highways and railways
- Local transportation
- Tourism or urban development
- Water or sewage
- Broadband (telecommunications connectivity)

CSIF has placed emphasis on partnerships with any combination of municipal, provincial, territorial governments, as well as the private sector. Each partnership is governed by specifically-tailored arrangements.

Benefits to Canadians

- ◆ Safer and faster movement of people and goods on Canada's major land transportation routes
- ◆ Reduced production of greenhouse gases and airborne pollutants
- ◆ Increased effectiveness of urban development



- ◆ Increased economic activity, including tourism
- ◆ Use of innovative technologies and practices to minimize greenhouse gas emissions

Source: http://www.feddevontario.gc.ca/eic/site/723.nsf/eng/h_00105.html

C.3 Next Generation of Jobs Fund

The Next Generation of Jobs Fund (NGOJF) supports a number of strategic and innovative projects in priority sectors of the economy since March 2008 through three programs: the Jobs and Investment Program (JIP), the Biopharmaceutical Investment Program (BIP), and the Strategic Opportunities Program (SOP). To date, the fund has leveraged over \$3 billion in new private-sector investments, and is creating or retaining over 10,000 jobs.

In order to ensure that the province's partnerships continue to serve the evolving needs of the business community, the province will take this time to review options for the fund going forward. We have received an impressive number of NGOJF JIP applications, and while complete applications received to date will continue to be processed, the NGOJF JIP will not be accepting new applications effective December 15, 2009.

A pause in applications is a fair step to take for businesses that would otherwise invest time and money in completing new applications.

The NGOJF JIP has supported a number of strategic and innovative projects in priority sectors of the economy under the JIP.

- Leveraged \$3.29 billion in total private-sector investments.
- Contributed \$413 million in total grants to businesses.
- Creating and retaining thousands of high-value, high-paying jobs through the global recession. Recipient companies announced over 10,000 jobs in total.
- Strengthened priority sectors of the economy, such as ICT/Digital Media, Clean Industries, and Advanced Health.
- Created synergies between business people, entrepreneurs, and researchers.
- Supported the research and development of innovative applications and products.

C.4 Communities in Transition

It's no secret that many communities and regions across Ontario are facing economic development challenges and need help developing innovative solutions for their futures.

That's why the government created the Communities in Transition Initiative.

It's a flexible program that lets communities and regions apply at any time for help developing a strategy for their economic growth. Staff in the Communities in Transition Office is available to work one-on-one with community representatives to review specific challenges and opportunities and advise on project proposals.

Communities that have already benefited from the initiative include St. Thomas, Fort Erie, Windsor and Smiths Falls.



C.5 Advanced Manufacturing Investment Strategy (AMIS)

The Advanced Manufacturing Investment Strategy (AMIS) supports investments in leading-edge technologies and processes by eligible manufacturing firms in Ontario. To date the program has leveraged \$900 million in new investments, and is creating or retaining more than 4,300 jobs.

In order to ensure that the province's partnerships continue to serve the evolving needs of manufacturers and business, Ontario will take the time to review options for the program going forward. While complete applications received to date will continue to be processed, the AMIS program is not accepting new applications effective February 15, 2010.

A pause in applications is a fair step to take for businesses that would otherwise invest time and money in completing new applications.

Under AMIS and in cooperation with industry, the government:

- has made loan commitments of over \$115 million;
- is generating about \$950 million in new investments and support;
- is creating or retaining more than 4,400 jobs in 17 communities over a five-year period.
- is creating synergies between business people, entrepreneurs and researchers;
- is supporting leading-edge technologies and processes; and,
- is strengthening priority sectors of the economy.



Annex D - Project Team

The team for this mission included:

Team and Project leader

Christian Perreault, Senior Partner, Airport Strategic Development

Project team

Nathalie Tousignant, Senior Partner, Director, Strategic & Economic Studies

Jacques Perreault, Research Analysis

Please see below short bios of each team member.

Christian Perreault, Senior Partner, team leader



Christian Perreault holds a Bachelor of Science degree and a Master's degree in International Management from University of Québec in Montreal. Christian has been involved in airport and aerospace economic development for over fifteen years and was previously Vice-President – International Business Development for Longueuil Economic Development, and General Manager for the Haut-Richelieu Economic Council. He is the driving force behind many aerospace-related projects such as the Aerospace Technology Road Map, the Canadian GNSS Institute, and the Longueuil Aerospace Zone, and is actively involved in the Canadian and North-American aerospace sector. He is an active member of the Aerospace Industries Association of Canada, of the Canadian Association of Defence and Security Industries, of the Georgia Airport Association, the Canadian Airport Council, the Canadian Business Aviation Association, and the International Economic Development Council.

Nathalie Tousignant, Director, Economic and Strategic studies



Nathalie possesses vast experience in the air transport industry and as a marketing consultant. She works with various organizations in the field of aviation providing them with strategic consulting and assistance in reaching their goals.

Nathalie started with Explorer Solutions in 2007 as a consultant. Since 2008, she has been our Director of Strategic Studies and Market Development. From 2004 to 2007, she was a member of the board of directors at NAV Canada, the national operator of the civil air navigation system. She served on a number of committees including the *Navigation System Security Commission*.

From 2000 to 2004, Nathalie worked for the largest steel distributor in eastern Canada as a marketing specialist. From 1993 to 2000, she acquired managerial experience, first as the director of a flight school, then in starting, promoting, and developing an air taxi service (Max Aviation, a subsidiary of Cargair Ltd.). During this period, Nathalie acquired invaluable experience in air transport operations. She obtained her private pilot's license in 1993.



Jacques Perreault, Research Analyst



Jacques worked for twenty years in different administrative positions within the Canadian Armed Forces. The knowledge he acquired of the different equipment used by the Navy, Air Force, and Army helped him pursue his career as the director of supply and purchasing and the bidder and purchasing manager for companies such as Termaco Ltd., Equipement Militaires Mil-Quip Inc., and Industries B. Rainville. Today, he intervenes as a senior analyst in supply chain projects, contract negotiations and business intelligence.



Annex E – 2010 Ontario Airport Events

Date	Airport	Event	Miscellaneous
1 – 2 May	Mount Hope	The Canadian Aviation Expo Aviation Trade Show and Canada's Largest Fly-in	www.canadianaviationexpo.com
15 – 16 May	Haliburton/Stanhope	Pancake Breakfast/Brunch	www.stanhopeairport.com
22 – 23 May	Dryden	Dryden Centennial Air Show	
29 May	Westport	Breakfast Fly/Splash In	
5 June	Brantford	Aircraft Spruce 2 nd Annual Canada Super Sale and Fly-In	www.aircraftspruce.ca
13 June	Owen Sound	2 nd Annual Wings and Wheels	Billy Bishop COPA Flight 144
13 June	Cobden	Annual Fly-in Breakfast	COPA Flight 124, Champlain Flying Club
19 – 20 June	Region of Waterloo International Airport	Aviation Expo & Airshow	
20 June	Cornwall	Annual Father's Day Fly-In	COPA Flight 59, Cornwall Flying Club
3 – 4 July	Dunnville	Open House	No. 5 RCAF Dunnville Museum
11 July	Bancroft	Annual Pancake Breakfast	Bancroft Flying Club
17 – 18 July	Goderich	Fly-In Weekend	COPA 45
14 – 15 August	Haliburton/Stanhope	Homebuilt/Ultra-light Fly In	www.stanhopeairport.com
28 – 29 August	Ottawa Rockliffe Airport	Classic Air Rallye	www.flightworks.ca
1 September	Brantford Municipal Airport	Airshow	
11 September	Brampton	RAA-TR Corn Roast	
2 – 3 October	Haliburton/Stanhope	Fall Colour Fly In	www.stanhopeairport.com

This list of events is partial and will be updated as we receive new information. It was tallied from three main sources:

- Benchmarked airports web sites
- COPA (Canadian Owners and Pilots Association) www.copa45.com
- AMCO (Airport Management Council of Ontario)