



Tillsonburg Regional Airport (CYTB)
Airport Master Plan: Report Segment
Economic Impact Study

February 2021



1. Economic Impact Study

1.1 Objectives and Definitions

This portion of the report focuses on identifying and quantifying the direct, indirect and induced economic impacts generated by the airport's activities and its tenants. The objective of this study is to understand the true economic contribution of the airport at the regional level. The data gathered through this study should be used in various discussions and at multiple levels (municipal, regional, provincial and federal) to demonstrate the importance of this important asset for the Town of Tillsonburg and the County of Oxford.

1.1.1 Definitions

For a common understanding of the terminology used in this section, each of the economic impacts are summarized below:

1.1.1.1 Direct economic impacts

Direct economic impacts measure the magnitude of the economic impact generated at the airport from the tenants (including the airport) and passengers visiting the region (tourism spending and attraction). This is the effect generated by the operating expenses, the labour force, their remuneration, and other elements contributing to GDP (gross profits, inventories/stocks, social benefits and taxes) and government revenues.

1.1.1.2 Indirect economic impacts

Indirect economic impacts refer to the chain reactions that the airport activities generate in the regional economy - particularly the jobs and activities generated by regional subcontractors and suppliers collaborating with the airport tenants. In other words, companies in Tillsonburg and across Ontario, whose income generating activities are positively impacted by the vitality of the airport and its traffic, are included in this category.

1.1.1.3 Induced economic impacts

These are the multiplier effects generated by the expenses. Expenditures have direct and indirect effects, and a portion of this revenue is re-injected into the economy in the form of new expenditures on goods and services (consumer spending). These new expenditures will become, in part, revenue for other economic agents who will use, in turn, a fraction to make new expenses, and so on.

1.2 Methodology

In order to obtain the data required to complete the economic impact analysis as accurately as possible, the airport and commercial airport tenants were surveyed. With the help of the Airport Administrator, an exhaustive list of tenants and users was prepared.

In parallel, Explorer Solutions prepared a letter of invitation and a questionnaire that was validated by the Client team. During the week of January 18, 2021, the letter was first sent to the airport and its commercial tenants to solicit their participation in the study. Data was collected between January 18, 2021 and February 4, 2021. We used Qualtrics (online survey tool) to build the questionnaire. Following the initial outreach by email, our team completed a series of follow up attempts by both telephone and email to increase participation rates and to also offer the opportunity to complete the questionnaire by telephone.

Our team then consolidated all collected information in a comprehensive information matrix. Of the eight (8) businesses that were targeted to support the economic impact analysis, six (6) of them participated. The economic impact survey asked respondents for the following financial information to assist with the financial analysis:

- Total Expenses;
- Total Payroll;
- Municipal (Property) Taxes Paid;
- Corporate (Income) Taxes Paid;
- Top outsourced services/products (including description, supplier name, supplier location, and value of annual spending);
- Number of full- and part-time staff;
- Name of city/town of where employees reside;
- Summary of main investments made at the airport over the past three (3) years; and
- Summary of planned investments to be made at the airport over the upcoming five (5) years.

The results of the economic impact analysis are presented in the following section.

1.3 Obtained Results

The results obtained during the economic impact study are segmented into direct, indirect and induced impacts. Data was obtained from either the Airport Administrator and/or the Manager of Public Works regarding information specific to the Tillsonburg Regional Airport and from conversations held with commercial airport tenants.

The commercial operators that were considered for calculating the economic impact of the airport included the Tillsonburg Regional Airport, Skyway Café, Tillsonburg Flying School, Tailwind Aviation Services, Custom Craft, Lee Air Leasing, Canadian Harvard Aircraft Association, and an independent aircraft mechanic.

Table 1 provides a detailed portrait of the recurrent and non-recurrent economic impacts generated by the airport and its tenants for each category and type of impact.

The breakdown of the results begin to provide a glimpse into the magnitude and impact of the airport and its tenants activity along the Tillsonburg value chain. A total of 20 positions exist at the airport and are split evenly between full- and part-time positions. Gross payroll (labour income) of \$632,600 was calculated which contributed to \$93,833 in direct payroll taxation revenue. Municipal property taxes collected from all onsite tenants amounted to \$30,684 and this amount is directed to the Township of South-West Oxford. Due to confidentiality reasons, total gross corporate revenues/profits were not disclosed and as a result, corporate taxes paid were not able to be calculated. Corporate expenses were partially disclosed insofar that total expenses for three (3) commercial operators were provided and the prevailing major expenses/outsourced services were provided for an additional three (3) commercial operators. Together, these amounted to approximately \$1.6 million in corporate spending. The total expenses for the remaining two (2) commercial operators were not provided. The value of current investments (such as construction-related investments) amounted to \$329,000 and one-time equipment purchases totalled \$64,000. Corporate jet visits and passenger spending was calculated at approximately \$2,105 in direct spending and the direct economic impact achieved by the five (5) Fly Days and one Wings and Wheels Day presented by the Canadian Harvard Aircraft Association was assessed at \$44,275.

Together, this direct spending contributed to a total economic impact of \$4,226,203.

Table 1 - Summary of the 2020 Direct, Indirect and Induced Economic Impacts

Categories		Direct Effect	Indirect Effect	Induced Effect	Total
Jobs (FTE)		10	3	2	15
Jobs (PTE)		10	3	2	15
Total Jobs Created		20	6	4	30
Gross Payroll		\$632,600	\$202,432	\$126,520	\$961,552
Province Government Revenues	<i>Payroll Tax</i>	\$32,484	\$10,395	\$6,497	\$49,376
	<i>Total</i>	\$32,484	\$10,395	\$6,497	\$49,376
Federal Government Revenues	<i>Payroll Tax</i>	\$61,399	\$19,648	\$12,280	\$93,326
	<i>Total</i>	\$61,399	\$19,648	\$12,280	\$93,326
Government Revenues		\$93,883	\$30,042	\$18,777	\$142,701
Municipal Taxes Paid to SWOX		\$30,684	9,819	6,137	46,640
Corporate Expenses		\$1,652,125	\$528,680	\$330,425	\$2,511,230
Current Investments		\$393,000	105,280	65,800	564,080
Grand Total		\$2,802,292 66.3%	\$876,253 20.7%	\$547,658 13.0%	\$4,226,203 100.0%

As presented in the table above, the approximate total direct, indirect and induced impacts are respectively ~\$2.8M (66.3%), \$876,253 (20.7%) and \$547,658 (13.0%).

1.4 Geolocation of Employees

Insights from where full- and part-time employees reside can provide additional insights into measuring the breadth of the local economic impact experienced by the airport. Feedback obtained during the consultation process confirmed that ten (10) full-time and 10 part-time positions are fulfilled at commercial operators at the airport. Important to note is that the place of residence for two (2) of the full-time positions were not disclosed and that one of the commercial tenants is maintained by a group of volunteers without paid staff. The volunteers are not counted within the charts below.

Chart 1 reveals that the following number of full-time employees reside in the following towns: Aylmer (1); Dorchester (1); London (1); Mississauga (1); Norwich (1); Tillsonburg (2); Woodstock (1); and Undisclosed (2).

Chart 1 - Number of FTEs Employed at YTB

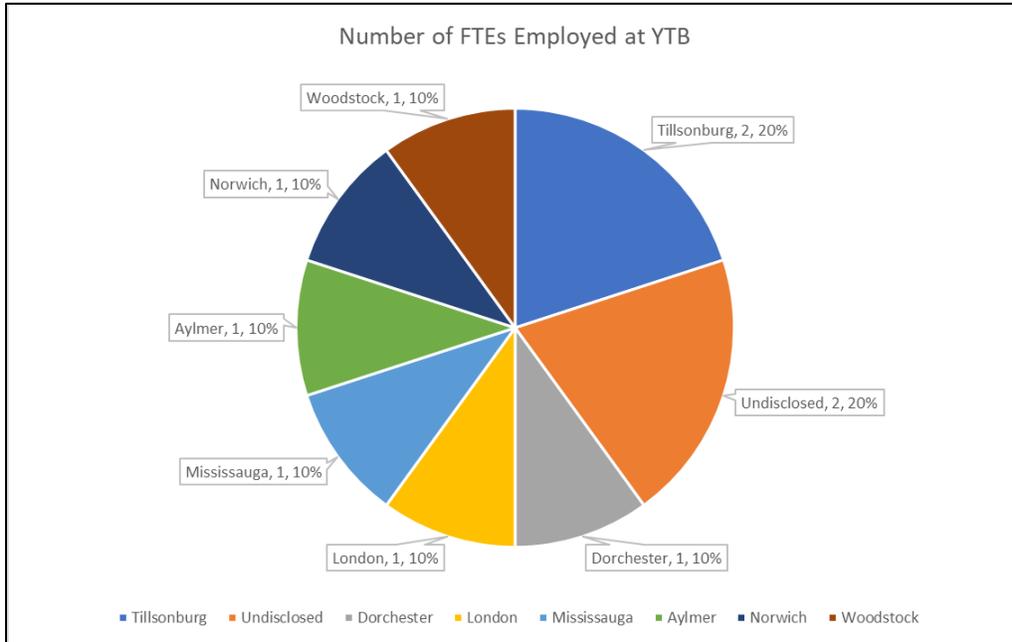


Chart 2 reveals that the ten (10) part-time employees reside in the following towns: Aylmer (1); Brantford (1); Delhi (1); Hamilton (2); and Tillsonburg (5).

Chart 2 - Number of PTEs Employed at YTB

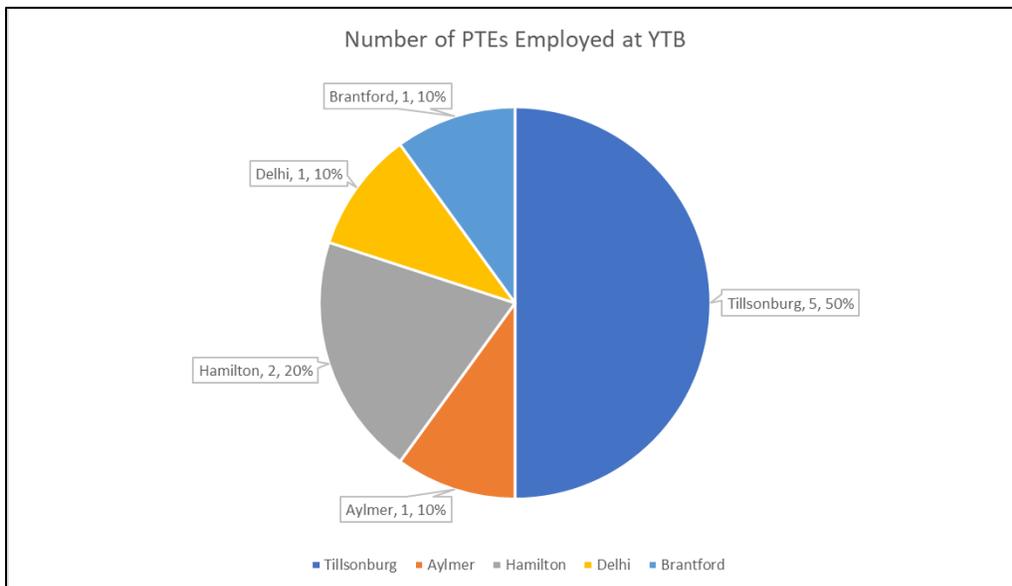


Chart 3 presents the combined total of full- and part-time employees at the airport by place of residence. This includes: Tillsonburg (7); Aylmer (2); Hamilton (2); Undisclosed (2); Dorchester (1); London (1); Mississauga (1); Norwich (1); Woodstock (1); Delhi (1); and Brantford (1).

Chart 3 - Total Jobs Created at YTB

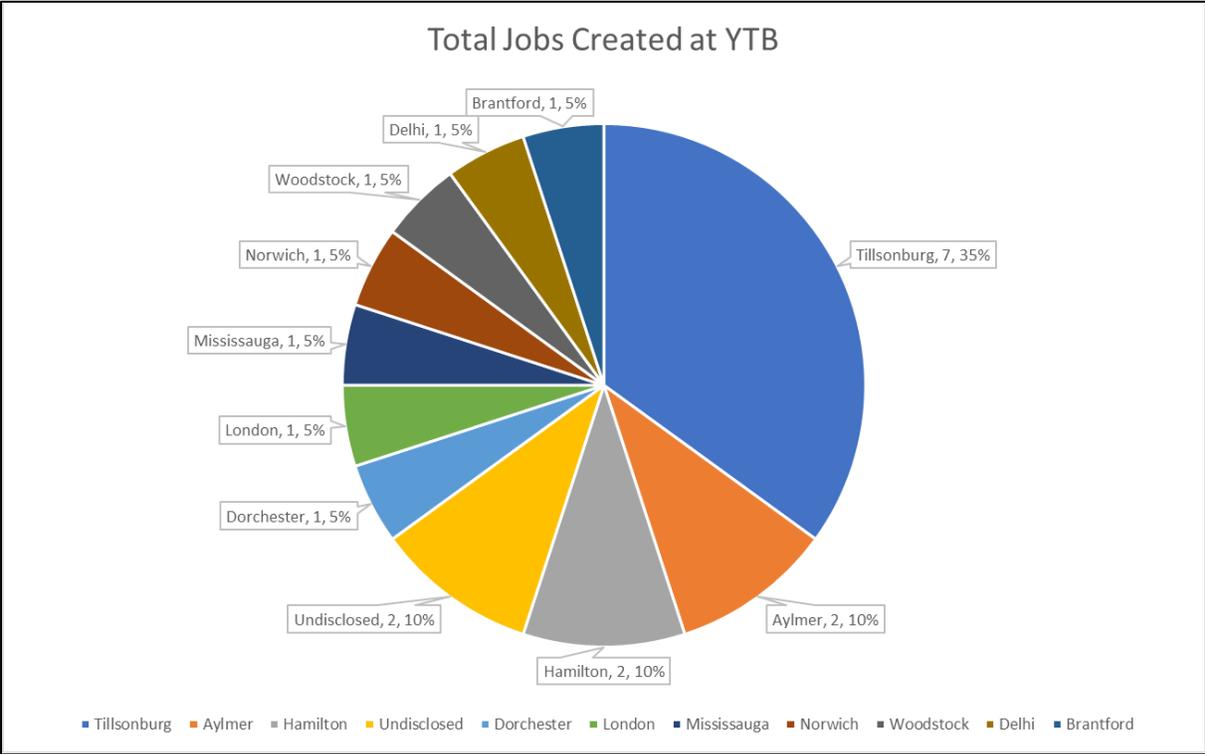
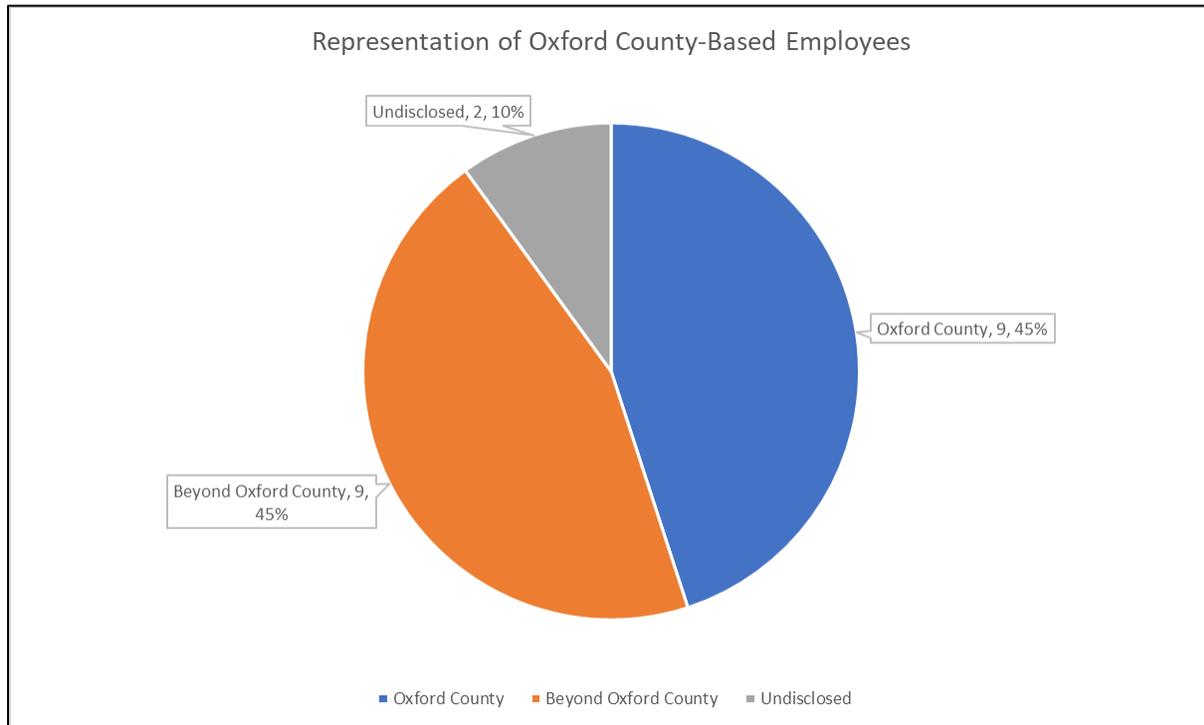


Chart 4 presents the representation of combined full- and part-time employees based on who resides within Oxford County and those who do not. The data indicates that nine (9) employees (representing 45%) of those employed at businesses located on airport property reside in Oxford County. An additional nine (9) employees are not located within Oxford County and two (2) individuals remain undisclosed.

Chart 4 - Representation of Oxford County-Based Employees



1.5 Past, Current and Future Investments

In addition to the airport’s financial statement data, respondents were asked to provide information on past, current and future capital investments that had, are or will occur at the airport. While the 2020 investments will only be included within calculations for determining the overall economic impact, it is important to demonstrate that other investment activities continue to be evident in the airport’s recent history and short-term outlook.

When considering the value and the respective economic impact of past investments, two (2) construction investments were valued together at \$128,000 – both of which were undertaken by the Tillsonburg Regional Airport (yet funded by the Town of Tillsonburg) and took place between 2017 and 2019. Additionally, four (4) GA hangars were constructed between 2016 and 2019. A conservative estimate of \$150,000 was used to estimate the cost of construction associated with each hangar in the General Aviation Park. When considering the acquisition of equipment or one-time major purchases, one (1) investment (from a commercial tenant) totaled \$15,000 and which took place in 2019. While these one-time investments can be interpreted as economic outputs

and not as direct economic impacts, it is important to understand that not all investments have the same level of influence. In fact, construction investments create much more value in the economy compared to investments into equipment.

Table 2 - Summary of Past Investments

Category	Organization	Investment Description	Amount (CAD)	Time Frame
Construction Projects	Tillsonburg Regional Airport	Supporting infrastructure and associated costs <i>(Funded solely by Town of Tillsonburg)</i>	\$128,000	2017
	Private	Hangar Development (4 x \$150,000 ea.)	\$600,000	2016-2019
	Total "Construction Project" value:		\$728,000	
Purchase of Equipment or One-Time Purchases	Commercial Tenant	Aircraft-related expense	\$15,000	2019
	Total "Purchase of Equipment" value:		\$15,000	
	Total "Past Projects" value:		\$743,000	

Considering that the Town of Tillsonburg is a regional centre, a high proportion of these construction investments were more likely to involve local contractors and suppliers. When evaluating the indirect and induced economic impact of equipment purchases, these major pieces of equipment (unless constructed/assembled locally or sold through a local distributor, have very low indirect and induced economic impacts on the local community. That said, it is important to be mindful that equipment purchases can create an operational cost savings which can be attributed to efficiencies, increased quality of work, etc. When combining the direct, indirect and induced impacts of reported past investments, a total economic impact of \$1,121,560 was calculated and is presented in Table 3.

Table 3 - Direct, Indirect and Induced Economic Impacts of Past Investments

Category	Direct	Indirect	Induced	Total Impact
Construction Projects	\$728,000	\$232,960	\$145,600	\$1,106,560
Purchase of Equipment	\$15,000	n/a	n/a	\$15,000
Total:	\$743,000	\$232,960	\$145,600	\$1,121,560

While not accounted for in the calculated Past Investments above, but still worth making reference to is the anecdotal information obtained on behalf of one (1) commercial tenant who acknowledged an undisclosed series of investments which had been made into their onsite operations each year since 2012.

In considering the Current Investments which took place at the airport throughout 2020, Table 4 presents one (1) construction investments initiated by the airport (and funded by the Town of Tillsonburg) valued at \$29,000 and also the construction of two (2) hangars in the General Aviation Park. Again, an estimated cost of construction of \$150,000 per hangar was utilized. When considering the acquisition of equipment or one-time major purchases, two (2) investments totaled \$64,000 – one of which was associated with the airport (and funded by the Town of Tillsonburg) and a second with a commercial tenant.

Table 4 - Summary of Current Investment

Category	Organization	Investment Description	Amount (CAD)	Time Frame
Construction Projects	Tillsonburg Regional Airport	Supporting infrastructure and associated costs <i>(Funded solely by Town of Tillsonburg)</i>	\$29,000	2020
	Private	Hangar Development (2 x \$150,000 ea.)	\$300,000	2020
	Total "Construction Project" value:		\$329,000	
Purchase of Equipment or One-Time Purchases	Tillsonburg Regional Airport	Equipment purchase <i>(Funded solely by Town of Tillsonburg)</i>	\$19,000	2020
	Commercial Tenant	Equipment purchase	\$45,000	2020
	Total "Purchase of Equipment" value:		\$64,000	
	Total "Current Projects" value:		\$393,000	

When combining the direct, indirect and induced impacts of reported Current Projects, a total economic impact of \$564,080 was calculated and is presented in Table 5.

Table 5 - Direct, Indirect and Induced Economic Impacts of Current Investments

Category	Direct	Indirect	Induced	Total Impact
Construction Projects	\$329,000	\$105,280	\$65,800	\$500,080
Purchase of Equipment	\$64,000	n/a	n/a	\$64,000
Total:	\$393,000	\$105,280	\$65,800	\$564,080

Looking into the future, Table 6 presents a series of planned investments identified to take place at the airport. Three (3) construction investments are associated with the Tillsonburg Regional Airport and two (2) additional hangars are scheduled for construction in the General Aviation Park throughout 2021. An estimated budget of \$150,000 per hangar was utilized to calculate each investment.

One (1) commercial tenant indicated a need to invest in upgrading a series of existing equipment. At the time of undertaking the consultation process, no other future investments or equipment were disclosed by airport tenants. The total value of planned construction investments and equipment purchase was calculated at \$508,000.

Table 6 - Summary of Future Investments

Category	Organization	Investment Description	Amount (CAD)	Timeframe
Construction Projects	Tillsonburg Regional Airport	Supporting infrastructure and associated costs #1 <i>(to be Funded solely by Town of Tillsonburg)</i>	\$195,000	2021
		Supporting infrastructure and associated costs #2	tbd	2021
		Supporting infrastructure and associated costs #3	tbd	tbd
	Private	Hangar Development (2 x \$150,000 ea.)	\$300,000	2021
Total "Construction Project" value:			\$495,000	
Purchase of Equipment	Commercial Tenant	Commercial equipment	\$13,000	tbd
	Total "Purchase of Equipment" value:			\$13,000
Total "Future Projects" value:			\$508,000	

Similar to the presentation of Current Investments, it is possible to estimate the direct, indirect and induced economic impacts for the planned construction investments to come. Based on the direct investments of \$508,000 into airport-related construction investments and the purchase of equipment, a total economic impact of \$765,400 can be estimated (see Table 7).

Table 7 - Direct, Indirect and Induced Economic Impacts of Future Investments

Category	Direct	Indirect	Induced	Total Impact
Construction Projects	\$495,000	\$158,400	\$99,000	\$752,400
Purchase of Equipment	\$13,000	n/a	n/a	\$13,000
Total:	\$508,000	\$158,400	\$99,000	\$765,400

1.6 Economic Impacts Generated by Corporate Expenses

1.6.1 Economic Impacts Generated by Corporate Expenses

This section seeks to understand the economic impact of the total corporate expenses which takes place from the commercial activity at the airport over the course of a year. Table 8 presents a summary of those direct corporate expenses (\$1,605,745) which translate into a total economic impact of approximately \$2,440,732. This includes being provided with the total corporate expenses from three (3) businesses onsite, including the major outsourced expenses from three (3) other businesses. Information regarding major outsourced or complete expenses from the remaining two (2) commercial tenants was not provided.

Table 8 - Summary of Corporate Expenses

Category	Direct	Indirect	Induced	Total Impact
Value of Corporate Expenses	\$1,605,745	\$513,838	\$321,149	\$2,440,732
Total:	\$1,605,745	\$513,838	\$321,149	\$2,440,732

1.6.2 Economic Impacts Generated by Corporate Jets and Passengers

In addition to the impacts generated by airport tenants, it is important to consider corporate jet visits and passengers traveling from outside the region who use the airport for business purposes. Passenger data for non-commercial jets is not recorded by the airport, so this segment only focuses on the economic impacts associated with commercial jet activity. Furthermore, since the 2020 calendar year was heavily impacted as a result of the Covid-19 pandemic, this segment takes into consideration the corporate jet activity for the 2019 calendar year as a truer representation of a typical year of corporate jet activity.

The information utilized to calculate the 2019 corporate jet activity was provided in the form of aircraft jet logs provided by the Airport Administrator. With these various parameters in hand, the estimated economic impacts of the corporate jet and passenger activity are calculated in Table 9. The total spending was estimated at \$3,200 in 2019, which reflects the direct, indirect and induced impacts generated by the external corporate jet and visitors using the airport.

Table 9 - Assumptions and Calculation of the Economic Impacts Generated by Corporate Jets and Passengers

Categories	Description	Spending
Total Number of Jet and Duration of Stay	# of Corporate Jet Visits (<1 hour) = 23 # of Corporate Jet Visits (1-4 hours) = 22 # of Corporate Jet Visits (> 4 hours) = 1	n/a
Total Number of Jet Passengers	# of Crew = 96 # of Passenger = 104	n/a
Landing Fees	Corporate Jet (\$40 per landing) = net 13 Corporate Jet (\$25 up to 4 hours) = net 6 Corporate Jet (\$50 per day) = net 1 * Landing Fees are waived with fuel purchase	\$870
Food and Beverage Assumptions	Onsite dining average transaction size - \$15 # of Corporate Jet Visits that record dining onsite - 12 # of passengers who dine onsite - 79	\$1,185
Fuel Assumptions	# of aircraft which purchased fuel - 25 * Since fuel consumption at the airport was already accounted for in the outsourced expenses, they were not doubled counted here	n/a
Other Spending Assumptions	1 corporate jet visit recorded having rented a vehicle for less than a 24-hour period (\$50)	\$50
Total Annual Spend (Direct Economic Impact):		\$2,105
Total Indirect Economic Impact:		\$674
Total Induced Economic Impact:		\$421
Total Economic Impact:		\$3,200

1.6.3 Economic Impacts Generated by the Canadian Harvard Aircraft Association

The Tillsonburg Regional Airport has a unique asset which not only adds value to the airport's overall brand but acts as a source of income (as a paying tenant) and is seen as also adding tremendous value to the local community.

The Canadian Harvard Aircraft Association (CHAA) is known for putting on a series of community-based aviation events throughout the year. Amongst its annual programming is its Fly Days which are typically offered five (5) times per season. These smaller events will often draw in 150 people (on average) throughout the day. Many of these individuals will enjoy lunch or a bite to eat at the onsite café, while others (especially more out-of-town guests) may grab a bite to eat within the Town of Tillsonburg or another nearby location which may also offer some type of shopping experience. Additionally, a portion of these out-of-town visitors will also have to refuel their vehicles prior to returning home and these purchases are also often typically made locally.

The following conservative assumptions were discussed in consultation with a representative on behalf of the CHAA and are considered to be anecdotal evidence to support the calculation of the local economic impact of the Fly Days programming. Furthermore, out-of-town guests are considered to be individuals and/or groups who travel from a distance greater than a 20-30-minute commute from the Tillsonburg Regional Airport. When these parameters are applied, the combined direct, indirect and induced economic impact generated by CHAA's Fly Days is approximately \$24,548 as evident in Table 10

Table 10 - Assumptions and Calculation of the Economic Impacts Generated by CHAA's Fly Days

Categories	Description	Spending (Annualized)
Fly Days	<ul style="list-style-type: none"> • Number of annual events = 5 • Average number of attendees per event = 150 	n/a
Assumptions: Food & Beverage Purchases at Airport	<ul style="list-style-type: none"> • 60% of total attendees buy food onsite during event = 90 • Average spend per person on food/beverage = \$15 	\$6,750
Assumptions: Food & Beverage Purchases within the Local Community	<ul style="list-style-type: none"> • 20% of total attendees buy food in the local community = 30 • Average spend per person on food/beverage = \$15 	\$2,250
Assumptions: Local Tourism Spending	<ul style="list-style-type: none"> • 20% of total attendees shop locally while in town = 30 • Average spend per person on local purchases = \$25 	\$3,750
Assumptions: Passenger Vehicle Fuel Purchases	<ul style="list-style-type: none"> • 70% of total attendees are non-residents = 105 • Average number of people per party/vehicle = 3 • Number of out-of-town vehicles = 35 • 50% of out-of-town groups fuel up their vehicle in town = 17 • Average transaction size to fuel up a vehicle = \$40 	\$3,400
Total Annual Spend (Direct Economic Impact):		\$16,150
Total Indirect Economic Impact:		\$5,168
Total Induced Economic Impact:		\$3,230
Total Economic Impact:		\$24,548

In considering the economic impact of CHAA's Wings and Wheels Day, a similar approach was applied and which was discussed with the same representative on behalf of CHAA to derive a combined direct, indirect and induced economic impact of \$42,750 as presented in Table 11.

Table 11 - Assumptions and Calculation of the Economic Impacts Generated by CHAA's Wings and Wheels Day

Categories	Description	Spending (Annualized)
Wings and Wheels Day	<ul style="list-style-type: none"> • Number of Events in 2019 = 1 • Average number of attendees per event = 1,250 	n/a
Assumptions: Food & Beverage Purchases at Airport	<ul style="list-style-type: none"> • 70% of total attendees buy food onsite during event = 875 <ul style="list-style-type: none"> • 60% of which buy from onsite food trucks = 525 • 40% of which dine onsite = 350 • Average spend per person on food/beverage = \$15 	\$13,125
Assumptions: Food & Beverage Purchases within the Local Community	<ul style="list-style-type: none"> • 20% of total attendees buy food in the local community = 250 • Average spend per person on food/beverage = \$15 	\$3,750
Assumptions: Local Tourism Spending	<ul style="list-style-type: none"> • 20% of total attendees shop locally while in town = 250 • Average spend per person on local purchases = \$25 	\$6,250
Assumptions: Passenger Vehicle Fuel Purchases	<ul style="list-style-type: none"> • 60% of total attendees are non-residents = 750 • Average number of people per party/vehicle = 3 • Number of vehicles = 250 • 50% of out-of-town groups fuel up their vehicle = 125 • Average transaction size to fuel up a vehicle = \$40 	\$5,000
Total Annual Spend (Direct Economic Impact):		\$28,125
Total Indirect Economic Impact:		\$9,000
Total Induced Economic Impact:		\$5,625
Total Economic Impact:		\$42,750

Together, these six (6) activities have an approximate combined direct, indirect and induced economic impact of \$67,298.

In summary, the total economic impact of all Corporate Expenses is \$2,511,230 as presented in Table 12.

Table 12 - Summary of Corporate Expenses Split out by Type

Category	Direct	Indirect	Induced	Total Impact
Value of Corporate Expenses	\$1,605,745	\$513,838	\$321,149	\$2,440,732
Value of Corporate Jets and Passengers	\$2,105	\$674	\$421	\$3,200
Value of CHAA Annual Events	\$44,275	\$14,168	\$8,855	\$67,298
Total:	\$1,652,125	\$528,680	\$330,425	\$2,511,230

1.7 Conclusion

As a result of the data obtained and presented above contributes to a calculated total economic impact of approximately \$4,226,203 during the 2020 calendar year.

While the Town of Tillsonburg funds the investments at the Airport, the Township of Southwest Oxford receives the municipal taxes and all area municipalities indirectly benefit from the Airport spin off revenues.

The County of Oxford benefits with 45% all employees located at the airport residing throughout the County.

1.8 Disclaimer

It is hypothesized that this is a conservative estimate based on the following reasons:

- The total salaries from three (3) of the independent operators were estimated at \$60,000 per year and it is believed that this figure should be much greater;
- The exact breakdown of payroll by employee for two (2) commercial businesses were not disclosed, so a calculated estimate was utilized in order to determine the approximate paid provincial and federal payroll taxes;
- Corporate profits were not disclosed for any of the commercial operators which meant that corporate taxes paid were not able to be calculated;
- Three (3) of the eight (8) commercial businesses provided their total annual expenses, a further three (3) provided their major outsourced expenses and the remaining two (2) did not provide any details of their corporate expenses. As a result, the reported figure could be higher;
- The percentage of employee payroll which should be determined as mandatory and/or discretionary spending in order to calculate HST on purchases made was not determined.