

2023

# Economic Impact Study

Region of Waterloo International Airport (YKF)

FINAL REPORT JANUARY 31, 2025



InterVISTAS

## Executive Summary

This study examines the economic impact generated from the operations related to the Region of Waterloo International Airport (YKF) and all businesses operating at YKF in the Province of Ontario, based on a review of businesses and associated activities in 2023.

*Economic impact* is a measure of the spending and employment associated with a sector of the economy, a specific project, or a change in government policy or regulation. In this case, economic impact refers to the economic contribution associated with the ongoing activities of YKF, all Region of Waterloo International Airport tenants and subtenants, as well as associated firms located off-airport. The economic contribution of the operations at the airport to the community is termed the *economic impact of YKF*. The three major components of economic impact are classified as *direct*, *indirect*, and *induced impacts*.<sup>1</sup> Together, they provide a snapshot of how the operations of the airport benefit the local and regional economy.



***The economic impact of Region of Waterloo International Airport in 2023 includes 660 direct jobs, generating \$50 million in direct wages.***

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<sup>1</sup> Direct impacts account for the economic activity of the target sector itself. Indirect impacts are those that result because of the direct impacts, which involve employment in upstream industries (i.e., suppliers) that arise from the presence of YKF. Induced employment is generated from expenditures by individuals employed directly or indirectly by the airport.

## Economic Impact (2023)

A wide range and significant number of individuals are involved in the arrival and departure of each flight at an airport – servicing the aircraft, as well as the passengers and cargo onboard. In addition, YKF supports the employment of the various tenants and subtenants operating on airport property. **Figure ES-1** shows a breakdown of the direct jobs at YKF and the industries of employment.

**Figure ES-1: Direct Employment by Industry at Region of Waterloo International Airport, 2023**



Source: YKF Employment Survey and InterVISTAS Analysis.


The current economic impact of YKF is summarized in **Figure ES-2**.<sup>2</sup> *Direct* economic impact measures the employment and economic impact directly associated with the airport. This includes employment of all airport terminal building tenants, YKF tenants, subtenants, and relevant employment of firms that are located off-airport. *Indirect* and *induced* impacts are multiplier impacts in the wider economy stimulated by the airport's activities (e.g., other businesses that supply goods and services to the airport, and spending by employees of firms that operate at YKF).

Emphasis is placed on the direct economic impact as this was based on data from the employment survey and is clearly identifiable. The indirect and induced impacts were derived from Statistics Canada

<sup>2</sup> The results of this study are based on a review of 2023 operations.

economic multipliers for Ontario.<sup>3</sup> These impacts were assessed using the corresponding economic multipliers for each of the relevant industries that operate on airport lands.

**Figure ES-2: Annual Ongoing Economic Impact of Region of Waterloo International Airport's Total Operations, 2023**



Impact	Employment Jobs	Wages (\$ Millions)	GDP (\$ Millions)	Economic Output (\$ Millions)
Direct	660	\$50	\$90	\$220
Indirect	440	\$30	\$50	\$110
Induced	260	\$20	\$30	\$60
<b>Total ON</b>	<b>1,360</b>	<b>\$100</b>	<b>\$170</b>	<b>\$390</b>

Note: Totals may not sum due to rounding.

The *direct* impact of YKF in 2023 is estimated to be equivalent to 660 *direct* jobs, earning approximately \$50 million in *direct* wages and an average of \$78,340 per job. This compares to the average annual provincial wage of roughly \$64,000 across all industries, reflecting the large number of high skilled positions that are supported by the airport's operations.<sup>4</sup> Direct employment generates \$90 million in *direct* GDP and \$220 million in *direct* economic output annually.

*Total* impacts are calculated by adding together the *direct*, *indirect*, and *induced* impacts. Including indirect and induced multiplier impacts, current economic impact of YKF include a *total* of 1,360 jobs in Ontario. *Total* earnings of all associated provincial employees amount to \$100 million in wages. Furthermore, YKF's operations contribute an estimated \$170 million and \$390 million in *total* GDP and *total* economic output, respectively, to the provincial economy.

YKF also contributes wider economic benefits to the region beyond the direct, indirect, and induced economic impact that can be more difficult to quantify. The airport facilitates increased trade, attracts new businesses, and encourages investment, which generates local employment and economic development in the region. YKF is vital in providing links between the regional and national economy, supporting long-term economic growth by creating jobs, establishing connections to business markets,

<sup>3</sup> The direct GDP, direct economic output, indirect and induced economic impacts are calculated using Statistics Canada multipliers for Ontario (2019), adjusted for inflation. [Statistics Canada](#) recommends using the 2019 Input-Output multiplier dataset as the most suitable for assessing impacts related to current economic conditions, as the more recent ratios and multipliers for 2020 reflect the unique conditions caused by the global pandemic and not reflective of the current economy. Multiplier impacts must be interpreted with caution since they may be illusory when the economy experiences high employment and output near industry capacity.

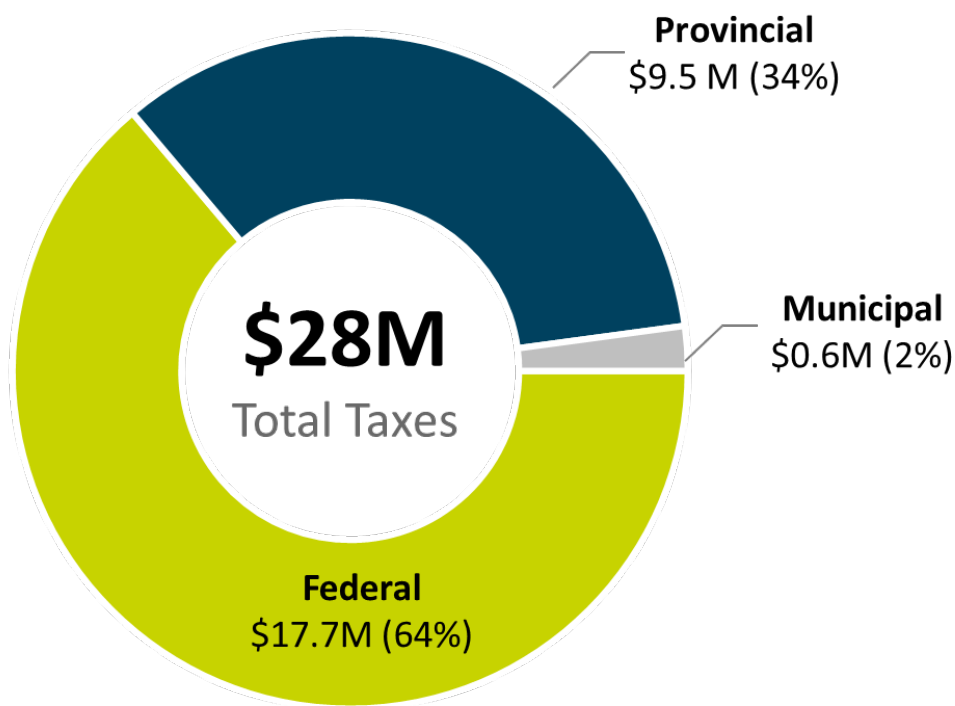
<sup>4</sup> Statistics Canada. Table 14-10-0204-01 Average weekly earnings by industry, annual (all industries), 2023, calculated for annual earnings.

and providing access to resources. Not only does this benefit direct airport users, but more importantly YKF's operations extend positive impacts on the performance and economic activity of the region. Overall, YKF is essential in facilitating economic development, and contributes to Ontario's attractiveness and competitiveness as a province.

## Tax Contributions (2023)

YKF is also an important generator of tax revenues to all levels of government. Total tax contributions in 2023 are estimated at nearly \$28 million. Majority of YKF's taxes accrue to the federal and provincial governments, accounting for 64% and 34%, respectively, of the total tax revenues generated by YKF. The municipal government benefits from YKF through the collection of property taxes from airport tenants, amounting to nearly \$0.6 million paid to the Regional Municipality of Waterloo. **Figure ES-3** provides a summary of the taxes collected.

**Figure ES-3: Estimated Annual Tax Revenues Generated at Region of Waterloo International Airport (YKF), 2023**



Note: Taxation impacts are based on 2023 tax rates. Total may not sum, due to rounding.

# Contents

<b>Executive Summary</b> .....	<b>i</b>
Economic Impact (2023) .....	i
Tax Contributions (2023) .....	iii
<b>1 Introduction</b> .....	<b>1</b>
1.1 Region of Waterloo International Airport .....	1
1.2 Regional Economy Overview .....	3
1.3 The Importance of YKF to the Community .....	4
1.4 Economic Impact Overview .....	5
<b>2 Methodology</b> .....	<b>8</b>
2.1 Estimating Current Economic Impact .....	9
2.2 Inferring Employment .....	10
2.3 Estimating Indirect and Induced Impacts .....	10
2.4 Estimating Tax Revenue Impacts .....	12
<b><i>Case Study: Supporting the Training and Development of Future Aviation Professionals</i></b> .....	<b>13</b>
<b>3 Economic Impact of YKF's Operations</b> .....	<b>16</b>
3.1 Ongoing Operations at YKF .....	16
3.2 Commercial Air Services at YKF.....	18
<b>4 Tax Impacts of YKF's Ongoing Operations</b> .....	<b>21</b>
4.1 Tax Contributions by Level of Government .....	22
<b>5 Estimated One-Time Capital Expenditure Impacts at YKF</b> .....	<b>24</b>
5.1 Economic Impact of Capital Expenditures at YKF .....	24
<b><i>Case Study: Flair Airline's Impact on the Region of Waterloo</i></b> .....	<b>25</b>
<b>6 Summary of Results</b> .....	<b>27</b>
6.1 Economic Impact.....	27
6.2 Annual Tax Contribution .....	29
<b>Appendix A: Employment Survey</b> .....	<b>30</b>
<b>Appendix B: Sample Survey</b> .....	<b>33</b>
<b>Appendix C: Summary of Direct Jobs</b> .....	<b>40</b>
<b>Appendix D: Inferred Employment</b> .....	<b>41</b>
<b>Appendix E: Contract Employment</b> .....	<b>42</b>
<b>Appendix F: Tax Revenues Attributable to YKF Employers</b> .....	<b>43</b>
<b>Appendix G: Tax Revenues Attributable to Airport Users</b> .....	<b>48</b>
<b>Appendix H: Glossary of Terms</b> .....	<b>50</b>

# 1 Introduction

InterVISTAS Consulting Inc. was commissioned by the Region of Waterloo International Airport (YKF) to conduct a study on the economic impact of the airport based on its operations in 2023. This analysis examines the economic impact generated by operations and activities of the airport and related businesses in the Province of Ontario, including the contribution of all airport tenants and aviation-related firms located offsite.

YKF plays a vital role in the local and provincial economy. The airport enables passenger and cargo transportation, while also providing a hub for various businesses. YKF serves both commercial air services and general aviation, which fosters employment opportunities and contributes substantially to the Ontario economy.

## 1.1 Region of Waterloo International Airport

In 2023, the Regional Municipality of Waterloo reported a population of 673,910,<sup>5</sup> with a median household income for residents in the region of \$81,000 as reported in the 2021 Census. The key industries supporting the region include advanced manufacturing, automotive, robotics and digital media, with the region eager to continue growing its technology cluster. The Region of Waterloo is located 105 km west of Toronto, connecting it to a large metropolitan region with one of the fastest growing tech workforces in North America.

The Region of Waterloo International Airport (YKF), originally constructed as the Kitchener-Waterloo Municipal Airport in 1929, has grown from two grass air strips to one of Canada's busiest airports. Renamed in 2004 to reflect its international reach, the airport supports a variety of commercial, corporate, and general aviation needs. YKF is a full-service airport that services southwestern Ontario and connects the region to destinations in Canada and beyond, with year-round commercial flights to cities like Vancouver, Calgary, and Halifax. The airport's location in central southwestern Ontario supports regional trade and tourism.

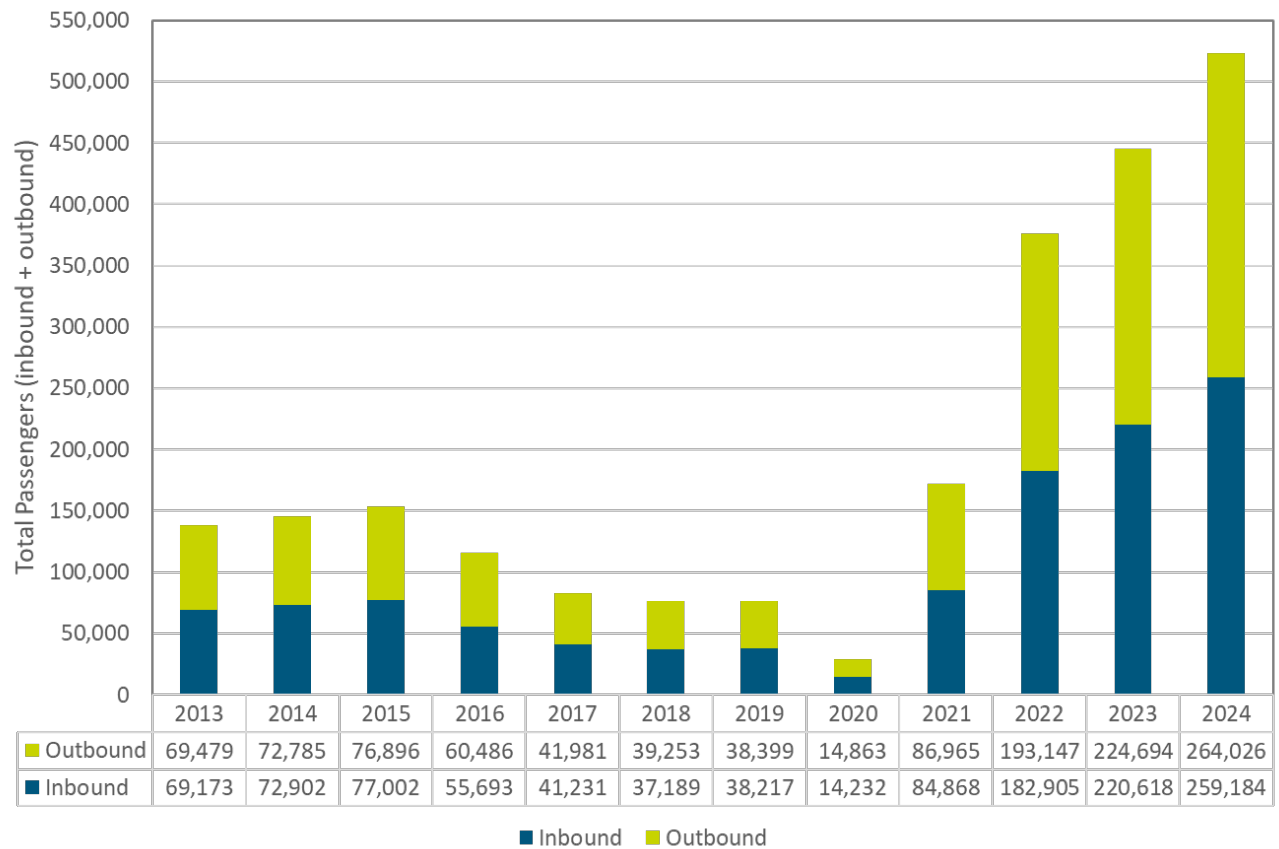
Commercial air services at YKF are currently offered by Flair and WestJet, with some seasonal services offered under the Sunwing Airlines brand. Since Flair's entry to the Region of Waterloo market in 2021, the airport's traffic levels have increased substantially, providing residents and businesses with greater overall connectivity to domestic, U.S., and other international destinations.

**Figure 1-1** shows the total passenger volume levels at YKF from 2013 to 2023. From the lows experienced during the pandemic (less than 30,000 passengers were handled in 2020) to over 440,000 passengers handled in 2023, YKF has demonstrated its importance in supporting commercial air services to residents. YKF also provides passengers with an alternative to flying into Toronto Pearson Airport.

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<sup>5</sup> Source: <https://www.regionofwaterloo.ca/en/regional-government/resources/Census/PDL-CPL-24-004-Year-End-2023-Population-and-Household-Estimates-for-Waterloo-Region.pdf>

**Figure 1-1: Summary of Total Passengers at YKF, 2013-2023**



Source: Regional of Waterloo International Airport

## 1.2 Regional Economy Overview



Located in Southwestern Ontario, the Regional Municipality of Waterloo (ROW) has established itself as a hub for advanced manufacturing, with significant academic, governmental, and industrial investment devoted to the sector over the past half a century. Efforts to apply the locality's expertise in manufacturing in other industries have driven significant industrial progress and diversified its economy. Having expanded its focus on retail and manufacturing to include growing technologies like robotics, automotive, digital media, and cleantech, the region continues to flourish. ROW has seen consistent GDP growth over the past 10 years, even throughout the COVID-19 pandemic, with employment numbers also experiencing a steady increase over that same period. These trends demonstrate the Region of Waterloo's potential for growth.

Manufacturing continues to be the leading industry, comprising 17.5% of all jobs in Waterloo Region. Backed by over 1,850 manufacturing companies—including Toyota Motor Manufacturing Canada, Frito-Lay Canada, Canadian General-Tower, and more—Canada's manufacturing corridor continues supplementing the industry with talent and market access.<sup>6</sup> Toyota, as Canada's largest automaker, has called the Region of Waterloo home since 1988, and has been recognized as one of Canada's top 100 employers since 2005, alongside other accolades.<sup>7</sup> In 2018, the company invested \$1.4 billion into its Cambridge facility, with the federal and provincial governments contributing \$3.8 billion and \$4.5 billion to the development of Electric Vehicles, respectively. The University of Waterloo has also continued supporting manufacturing and automotive industries in the region, with numerous research centres dedicated to these fields and thousands of students enrolled in relevant programs. Significant public, private, and academic investments into ROW's growing industries make the region's economic outlook promising. The Waterloo Economic Development Corporation (Waterloo EDC) received \$3 million in investments from the Federal Economic Development Agency for Southern Ontario in 2024 to provide further opportunities for local investment.<sup>8</sup>

### *Regional Municipality of Waterloo*

- **Population:** 673,910 (2023)
- **Employment:** 277,785
- **Median Household Income:** \$81,000 CAD (2021 Census)
- **Largest Industries:** Advanced Manufacturing, Automotive, and Technology

Nevertheless, the region is continuing to diversify its economy. As the fourth largest aerospace cluster in Ontario, ROW connects businesses in the region with international markets.<sup>9</sup> The region recently launched the Aerospace Accelerator program in February 2024 in partnership with NAVBLUE to support

<sup>6</sup> Waterloo Economic Development Corporation, 2024

<sup>7</sup> Canada's Top Employers, 2024.

<sup>8</sup> Government of Canada, 2024

<sup>9</sup> Region of Waterloo – Aerospace, 2022

the growth and scale-up of 10 local startups.<sup>10</sup> The incubator program, alongside many other initiatives, strategically support YKF and cement the region as a leader in aviation and aerospace.

### 1.3 The Importance of YKF to the Community

As part of studies and outreach being undertaken for the airport's Master Plan project, stakeholder consultations were conducted to gather information on sentiment with respect to the airport's role in the community. The following is a summary of commentary collected by Northguide from the Chamber of Commerce and airport business advisory committee. The paraphrased comments below demonstrate the importance of YKF to the community.

#### *Distinguishing characteristics of YKF*

- *YKF provides fast and efficient service levels compared to larger airports*
- *YKF provides consistent and predictable service levels, with minimal wait times*
- *Outstanding customer service, exceeding expectations*

#### *Ability to attract customers*

- *Provides direct access to U.S. hubs, via private aircraft operators*
- *YKF is an asset to the region's vision for growth and connectivity*
- *Improved air travel at YKF saves time and money*
- *Leverage lands to support growth that promised improved air travel experience*

#### *The capacity of YKF to attract talent*

- *Access to major hubs and the U.S., improves connectivity*
- *Research in education and innovation is facilitated by the airport's presence*
- *Connectivity is essential to attracting talent for market growth*

#### *A catalyst to enhanced global business*

- *Access to other continents increases business opportunities*
- *Increased connectivity and access to international markets fosters networking and trade*
- *Increasing connectivity at YKF creates business opportunities outside of downtown Toronto*
- *Interregional connectivity amplifies regional business opportunities*

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<sup>10</sup> The Accelerator Centre, 2024.

## 1.4 Economic Impact Overview

YKF contributes directly to employment in the Regional Municipality of Waterloo, as well as the provincial GDP growth through its business and commercial activities and operations. More importantly, it also acts as an economic catalyst, facilitating the growth of regional businesses and industrial sectors.

Economic impact is a measure of the employment, spending, and economic activity associated with a sector of the economy, a specific project (such as the construction of new infrastructure), or a change in government policy or regulation. In this case, the economic contribution of the airport, its tenants, and related offsite businesses to the community is termed the economic impact of YKF.

Economic impact is commonly measured in several ways, including employment, wages, GDP, and economic output, as summarized in **Figure 1-2**. YKF supports both the local economy and the provincial economy. Tax impacts are presented for all levels of government – federal, provincial and municipal. The importance of the industry is highlighted by both the employment/wage impacts and the impacts on the greater economy, through both GDP and economic output.

**Figure 1-2: Measurements of Economic Impact**

<b>Employment (Jobs)</b>	<ul style="list-style-type: none"> <li>•The number of jobs generated by a particular source. This includes full-time, part-time and seasonal positions.</li> </ul>
<b>Wages</b>	<ul style="list-style-type: none"> <li>•The wages, salaries, bonuses, benefits and other remuneration earned by the associated workforce.</li> </ul>
<b>Gross Domestic Product (GDP)</b>	<ul style="list-style-type: none"> <li>•A measure of the value added by labour and capital services used to produce final goods and services, as a result of economic activity in the nation. This measure is net of the value of intermediate goods and services used up to produce the final goods and services.</li> </ul>
<b>Economic Output</b>	<ul style="list-style-type: none"> <li>•The dollar value of industrial output produced. Sometimes referred to as “economic activity,” it reflects the spending (i.e., capital improvement plus revenue) by firms, organizations and individuals.</li> </ul>

### 1.4.1 Categories of Economic Impact

The three major components of economic impact are *direct, indirect, and induced impacts*. These distinctions are used as a base for the estimation of the total economic impact of YKF. Each of these three components requires different tools of analysis.

These categories of impact are described below and summarized in **Figure 1-3**.



**Direct impact** associated with activities directly related to the operation and management of YKF, including businesses located onsite at the airport, as well as businesses offsite that are dependent on the airport. Thus, the direct employment base comprises airline employees, fixed base operators, aircraft maintenance, ground handling, customer service, airport management staff, etc.



**Indirect impact** of industries that supply, support, or are wholly dependent on activities at YKF. For instance, indirect employment includes the portion of employment in supplier industries which are dependent on sales to the air transport sector, e.g., food wholesalers that supply food for catering on flights, aviation fuel providers, and IT suppliers.

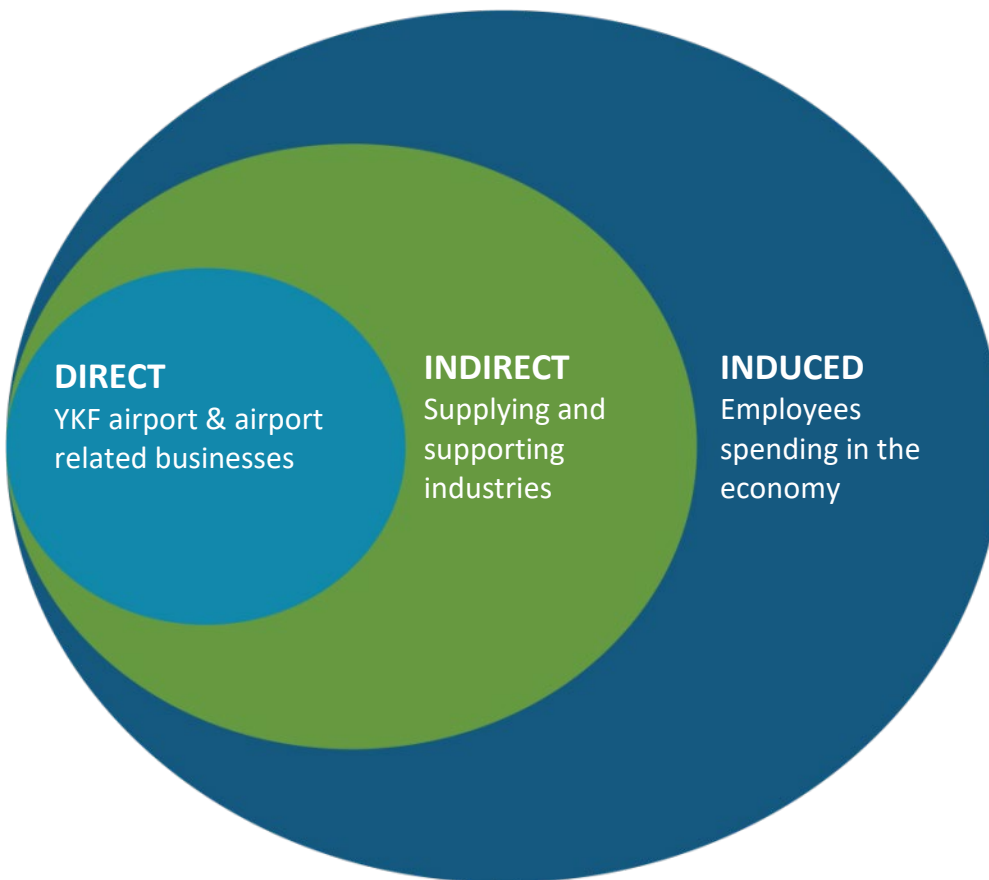


**Induced impact** created by the spending of wages, salaries, and profits earned through direct and indirect economic activities. It captures the economic activity generated by the employees of firms directly or indirectly connected to YKF spending their wages in the wider economy. For example, an airport employee might spend their wages on groceries, restaurants, childcare, dental services, home renovations and other items which, in turn, generates employment in a wide range of sectors of the general economy.



**Total economic impact** as the sum of the direct, indirect, and induced impacts.

Figure 1-3: Categories of Economic Impact Generated and Facilitated by YKF



## 2 Methodology

InterVISTAS conducted this study in the winter/spring of 2023. The study estimated the economic impact of YKF's operations in 2023.

The study was based on data collected from an employment survey of all employers associated with the operation of YKF (e.g., airlines, general aviation businesses, security services, onsite concessions, etc.) and all tenants operating at YKF. The survey produced estimates of the number of people employed in directly related occupations. The employment survey was used to classify the total direct employment by business type.

InterVISTAS estimated the indirect and induced effects using economic multipliers developed by Statistics Canada that are derived from models of how the Canadian provincial economies operate. InterVISTAS utilized a proprietary economic model to conduct multiplier analysis and estimate indirect and induced impacts.<sup>11</sup>

Data collected from the employment survey was also used to calculate the associated tax impacts (government revenue) generated by the airport's operations.

### Survey Response Rate

- 52% of tenants responded to the survey
- 86% of total direct full-time equivalents covered by the survey

### Study Time Frame

- 2023 operations

### Economic Multiplier Source

- Statistics Canada: Input-Output Multipliers for Ontario, 2019

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<sup>11</sup> The direct GDP, direct economic output, indirect and induced economic impacts were calculated using Statistics Canada multipliers for Ontario (2019), adjusted for inflation. [Statistics Canada](#) recommends using the 2019 Input-Output multiplier dataset as the most suitable for assessing impacts related to current economic conditions, as the more recent ratios and multipliers for 2020 reflect the unique conditions caused by the global pandemic and not reflective of the current economy. Multiplier impacts must be interpreted with caution since they may be illusory when the economy experiences high employment and output near industry capacity.

## 2.1 Estimating Current Economic Impact

The direct employment base related to ongoing operations at YKF was first measured.<sup>12</sup> Employment figures are generally more understandable by the public than more abstract measures, such as economic output or GDP. Employment figures also have the advantage of being a more accurate measure, both because the firms are more likely to provide data on employment, as opposed to information on revenues, wages, and other monetary amounts, and because there is less chance of double counting economic activity.<sup>13</sup>

The economic impact study then assessed the indirect and induced (or “multiplier”) employment supported by YKF’s related operations, as well as economic activity in terms of economic output and GDP using Statistics Canada’s economic multipliers.

### Surveying Direct Employment

Employment attributable to ongoing activity at YKF was measured by surveying 44 tenants and subtenants located at YKF, and at other businesses economically linked to the airport. Specifics of the survey methodology are contained in the Appendices. **Appendix A** shows a breakdown of survey responses by firm type. A sample copy of the survey is provided in **Appendix B**.

Telephone follow-ups were conducted to increase the response rate. In total, 52% of the businesses and organisations contacted responded to the survey, representing 87% of total direct jobs covered by the survey.

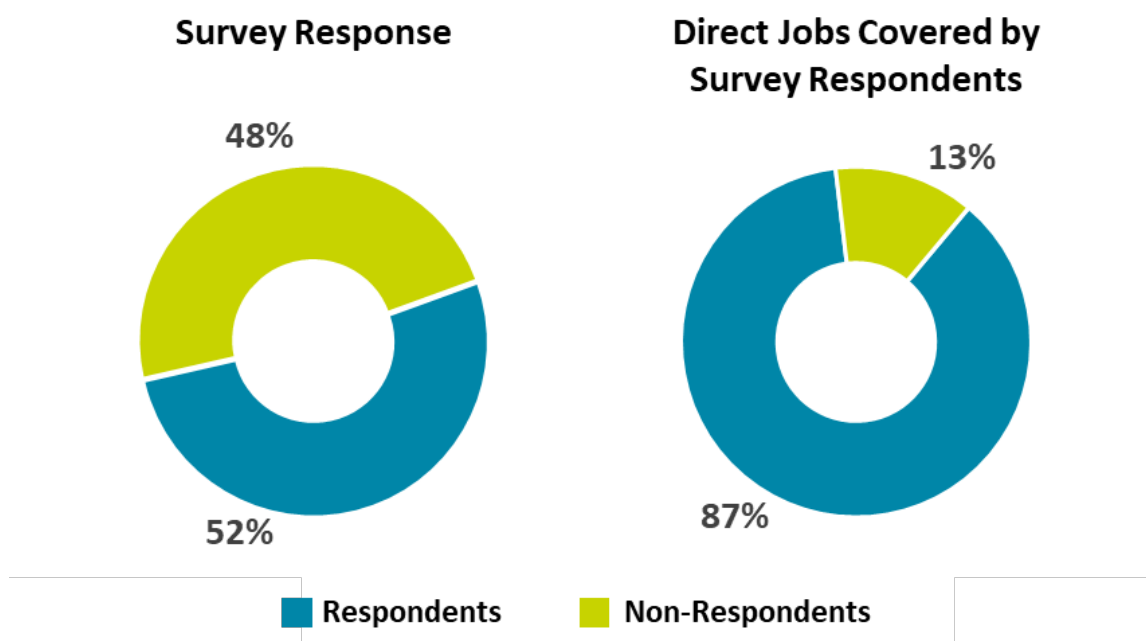
A summary is provided in **Figure 2-1**.

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<sup>12</sup> This includes employment of all airport terminal building tenants, YKF tenants, subtenants, and relevant employment of firms that are located off airport.

<sup>13</sup> For example, revenues reported by an air carrier would double count revenues received by caterers. The caterer’s revenue is an expense for the airline.

Figure 2-1: Response Rate for YKF Employment Survey



## 2.2 Inferring Employment

Employment was “inferred” for firms that did not respond to the survey by using a proven and accepted methodology.<sup>14</sup> This includes using other sources of employment information, such as publicly available information or using survey results for firms of similar types. A conservative approach was taken when using other survey or employment information to infer for non-responding firms.

There may be firms which were not surveyed simply because it was not known that they existed. We do not include an estimate of employment for such non-surveyed firms because there is no basis for an assessment. In any event, we expect most of these to be very small in terms of missed employment (See **Appendix D**).

## 2.3 Estimating Indirect and Induced Impacts

Measurement of indirect and induced economic activity is difficult. While it may be possible to conduct a survey of downstream employers, the survey would need to cover thousands of firms to completely cover indirect employment. For induced employment, the entire economy would need to be scrutinized.

<sup>14</sup> The methodology employed in this study to infer for non-respondents is also used by the federal government for estimating the national income and product accounts.

In addition to the time and financial resources needed to conduct such surveys, the quality of responses would be suspect.

As an alternative to costly and inaccurate surveys, indirect and induced effects are typically measured using *economic multipliers and ratios*. Multipliers are derived from models of the general economy. They come in a variety of forms and differ greatly in definition and application. Thus, great care must be exercised in choosing the appropriate set of multipliers to use.

In addition, the use of multiplier analysis is limited by several factors, these being:

- the accuracy of the structure and parameters of the underlying model;
- the level of unemployment in the economy;
- the assumption of constant returns to scale in production;
- the assumption that the economy's structure is static over time; and
- the assumption that there are no displacement effects.

Multiplier impacts must be interpreted with caution since they may be illusory when the economy experiences high employment and output near industry capacity. When they are reported, it is recommended that the reader be reminded of the limitations on the use of multipliers. Mindful of these limitations, this study has undertaken multiplier analysis to estimate indirect and induced employment, with emphasis nonetheless placed on the direct economic impact as this is based on data from the employer survey and are clearly identifiable.

For this study, InterVISTAS applied economic multipliers and ratios for Ontario based on Statistics Canada's 2019 Interprovincial Input-Output model.<sup>15</sup> The multipliers and ratios are based on a highly detailed accounting of provincial economic structures or relationships. The model tracks how the goods and services produced by industry are used by other industries and final users. The provincial multipliers were updated with Consumer Price Indices to account for inflation.

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<sup>15</sup> [Statistics Canada](#) recommends using the 2019 Input-Output multiplier dataset as the most suitable for assessing impacts related to current economic conditions, as the more recent ratios and multipliers for 2020 reflect the unique conditions caused by the global pandemic and not reflective of the current economy. A number of industries operate at YKF, including Air Transportation, Support for Transportation, Ground Transportation, Food & Beverage, Retail, Government Services, Manufacturing and Construction. the corresponding economic multipliers for each of the relevant industries that operate on airport lands were utilized in the analysis.

## 2.4 Estimating Tax Revenue Impacts

The tax revenue contributions to the federal, provincial, and municipal levels of government that are associated with airport operations were also estimated.<sup>16</sup> This includes taxes paid by employers and employees (such as payroll taxes), and passengers (such as sales taxes on expenditures or airport fees and charges).



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<sup>16</sup> Taxation impacts are based on 2023 tax rates.

## Case Study: Region of Waterloo Airport: Supporting the Training and Development of Future Aviation Professionals

*Since the early days of the airport, the Region of Waterloo International Airport (YKF) has supported and facilitated a pathway to careers in aviation for members of the Waterloo Region community and beyond. As the starting point for many aviation careers, YKF supports flight training programs in partnership with local educational institutions and flight schools including Waterloo Wellington Flight Centre (WWFC), Conestoga College, and Great Lakes Helicopter (GLH). YKF also acts as a living laboratory for the Waterloo Institute for Sustainable Aeronautics (WISA).*

*Given labour shortages affecting the aviation industry, the value of supporting the development of aviation professionals is top of mind. A 2018 report by the Canadian Council for Aviation and Aerospace (CCAA) estimated a need for 7,300 new pilots by 2025 or 9,800 with the new pilot fatigue rules which have since come into force.<sup>17</sup> Given the current operating environment, the crucial role of YKF and educational partners in collaborating to alleviate challenges associated with the labour shortages in the aviation industry is highlighted.*

### Waterloo Wellington Flight Centre (WWFC)



*With origins as a flying club in 1932, WWFC is a non-profit organization which has evolved to become one of the largest flight schools in Canada based on number of students and fleet size. In 1997, WWFC partnered with Conestoga College then in 2007, also partnered with the University of Waterloo to provide flight training at YKF for their respective post-secondary programs. WWFC also offers various pilot training options including commercial, recreational, and flight instructor programs. In 2022, students at WWFC earned over 260 licenses and ratings. As a recognized Transport Canada Testing Centre for PPAER (private pilots) and CPAER (commercial pilots) exams, the flight school conducts written exams for students across Southwestern Ontario. With support from funding received by WISA from an investment of nearly \$9.2 million received through the Federal Economic Development Agency for Southern Ontario (FedDev Ontario), WWFC broke ground on a 3,300 square-foot expansion project to establish a new Aviation SIM Centre and Innovation Hub in October 2023.<sup>18</sup> The facility houses three flight simulators dedicated to training pilots on Boeing 737, De Havilland Q-400, and Airbus 320 aircraft types—representing the majority of Canada’s aircraft fleet and preparing pilots for entry to major airlines. The facility opened in June 2024.<sup>19</sup>*

<sup>17</sup> <https://avaerocouncil.ca/industry>

<sup>18</sup> <https://www.waterloairport.ca/Modules/News/index.aspx?newsId=52e37f8c-f354-45ff-b9ee-54947a74d154>

<sup>19</sup> <https://wwfc.ca/grand-opening-hangar-7/>

## Waterloo Institute for Sustainable Aeronautics (WISA)



As a leading hub for sustainable aeronautical research, technology, and education, WISA supports undergraduate aviation programs at the University of Waterloo—home to the largest aviation-based undergraduate program in Canada. Academic programs in aviation include the Bachelor of Environmental Studies (BES) and Bachelor of Science (BSc). Students graduate with Transport Canada pilot qualifications upon completion Commercial Pilot Licence (CPL), Multi-Engine Rating, and Instrument (IFR) Rating. In strong collaboration with WWFC and YKF, WISA conducts research at the airport. YKF acts as a living laboratory, enabling researchers to test new technologies and training methods. Supported by funding from FedDev Ontario, experts at WISA and WWFC are collaborating to advance electric aviation in Canada. In 2023, the two-seater Pipistrel Velis Electro completed its inaugural flight at YKF. Research flights at the airport by WWFC staff and WISA researchers suggest that electric aircraft has the potential to reduce carbon emissions from aviation and lower costs of training for students, which in turn helps to address pilot shortages.<sup>20</sup> With evaluation in progress and a goal of certifying the Velis Electro for commercial use, electric flight training could be adopted at flight schools across Canada.

## Conestoga College Institute of Technology and Advanced Learning (Conestoga)



CONESTOGA  
Connect Life and Learning

Conestoga is the largest deliverer of apprentice training in Ontario and the region's only provider of polytechnic education. The Aviation – General Arts and Science diploma is one of the program clusters offered, with flight training offered through WWFC or GLH at YKF.<sup>21</sup> The program has a length of two years and students graduate prepared to complete Transport Canada CPL testing. Conestoga is responsive to community workforce needs, with a notable ability to tailor up-skilling or training programs for a specific employer. Through continuing education programs, workers can develop skills required to adapt to changes in the job environment. Conestoga's newest skill trades campus located in Cambridge opened in 2022 and is in the expansion phase with a 220,000 square-foot expansion planned for 2026. The first phase featured a 322,000 square-foot building with nearly half of the space dedicated to shops and labs. A 2023 report, *The Conestoga Effect*, estimates that Conestoga has served more than 53% of the local adult population.<sup>22</sup>

<sup>20</sup> <https://uwaterloo.ca/news/wisa-sends-electric-aviation-soaring-canada>

<sup>21</sup> Note: Program is being replaced by Commercial Flight Operations for September 2024 with flight training to be provided by Spectrum Airways.

<sup>22</sup> [https://www-assets.conestogac.on.ca/documents/www/about/college-reports/adapting-for-prosperity-III-2023-report-update.pdf?\\_gl=1\\*1rp9a6l\\*\\_gcl\\_au\\*MTU2ODk5NTYzNS4xNzEyMjU2MjUz\\*\\_ga\\*MTIwMzk2Nzg0OC4xNzEyOTYyMDgy\\*\\_ga\\_RN8COHR85Y\\*MTcxMjk2MjA4MS4xLjAuMTcxMjk2MjA4My41OC4wLjU4MjAzNjU4OA](https://www-assets.conestogac.on.ca/documents/www/about/college-reports/adapting-for-prosperity-III-2023-report-update.pdf?_gl=1*1rp9a6l*_gcl_au*MTU2ODk5NTYzNS4xNzEyMjU2MjUz*_ga*MTIwMzk2Nzg0OC4xNzEyOTYyMDgy*_ga_RN8COHR85Y*MTcxMjk2MjA4MS4xLjAuMTcxMjk2MjA4My41OC4wLjU4MjAzNjU4OA).

## Great Lakes Helicopter (GLH)



GLH is a flight school and charter company serving as the most comprehensive helicopter facility in Southwestern Ontario. A variety of helicopter pilot training programs are offered including commercial license, private license, foreign conversion, fixed wing to rotary wing, and advanced programs. In partnership with Conestoga, a college diploma program is offered allowing students to complete a two-year Aviation – General Arts and Science diploma alongside pilot training.<sup>23</sup> GLH provides students with unique opportunities to train in northern Ontario allowing for important experiences to handle operating in cold and extreme weather conditions. GLH has also partnered Missanabie Cree First Nation to create Great Lakes Maskwa Aviation to support the indigenous nation develop a presence in transportation, flight training, and utility work in the north.<sup>24</sup>

## Conclusion

The Region of Waterloo International Airport plays an integral role in facilitating the education of pilots and sustainable aeronautical research. Through close collaboration with educational institutes such as the University of Waterloo and Conestoga College, and flight schools such as the Waterloo Wellington Flight Centre and Great Lakes Helicopter, YKF supports the training of students across Southwestern Ontario and beyond. In the face of global labour shortages, YKF supports job creation in the aviation industry as a training facility for pilots and flight instructors. Through WISA, YKF is home to a living laboratory and leading research in electric aviation. The airport is the site of research flights for the Velis Electro aircraft which holds potential to transform flight training in terms of sustainability and affordability.



<sup>23</sup> See Note 5.

<sup>24</sup> <https://northernontario.ctvnews.ca/missanabie-cree-first-nation-gets-into-the-helicopter-business-1.5786142>

## 3 Economic Impact of YKF's Operations

### 3.1 Ongoing Operations at YKF

Operations and activities at YKF contribute significantly to the economy. This chapter documents the direct, indirect and induced impacts of YKF's operations in 2023, including that of tenants and subtenants on airport property.

#### 3.1.1 Direct Economic Impact

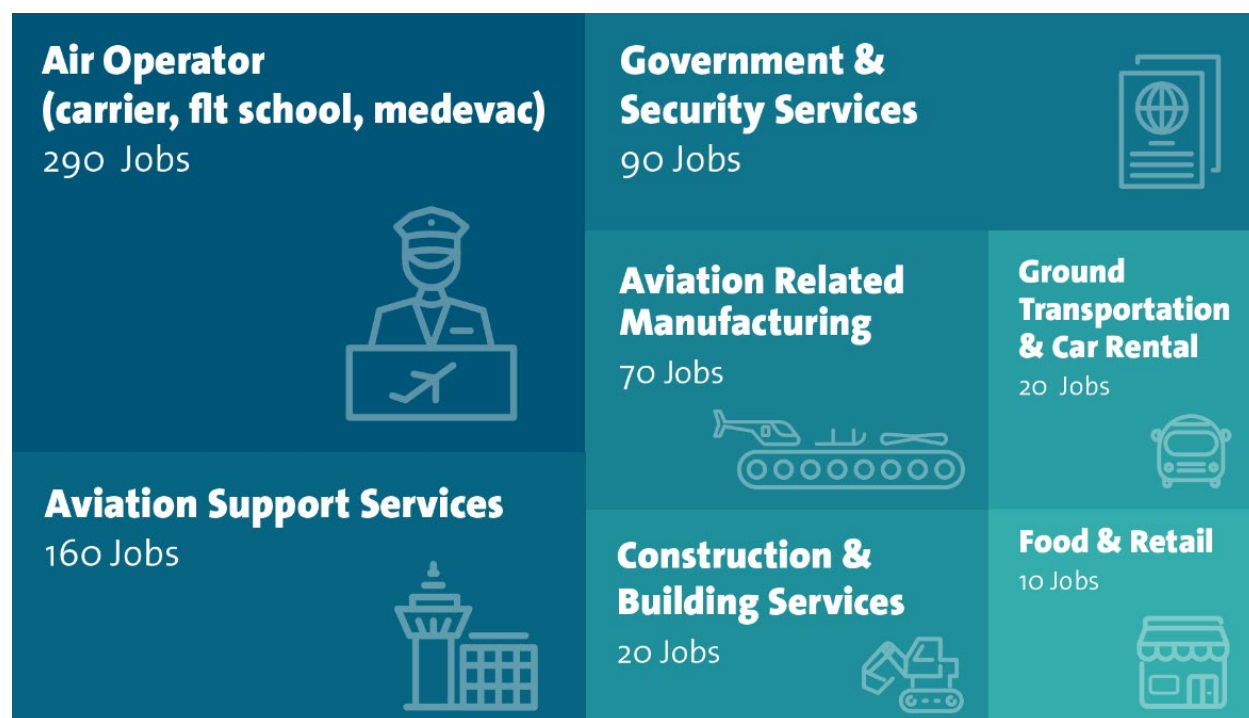
A total of 660 direct jobs are attributable to YKF's operations. This is a 121% increase compared to the 2015 Region of Waterloo International Airport study, which estimated that there are 300 jobs attributable to the airport.

A wide range of businesses operate at the airport which can be grouped into the following categories:

- **Air Operators** includes the employment related to commercial service and other air carrier operations. This includes all staff employed by the airlines, such as ticket agents, gate agents, and based crew. Plus flight training school management, maintenance and flight instructors. This category accounts for 290 jobs (44% of direct employment).
- **Aviation Support Services** includes employment related to ground handling, aircraft maintenance, fixed base operators, air navigation, and the airport authority. Employment related to aviation support services represents 160 jobs (24% of direct employment) at YKF.
- **Government and Security Services** account for employment related to government agencies and departments operating at YKF. Examples of this employment include Canadian Air Transport Security Authority and Government of Canada staff. This category accounts for roughly 90 jobs, or 14% of total onsite employment.
- **Aviation Related Manufacturing** includes all staff involved in providing aircraft product and parts manufacturing. This category accounts for 70 jobs (11% of direct employment).
- **Ground Transportation and Car Rental** accounts for taxi and limo services, as well as all car rental firms associated with YKF. The employment amongst these firms sums to over 20 jobs, 3% of the direct jobs at the airport.
- **Construction and Building Services** includes construction firms located on YKF as well as janitorial services. These employers account for 20 jobs or 3% of total employment.
- **Food & Retail** employment accounts for employees associated with airport retail outlets and restaurants. This category of business type sums to 10 jobs, representing 1.5% of direct employment.

A breakdown of direct employment at YKF by business type is illustrated in **Figure 3-2**.

Figure 3-2: Direct Employment by Industry at Region of Waterloo International Airport, 2023



### 3.1.2 Indirect and Induced Economic Impact

In addition to the direct impacts, there are other sectors of the economy that are dependent on those firms who facilitate ongoing operations at YKF.


Indirect impacts are generated by industries that supply or provide services to the firms located at YKF that support ongoing operations at the airport. There are an estimated that 440 *indirect* jobs in the province related to supporting ongoing operations at YKF in 2023. Labour wages associated with these jobs amount to \$30 million per annum. Indirect GDP contribution is estimated at \$50 million per year, and economic output at \$110 million annually in Ontario.

Induced impacts are generated because of expenditures by individuals employed both directly and indirectly by the airport's businesses that support commercial air service operations. It represents the demand for goods and services generated by wage earnings from economic activity directly related to the airport. *Induced* employment attributable to YKF is estimated at 260 jobs in the province. Induced employment is estimated to generate \$20 million per annum in wages. Induced GDP and economic impact contributions in Ontario amount to approximately \$30 million and \$60 million, respectively, per annum.

### 3.1.3 Total YKF Economic Impact

**Figure 3-1** displays the overall economic impact of YKF's ongoing operations in 2023. The airport's ongoing operations facilitate 660 direct jobs, \$50 million in wages and generating GDP of \$90 million. Economic output generated by this level of employment is \$220 million in the province of Ontario.

**Figure 3-1: Annual Ongoing Economic Impact of YKF's TOTAL OPERATIONS, 2023**



Impact	Employment (Jobs)	Wages (\$ Millions)	GDP (\$ Millions)	Economic Output (\$ Millions)
Direct	660	\$50	\$90	\$220
Indirect	440	\$30	\$50	\$110
Induced	260	\$20	\$30	\$60
<b>Total ON</b>	<b>1,360</b>	<b>\$100</b>	<b>\$170</b>	<b>\$390</b>

Note: Totals may not sum due to rounding.

## 3.2 Commercial Air Services at YKF

### 3.2.1 Direct Economic Impact

This section describes the employment and economic contributions attributable to employers directly related to the ongoing operations of commercial air services at YKF. Every arrival of a flight at YKF generates employment hours for individuals with jobs involved in handling passengers, their baggage, cargo, and the aircraft. This employment includes customer service, airline crew, ground handling, cleaning, maintenance functions, etc. It also includes some overhead labour (e.g., clerical, and administrative staff), and the associated employment of ground transportation firms and accommodation providers that service passengers flying on commercial air services at the airport.

Direct employment related to ongoing commercial air operations at YKF amounts to 310 direct jobs. Direct employment at YKF receives an estimated \$20 million in wages, resulting in an average of \$69,700 per job. In addition to employment and wages, the airport's commercial air services directly contribute \$40 million to provincial GDP and approximately \$90 million in direct economic output. The direct economic impact is summarized in **Figure 3-3**.

**Figure 3-3: Direct Economic Impact of Commercial Aviation Services ONLY at YKF, 2023**



				
Impact	Employment Jobs	Wages (\$ Millions)	GDP (\$ Millions)	Economic Output (\$ Millions)
Direct	310	\$20	\$40	\$90

### 3.2.2 Commercial Air Services: Indirect and Induced Economic Impacts

In addition to the direct impacts, there are other sectors of the economy that are dependent on those firms who facilitate commercial air services at YKF.

Indirect impacts are generated by industries that supply or provide services to the firms located at YKF that support commercial air services. Based on the application of the economic multipliers, it is estimated that 200 *indirect* jobs in the province are related to ongoing commercial air service operations at YKF in 2023. This indicates that 200 jobs are indirectly generated in industries that supply the businesses at the airport that deliver commercial air services to the community. Labour wages associated with the provincial indirect employment is estimated at \$10 million per annum. Indirect GDP contribution is estimated at \$20 million per year, and economic output at \$50 million annually in Ontario.

Induced impacts represents the demand for goods and services generated by wage earnings from economic activity directly related to the airport, direct and indirect impact. *Induced* employment attributable to YKF commercial air services is estimated at 110 jobs in the province. Induced employment is estimated to generate \$10 million per annum in wages. Induced GDP and economic impact contributions in Ontario amount to approximately \$20 million and \$30 million, respectively, each year.





### 3.2.3 Total Commercial Air Service Impacts

Ongoing YKF commercial air service operations including direct, indirect, and induced effects generate 620 total jobs and \$40 million in wages throughout Ontario. Including multiplier effects, commercial air

service operations at the airport support \$70 million in total GDP and \$160 million in total economic output.<sup>25</sup>

**Figure 3-4** summarizes the direct, indirect, induced, and total employment and wages in the provincial economy attributable to operations at YKF, as well as annual GDP and economic output.

**Figure 3-4: Annual Ongoing Economic Impact of YKF Associated with Commercial Air Services ONLY, 2023**

				
Impact	Employment (Jobs)	Wages (\$ Millions)	GDP (\$ Millions)	Economic Output (\$ Millions)
Direct	310	\$20	\$40	\$90
Indirect	200	\$10	\$20	\$50
Induced	110	\$10	\$20	\$30
<b>Total ON</b>	<b>620</b>	<b>\$40</b>	<b>\$70</b>	<b>\$160</b>

Note: Totals may not sum due to rounding.

In summary, nearly half of the direct jobs at YKF are affiliated with commercial air service operations. This is roughly consistent with the volume of commercial air services movements handled at the airport, where approximately half of movements are for commercial services. The employment that is supported at the airport provides the local community with air services for business and leisure travel enabling people to connect to other destinations.

<sup>25</sup> The indirect and induced economic impacts are calculated using the 2019 Statistics Canada multipliers for Ontario, adjusted for inflation. [Statistics Canada](#) recommends using the 2019 Input-Output multiplier dataset as the most suitable for assessing impacts related to current economic conditions, as the more recent ratios and multipliers for 2020 reflect the unique conditions caused by the global pandemic and not reflective of the current economy.

## 4 Tax Impacts of YKF's Ongoing Operations

The ongoing operations of YKF, as well as the associated economic activity in the region, generate a significant amount of tax revenue for the federal, provincial, and municipal levels of government. Tax impacts are estimated separately from economic impact, as the tax revenues generated by the airport's operations are different from its economic output. Tax impacts include income taxes and sales taxes, while economic output measures the spending of firms and individuals. This section summarizes the government revenues resulting from current YKF operations. **Appendix F** and **Appendix G** provide further details on the tax impact computations.

Revenue impacts are presented based on who is making the payment:

- **Taxes paid by employers and employees.** These are taxes paid by employers and employees with operations at the airport. They include income and payroll taxes, employment insurance contributions (such as the employment insurance premiums) and the federal and provincial fuel taxes.
- **Taxes paid by passengers.** Visitors pay various taxes. For example, these include taxes paid on airline tickets, Passenger Facilitation Fee (PFF) and General Terminal Fee.

For each of the tax revenue sources, taxes paid to the federal, provincial, and municipal levels of government are identified separately.<sup>26</sup>

This section presents the government tax revenue impacts resulting from economic activity that can be attributed directly to the operations at YKF. As with all economic impact studies, a conceptual decision is made as to how broad a definition of *economic activity* should be used in measuring the impacts. For this study, a relatively narrow definition has been taken. For example, the following have **not** been included:

- Taxes associated with indirect or induced employment (i.e., multiplier effects).
- Consumption taxes paid by employees when they spend their income/wages and benefits.
- Taxes paid by airport users outside of the airport.
- Property taxes paid by employees.

It would be exceedingly complex to broaden the scope of the tax base in this analysis to include taxes generated by indirect and induced employment. The level of detail collected on direct employment by the survey administered by InterVISTAS is critical to the tax impact analysis; however, such information

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<sup>26</sup> For the most part, this study **estimates** (some tax envelopes were measured directly, e.g., tenant property taxes) taxes paid from information on the passengers, employers, and employees at the airport. In a few situations, such as the corporate income tax paid by employers, an approximate method was used to estimate taxes paid. In every case conservative methods were used. No major tax has been excluded.

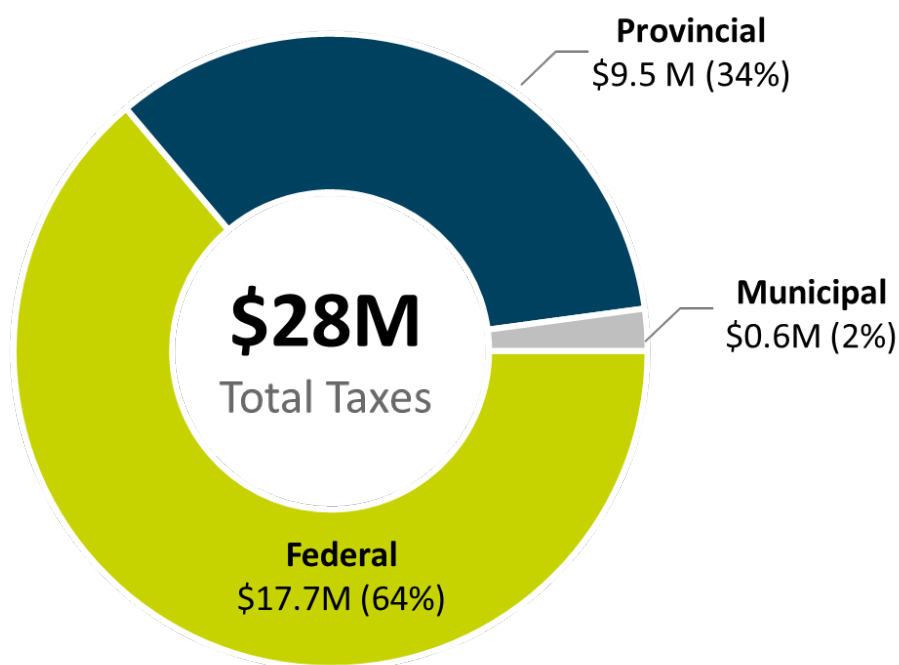
is not available for the indirect and induced employment. Estimating the tax impacts associated with indirect and induced employment would be a complex process, requiring speculation about the general economy and resulting in averages that would not necessarily be accurate. Therefore, the tax impact analysis in this report is limited to government revenues generated from direct employment associated with airport operations only.

## 4.1 Tax Contributions by Level of Government

Ongoing economic activity at YKF generates tax revenue contributions for all levels of government. In 2023, total tax contributions from YKF-related *direct* employment to all levels of government are estimated to be nearly \$28 million. The federal government received nearly \$18 million (64 % of the total), as seen in **Figure 4-1**. The provincial government received a tax revenue contribution of close to \$10 million (34 % of the total), while the municipal government received \$0.6 million in tax revenues (2% of the total).

A complete summary of tax contributions by YKF passengers, and airport employers and employees are provided in **Figure 4-2**.

**Figure 4-1: Annual Estimated Tax Revenues of YKF by Level of Government, 2023**



Note: Taxation impacts are based on 2023 tax rates. Total may not sum, due to rounding.

Figure 4-2: Annual Estimated Tax Revenues Generated at YKF by Taxpayer, 2023

Government Level	Passengers (\$ Millions)	Airport Employers/ Employees (\$ Millions)	Total (\$ Millions)
Federal	\$1.6	\$16.1	\$17.7
Provincial	\$2.8	\$6.7	\$9.5
Municipal	\$0	\$0.6	\$0.6
<b>Total</b>	<b>\$4.4</b>	<b>\$23.4</b>	<b>\$27.8</b>

Note: Totals may not sum due to rounding.







## 5 Estimated One-Time Capital Expenditure Impacts at YKF

### 5.1 Economic Impact of Capital Expenditures at YKF

In addition to the employment and other economic impact of ongoing operations at YKF, there is also economic impact associated with potential construction projects from the airport's 10-year Capital Budget and Forecast (2023-2032). The three phases of the Capital Plan amount to over \$419 million. In 2023, the main projects completed were the value parking lot construction and terminal expansion, amounting to nearly \$30 million. According to YKF, approximately 75% of the expenditure were local, with expenditures generating jobs in the Province of Ontario.

The economic impact of YKF's 2023 capital expenditures were estimated using Statistics Canada economic multipliers and ratios for the Province of Ontario. Based on this analysis, it is estimated that YKF's capital spending in 2023 supported approximately 90 *direct* FTEs, and \$12 million in *direct* GDP. A summary of the economic impact of 2023 capital expenditures at YKF is provided in **Figure 5-1**.

**Figure 5-1: Total Economic Impact of YKF's Capital Expenditures, 2023**

				
Impact	Employment (FTEs)	Wages (\$ Millions)	GDP (\$ Millions)	Output (\$ Millions)
Direct	90	\$8	\$12	\$22
Indirect	40	\$3	\$5	\$10
Induced	40	\$2	\$5	\$8
<b>Total</b>	<b>170</b>	<b>\$14</b>	<b>\$22</b>	<b>\$40</b>

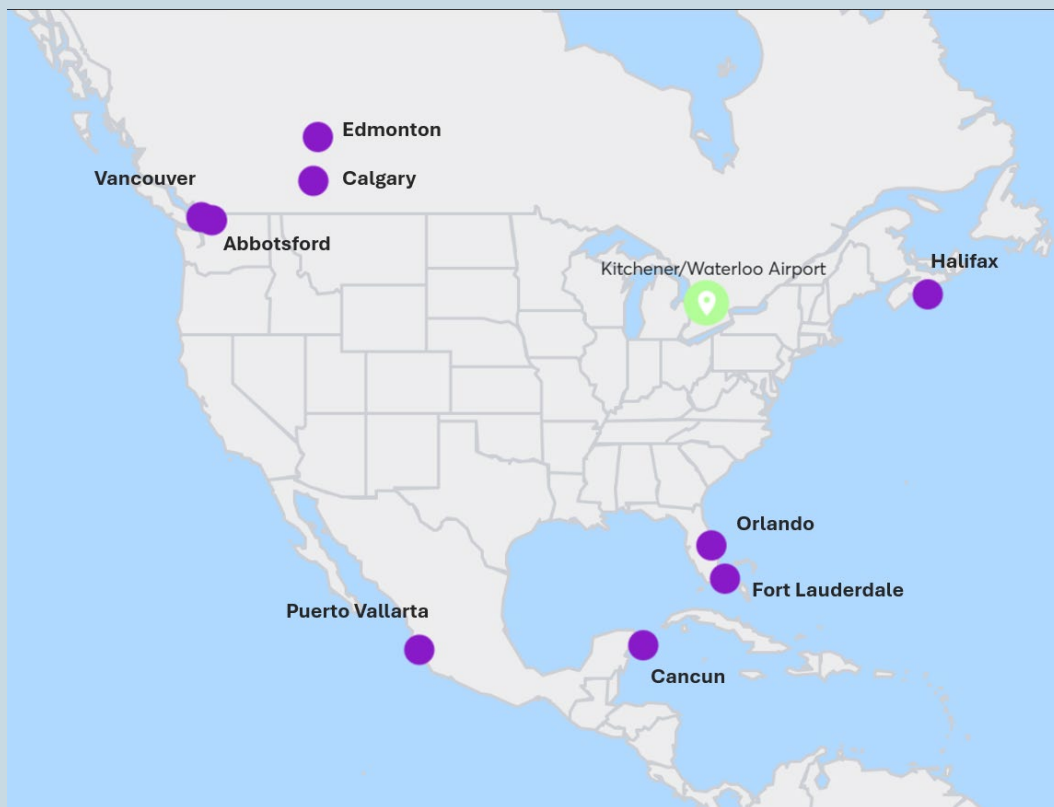
Note: Totals may not sum due to rounding.

## Case Study: Flair Airline's Impact on the Region of Waterloo

Flair Airlines first launched in 2017, as a Ultra Low Cost Carrier (ULCC) operator in Canada. The airline operates flights domestically, to the U.S., to Mexico, the Dominican Republic and Jamaica. The airline has flight offerings to 34 destinations.<sup>27</sup> The airline has two main aircraft type in their fleet of 20 aircraft,<sup>28</sup> including the Boeing 737 Max 8 and the Boeing 737-800. Flair experienced significant growth in recent years since the stabilization of the global pandemic and the start of the recoveries in the aviation and travel industries.

Flair began operations at YKF in 2021 and has operations from the airport to points across Canada (Vancouver, Abbotsford, Edmonton, Calgary, and Halifax,) to the U.S. (Orlando and Fort Lauderdale) and to Mexico (Puerto Vallarta and Cancun), as shown in Figure 1.

**Figure 1: Flair Airlines Route Map – Destinations from YKF**



Source: Flair website (<https://flights.flyflair.com/en-ca/where-we-fly>), routemap.

<sup>27</sup> Source: <https://flights.flyflair.com/en-ca/destinations>, as of September 2024.





<sup>28</sup> Source: <https://www.planespotters.net/airline/Flair-Airlines>, as of September 2024.

Flair Airlines has supported the Region of Waterloo as a job creator, facilitator of air connectivity and general economic growth and development with its air service operations.

For every arriving and departing flight at YKF, a diverse number of individuals are involved in servicing and supporting an aircraft and the passengers and cargo onboard that are employed by various firms. For example, Flair Airlines contribute flight crew to operate aircraft to transport passengers and cargo. Other individuals who support air services are typically employees working at the terminal, such as airline gate agents, ground handlers, air traffic controllers, cleaners, engineers, immigration and customs officers, retail cashiers, fixed base operators, airport staff members, and many more. To support the take-off and landing of an aircraft requires many people working together collaboratively. Additionally, there is relevant direct employment at firms located off airport, and the associated employment of ground transportation firms, food/beverage, retail and accommodation providers that support non-local visitor spending in the local region. These non-local tourists travel on airlines, such as Flair, to their travel destinations spending dollars in the local economy which generates employment in other local industries. Together, these individuals from different companies support the movement of passengers and cargo from origin to destination.

The following is an illustrative example of the economic impact of a daily (domestic) air service operation at YKF. The estimated economic impact is annualized for the combined impacts related to the airport operations and the non-local visitor spending in the Region of Waterloo.

**Figure 2: Estimated Economic Impact of a Daily Domestic Flight Operation, Total Aviation/Airport and Visitor Spending Impacts**

				
Impact	Employment (FTEs)	Wages (\$ Millions)	GDP (\$ Millions)	Output (\$ Millions)
Direct	230	\$9	\$13	\$28
Indirect	70	\$5	\$8	\$16
Induced	40	\$2	\$5	\$9
<b>Total</b>	<b>340</b>	<b>\$16</b>	<b>\$26</b>	<b>\$53</b>

Note: Totals may not sum due to rounding.

## 6 Summary of Results

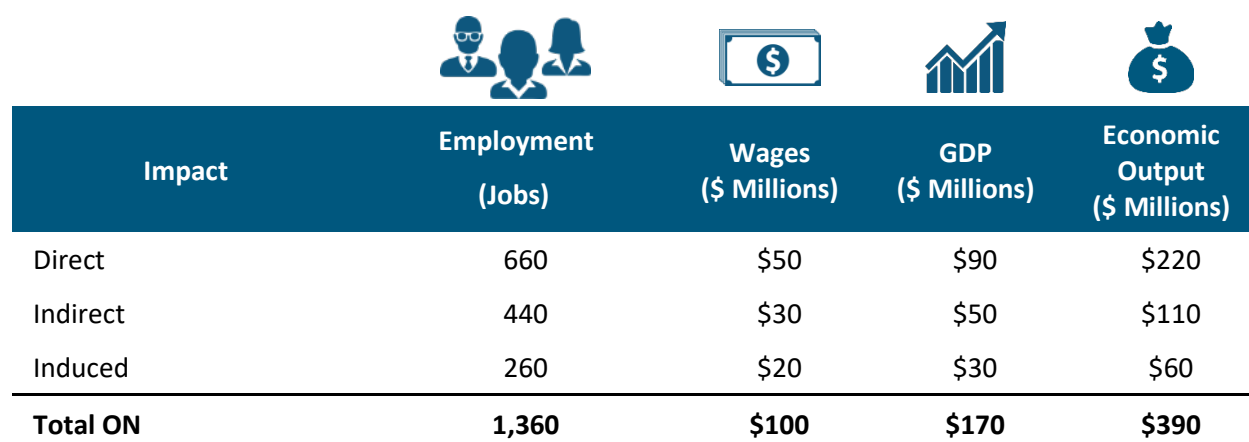
### 6.1 Economic Impact

Ongoing operations at YKF support a *total* of 1,360 jobs and \$100 million in wages in Ontario, when multiplier impacts are included. Of this employment, 660 jobs are *directly* related to the airport.<sup>29</sup> Because employment related to the airport and tenants extends far beyond YKF, the total also includes both indirect and induced employment in the province.

The significance of the airport and its tenants is demonstrated by the *direct* economic impact of the airport on GDP and economic output in Ontario, measured at \$90 million and \$220 million, respectively. Including indirect and induced impacts, the *total* provincial GDP and economic output impacts are approximately \$170 million and \$390 million, respectively.

Figure 6-1 summarizes these 2023 economic impact in total.

Figure 6-1: Annual Ongoing Economic Impact of YKF's TOTAL OPERATIONS, 2023



Impact	Employment (Jobs)	Wages (\$ Millions)	GDP (\$ Millions)	Economic Output (\$ Millions)
Direct	660	\$50	\$90	\$220
Indirect	440	\$30	\$50	\$110
Induced	260	\$20	\$30	\$60
<b>Total ON</b>	<b>1,360</b>	<b>\$100</b>	<b>\$170</b>	<b>\$390</b>





Notes: Totals may not sum due to rounding.

When assessing YKF's commercial air service operations specifically, almost half of the employment at YKF, including direct, indirect, and induced, are attributable to the airport's commercial air service. About 620 jobs in total in Ontario are associated with commercial air services operations, which generates \$40 million in wages.

Figure 6-2 illustrates the breakdown of the impact of YKF's commercial air service operations on employment, wages, GDP, and economic output in the province of Ontario.

<sup>29</sup> This includes employment of all airport terminal building tenants, YKF tenants, subtenants, and relevant employment of firms that are located off-airport.

**Figure 6-2: Annual Ongoing Economic Impact of YKF Associated with Commercial Air Services ONLY, 2023**










Impact	Employment (Jobs)	Wages (\$ Millions)	GDP (\$ Millions)	Economic Output (\$ Millions)
Direct	310	\$20	\$40	\$90
Indirect	200	\$10	\$20	\$50
Induced	110	\$10	\$20	\$30
<b>Total ON</b>	<b>620</b>	<b>\$40</b>	<b>\$70</b>	<b>\$160</b>

Notes: Totals may not sum due to rounding.

The economic impact of YKF's 2023 capital expenditures were estimated using Statistics Canada economic multipliers and ratios for the Province of Ontario. Based on this analysis, it is estimated that YKF's capital spending in 2023 supported approximately 90 *direct* FTEs, and \$12 million in *direct* GDP. A summary of the economic impact of 2023 capital expenditures at YKF is provided in **Figure 6-3**.

**Figure 6-3: Total Economic Impact of YKF's Capital Expenditures, 2023**

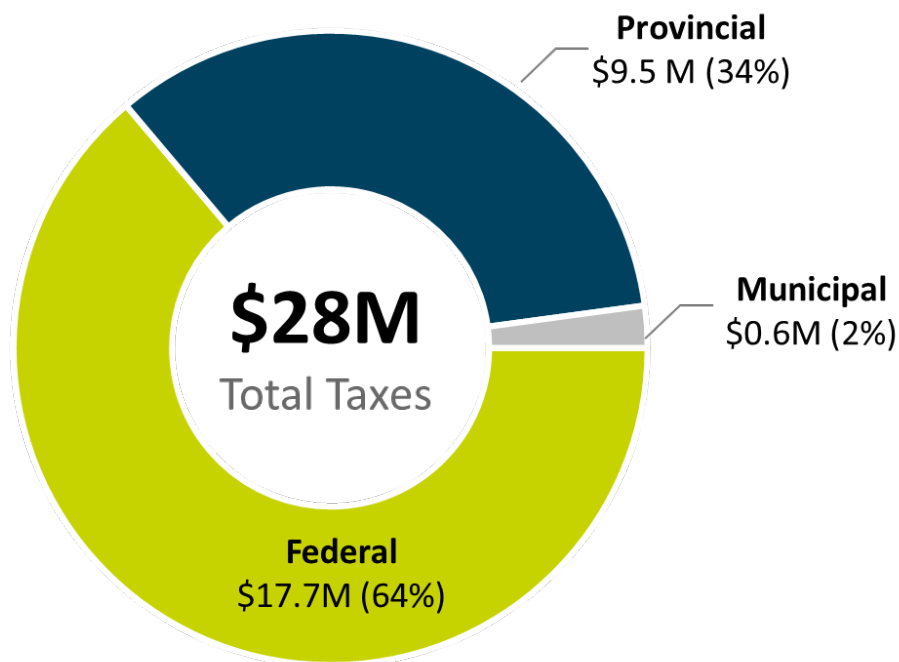
Impact	Employment (FTEs)	Wages (\$ Millions)	GDP (\$ Millions)	Output (\$ Millions)
Direct	90	\$8	\$12	\$22
Indirect	40	\$3	\$5	\$10
Induced	40	\$2	\$5	\$8
<b>Total</b>	<b>170</b>	<b>\$14</b>	<b>\$22</b>	<b>\$40</b>

Note: Totals may not sum due to rounding.

## 6.2 Annual Tax Contribution

The operations at YKF are also an important generator of taxation revenues to all levels of government. Total taxes paid on an annual basis are estimated at nearly \$28 million per year. The majority of taxes collected accrue to the federal and provincial governments with 64% and 34% of total taxes collected, respectively. The municipal government also benefits from the airport and its tenants, primarily through the collection of property taxes amounting to \$0.6 million, as shown in **Figure 6-4**.

**Figure 6-4: Annual Estimated Tax Revenues of YKF, 2023**



Note: Taxation impacts are based on 2023 tax rates. Total may not sum, due to rounding.

## Appendix A: Employment Survey

### Identification of the Survey Population

A total of 44 firms received employment surveys for the YKF economic impact study. The list of firms was provided by YKF to InterVISTAS.

**Figure A-1: Total Number of Firms Surveyed**

Number of Firms Surveyed	Number of Responding Firms	Response Rate
44	23	52%

### Questionnaire Design

The basic questionnaire was designed to be effective in obtaining information and, equally importantly, to be as clear and easy to understand as possible for respondent firms. The survey was distributed electronically to employers at the airport. The basic questionnaire provided to companies operating at YKF tenants focused on questions in the following areas:

#### General Information

- Name and address of firm
- Contact person's name and title
- Phone and fax numbers
- Email and website address
- Type of business and the proportion related to the airport and/or air service

### **Total Employment Numbers (for calendar year 2023)**

- Total employees
- Total annual payroll, excluding benefits
- Number of onsite employees
- Number of offsite employees

### **Part-time and Full-time Employment**

- Full-time permanent employees
- Part-time permanent employees
- Full-time seasonal employees
- Part-time seasonal employees
- Average hours and weeks for part-time and seasonal employees

### **Employment by Trade**

- A selection of job trades was provided to categorize employment

### **Outsourcing and Contracting Out**

- Number of individuals on contract
- Number and names of firms on contract

### **Taxes**

- Property taxes paid in 2023

Copies of the surveys are provided in **Appendix B**.

## Conducting the Survey

The survey was mailed out electronically by InterVISTAS Consulting with a cover letter from Chris Wood, Airport Director at the Region of Waterloo International Airport. The letter explained the purpose of the study, the confidentiality of responses and encouraged members of the airport business community to participate.

Following the initial electronic mail-out of the surveys and throughout the following weeks, non-responding firms were contacted by telephone to follow up. Firms were encouraged to return the survey and new copies were offered if the originals were lost. The replacement surveys were emailed once again. Some survey responses were collected via a telephone interview with firms.

## Analysis of the Results

The survey results were compiled into an MS Excel spreadsheet.

## Appendix B: Sample Survey



January 2024

To All Members of the Region of Waterloo International Airport Operating Committee:

**Re: Region of Waterloo International Airport Economic Impact Study 2024**

There has been a lot happening at our airport since 2015, the last time we measured our economic impact. It is time for an update. A critical factor in maintaining the community and government support we currently enjoy is our ability to demonstrate the significant economic impact of the Region of Waterloo International Airport (YKF) upon our community and province. The economic impact your business provides is a key measure.

Since the last study, there has been growth and development at the airport as well as significant global events that have impacted major industries, and some would say none more than aviation. In addition, work is underway on the airport's Master Plan 2024, thus taking stock of the economic impact of the airport is a timely initiative. The results of the study will be used to raise public awareness of the airport, the airlines and other related businesses' contribution to local employment and economic activity. It is important that the public and other stakeholders continue to understand the benefits of YKF to the economy of Ontario. We have commissioned world renowned transportation consulting firm InterVISTAS Consulting (InterVISTAS) to conduct an update.

We understand that some of the information requested in the survey may be of a sensitive nature to your firm. Please be assured that InterVISTAS will maintain strict confidentiality of your survey responses, and that the completed surveys, will only be viewed by the researchers at InterVISTAS. Only the aggregate survey totals will be provided in the final report. The published document will not reveal employment figures or other data for any individual firm.

The economic impact study is being managed under the direction of Doris Mak, Vice President at InterVISTAS. Should you have any questions regarding the study, please contact her at 1-604-717-1838. Should you have any questions about the completion of the survey, please contact Sonya Sula, Analyst at InterVISTAS at 1-604-717-1815.

Thank you for your cooperation in this important study. We all look forward to the results as they will benefit all members of the Region of Waterloo International Airport business community.

Sincerely,

Chris Wood  
Airport Director  
Region of Waterloo International Airport

4588682

**AIRPORT ADMINISTRATION**

1-4881 Fountain Street North  
Breslau ON N0B 1M0 Canada  
Telephone: 519-648-2256  
Toll free: 1-866-648-2256  
TTY: 519-575-4608  
Fax: 519-648-3540  
[www.waterloairport.ca](http://www.waterloairport.ca)



Region of Waterloo  
INTERNATIONAL  
AIRPORT

## Region of Waterloo International Airport Employment Survey

January 2024

The figures you provide in the following sections are strictly confidential and will be viewed only by InterVISTAS Consulting and reported only in an aggregate form. For the purposes of this study, it is important that the figures you provide are as accurate and current as possible.

**When answering the questions below regarding your business, please include all related subsidiary businesses. Please complete this survey electronically by responding directly into the form.**

Name of Firm: \_\_\_\_\_

Address of Firm: \_\_\_\_\_

City, Province: \_\_\_\_\_ Postal Code: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone number: \_\_\_\_\_

Email: \_\_\_\_\_

### Q1. Location of Firm

Please indicate the general location of your firm:

☐ Region of Waterloo International Airport (YKF), *we are an airport tenant and are located on airport lands.*

☐ Other, please specify: \_\_\_\_\_

### Q2a. Business Related to Region of Waterloo International Airport

Please estimate the amount of your business (revenue) that is related to Region of Waterloo International Airport.

<b>YKF Related Business:</b> (as of December 31, 2023)	%
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### Q2b. Cargo Related Business

We would like to be able to document the impact of the airport's air cargo services. Please help us by indicating the portion of your business that is involved in servicing air cargo.

Please estimate the proportion of your business (revenue) that can be attributed to air cargo related activities?

<b>Air Cargo Related Business:</b> (as of December 31, 2023)	%
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Region of Waterloo  
INTERNATIONAL  
AIRPORT

Region of Waterloo International Airport  
Employment Survey

January 2024

### Q3. Type of Business (check one)

If you are involved in more than one of the businesses below, please choose the one that best describes your business.

#### Air Carriers

- ☐ 1. Scheduled Canadian Carrier
- ☐ 2. Scheduled Non-Canadian Carrier
- ☐ 3. Charter Carrier
- ☐ 4. Helicopter
- ☐ 5. Air Taxi
- ☐ 6. Cargo Carrier
- ☐ 7. Courier
- ☐ 8. Other Type of Air Carrier: \_\_\_\_\_

#### Other Business Types

- ☐ 9. Facility Operator
- ☐ 10. Freight Forwarder, Cargo Agent, etc.
- ☐ 11. Warehousing
- ☐ 12. Customs Broker
- ☐ 13. Aircraft Maintenance
- ☐ 14. Aircraft Ground Handler
- ☐ 15. Fuelling Company
- ☐ 16. Fixed Base Operator
- ☐ 17. Aircraft Parts Supplier
- ☐ 18. Aviation Related Manufacturing
- ☐ 19. Aviation Related Training
- ☐ 20. Caterer
- ☐ 21. Security Firm
- ☐ 22. Hotel
- ☐ 23. Taxi, Bus
- ☐ 24. Car Rental
- ☐ 25. Airport Retail Outlet, Restaurant, etc.
- ☐ 26. Government Agency/Department
- ☐ 27. Air Traffic Control
- ☐ 28. Other: \_\_\_\_\_

### Q4. Total Employment

Please state the total number of employees that you have as of December 31, 2023. **This figure should include all full-time, part-time and seasonal work but should not include employment for work done on contract.**

<b>Total Number of Employees:</b> (as of December 31, 2023)	
<b>Total Annual Payroll (2023):</b> (Excluding employee benefits)	



Region of Waterloo  
INTERNATIONAL  
AIRPORT

Region of Waterloo International Airport  
Employment Survey

January 2024

**OR,** Provide an estimate of the average annual salary per employee \$\_\_\_\_\_

- ☐ Less than \$20,000
- ☐ Between \$20,000 and \$40,000
- ☐ Between \$40,000 and \$60,000
- ☐ Between \$60,000 and \$80,000
- ☐ Between \$80,000 and \$100,000
- ☐ More than \$100,000

### Q5. On-site versus Off-site Employees

For the purpose of this study, on-site workers are employees who work on airport land. Off-site employees are those who do not work on airport land, but are primarily performing airport or aviation related duties (e.g., airline sales representatives at a downtown office). Of the total number of employees listed in Q4, how many work on-site and how many work off-site?

Number of Employees On-Site:	
Number of Employees Off-Site:	

### Q6. Part-Time and Full-Time Employees

**A. Permanent Employees:** A permanent employee is one who works year round. In reference to the number of total employees in Q4, how many are permanent employees and how many are full-time and how many are part-time?

Number of Full-Time <u>Permanent</u> Employees:	
Number of Part-Time <u>Permanent</u> Employees:	

**For part-time employees**, on average, how many hours per week did they work last year (2023)?

# of Weekly Hours:	
--------------------	--

*If it is difficult to obtain this information or if there is great variation, you may provide a range of weekly hours (i.e., less than 10 hours, 10-15 hours, etc.)*

**B. Seasonal Employees:** A seasonal employee is one who is hired for work during peak or specific time periods only. In reference to the number of total employees in Q4, please indicate how many are seasonal full-time and part-time employees (December 31, 2023)?

Number of Full-Time <u>Seasonal</u> Employees:	
Number of Part-Time <u>Seasonal</u> Employees:	



Region of Waterloo  
INTERNATIONAL  
AIRPORT

## Region of Waterloo International Airport Employment Survey

January 2024

For seasonal workers, on average, how many **weeks** did they work last year (2023)?

<b>Number of Weeks Per Year:</b>	
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For part-time seasonal workers, on average, how many **hours per week** did they work last year (2023)?

<b>Number of Weekly Hours:</b>	
--------------------------------	--

*If it is difficult to obtain this information or if there is great variation, you may provide a range of weekly hours (i.e., less than 10 hours, 10-15 hours, etc).*

**THE SUM OF THE PERMANENT AND SEASONAL EMPLOYEES LISTED IN Q6A AND Q6B SHOULD EQUAL THE NUMBER OF TOTAL EMPLOYEES IN Q4.**

### Q7. Employment by Trade

In order to reflect the diversity of employment at the airport, please provide us with a breakdown of your total payroll employees, by position.

Employment by Trade		Number of Employees
General	Managerial/Supervisory	
	Clerical	
	Craft Trades (Electricians, Steam Fitters, etc.)	
Airline & Airline Servicing Trades	Pilots	
	Flight Attendants	
	Aircraft & Vehicle Mechanics	
	Customer Service Agents	
Support Trades	Aircraft Servicing	
	Security Agents	
	Food Service Workers	
	Drivers / Delivery / Couriers	
	Dispatchers	
Retail Trades	Call Centre / Reservations	
	Air Traffic Control	
	Sales / Cashiers	
Other (Please specify)	Food & Beverage Staff	



### Q8. Outsourcing and Contracting Out

Since we do not want to exclude any employment from the airport, we would like you to briefly comment on whether your firm contracts out any important services.

- A. Individuals on Contract:** If you pay some individuals through a contract, as opposed to through payroll, please indicate the number of such employees.

Number of <u>Contract</u> Employees:	
--------------------------------------	--

Of these employees on contract, how many **weeks**, on average, did they work last year (2023)? And, on average, how many **hours per week** do they work?

Number of Weeks Per Year:	
Number of Weekly Hours:	

- B. Firms on Contract:** Do you contract any work out to other **firms**? For example, janitorial services, ground handling, etc.

- ☐ **No.** (continue to next question)
- ☐ **Yes.** If yes, please complete the following table indicating the functions you contract out to other firms and an estimate of the annual hours on contract. Also include the names of the firms you use so we can ensure that we do not double count any work performed by other firms that we are surveying as a part of this study.

Function	Name of Firm	Located at YKF? (Yes/No)	Number of Hours Performed by Firm in 2023
<i>Example: Janitorial</i>	<i>Spic and Span Cleaners</i>		<i>100 a year (2 hours per week)</i>

### Q9. Subtenants

Since we would like to ensure that we do not miss any employment segments at the airport, if you have subtenants, please indicate accordingly and a survey link will be provided to those firms to complete. Thus, does your firm have subtenants?

- ☐ **No.**
- ☐ **Yes.** If yes, please complete the following table indicating the name and contact information of the subtenant(s).

Name of Firm	Contact Person	Contact Information (Phone Number/Email)



Region of Waterloo  
INTERNATIONAL  
AIRPORT

Region of Waterloo International Airport  
Employment Survey

January 2024


### Q10. Future Employment Base at Region of Waterloo International Airport

Over the next 5 years, do you expect your firm's employment base to:

- ☐ **Increase.** If so, by approximately how many employees? \_\_\_\_\_ employees
- ☐ **No change.** Remain at current levels.
- ☐ **Decrease.** If so, by approximately how many employees? \_\_\_\_\_ employees

### Q11. Property Taxes Paid in 2023

Please indicate the amount of property taxes paid by your firm in 2023.

<b>Total Property Taxes Paid</b> (2023)	
--	--

Thank you for your assistance in completing this survey.

Please return the completed survey by email to:

Attention: Sonya Sula  
Email: Sonya.Sula@InterVISTAS.com

If you have any questions, please call  
Sonya Sula at 1-604-717-1815.

## Appendix C: Summary of Direct Jobs

Figure D-1: Summary of Direct Employment

	Jobs	Jobs (Commercial Services <u>ONLY</u> )
Surveyed employment <sup>1</sup>	575	255
Inferred employment for non-respondents <sup>2</sup>	89	51
<b>Total</b>	<b>664</b>	<b>306</b>

**Notes:**

1. Refer to Appendix A
2. Refer to Appendix D
3. Rounded figures are presented throughout the report.

## Appendix D: Inferred Employment

Because not all employers responded to our requests for information in the survey, we statistically inferred some employment data to replace that which otherwise would be missing. This allows us to estimate the total amount and type of employment, which provides the basis for other estimates of economic impact.

In general, InterVISTAS' approach bases these inferred estimates on information provided by responding firms for each business type and validated against information from other publicly available sources of data. This approach is conservative in that we assumed that the non-responding firms are smaller than responding firms.

The employment data in this report was compiled from a combination of three sources:

1. **Employment reported by employers on surveys submitted to InterVISTAS.**
2. **Employment inferred for employers who did not provide a survey response.** Inferred employment was based on employment information from those firms in each business type that did respond to the survey. The mean employment of respondents in each business type was calculated, excluding outliers, and then conservatively adjusted downwards. For instance, those firms with especially large employment levels were excluded from the "mean without outliers" to obtain conservative results. This "adjusted mean" employment for each business type was then applied to those firms who did not respond to the survey.
3. **Airport RAICs.** The airport management team provided high level RAIC pass data by company to guide a rough order of magnitude job count for non-responding firms that was reviewed in the context with other information sources.

## Appendix E: Contract Employment

Some firms contract out services that they do not have expertise in providing or when there are cost advantages to doing so. For example, many airport firms contract out janitorial, elevator and maintenance services. The employment survey asked firms to identify whether they contracted out some of their work, and to estimate the number of annual hours involved.

Contract work was separated into two distinct categories in the employment survey:

- 1) individual “employees” paid through a contract, rather than via payroll, and
- 2) contracting out services to other firms.

There were roughly 18 contract jobs supplied by firms doing work for YKF and YKF tenants.

# Appendix F:

## Tax Revenues Attributable to YKF Employers

### Introduction

This appendix describes the employment and other assumptions on which tax revenue calculations are based. As well, the approaches used to estimate employer and employee contributions to local, provincial, and federal governments are presented. All estimates are using 2023 rates, unless otherwise stated.

Some of the taxes pose conceptual questions about how much, or if any, tax revenue from a particular source should be attributed to firms serving YKF. These questions are highlighted and simplifying assumptions are put forth.

### Employment at YKF

Majority of tax calculations in this report depend on direct employment and total wages. The total direct employment, in jobs, used for these calculations is 664 jobs. The total payroll is estimated at \$52 million.

### Personal Income Tax (Federal and Provincial)

Employees who work for employers located at YKF are taxed on their income and, as a result, contribute to federal and provincial tax revenues.

Under the *Income Tax Act* federal income tax is paid on taxable income at a rate that increases with taxable income.

#### Estimation Method and Results

Provincial income tax was formerly calculated as a percentage of federal tax, but most provincial governments have begun collecting taxes on a sliding scale.

Because the tax rate is progressive, the tax paid by a group of employees depends on the distribution of income among those employees. Unfortunately, the distribution of income is not known, and average incomes must be used.

The average tax rates used are derived from the more detailed calculations of taxes payable shown in **Figure F-1**. In those calculations, assumptions have been made about income from non-employment sources, tax deductions from income (e.g., RPP and RRSP contributions), and tax credits applied against tax otherwise payable (e.g., EI and charitable contributions). Average credits are calculated from Revenue Canada, *General Income Tax Forms, 2021*, the most recent available.

Each employee is assumed to pay tax as a single tax filer. Estimated income tax payable is \$6.4 million in federal tax and about \$2.7 million in provincial tax.

## **Corporate Income Tax (Federal and Provincial)**

All corporations are liable to pay federal income tax under the *Income Tax Act*. The tax rate varies by type and size of company and by province. Provincial governments also levy a corporation income tax on any company having a permanent establishment in that province.

Government agencies are not subject to corporate income tax, nor are public authorities.

### **Estimation Method and Results**

To calculate tax liability precisely is very difficult. It requires knowledge of the total tax base, and the proportion of the tax base attributable to the province. Therefore, an approximate method has been used.

In 2023, the federal corporate income tax collected per employee was \$4,660 and the provincial corporate income tax collected per employee was \$3,510.

Assuming all companies pay tax at the average rate per employee calculated above, the corporation income tax liability of the YKF employment sector is estimated to be \$2.8 million toward federal revenues and \$2.1 million toward provincial revenues. The estimated total corporate income tax revenue is roughly \$4.9 million.

**Figure F-1: Ontario Single Tax Filer Income Tax Calculation**

Income	\$0-\$5,000	\$5,000-\$10,000	\$10,000-\$15,000	\$15,000-\$20,000	\$20,000-\$25,000	\$25,000-\$30,000	\$30,000-\$35,000	\$35,000-\$40,000	\$40,000-\$45,000	\$45,000-\$50,000	\$50,000-\$55,000	\$55,000-\$60,000	\$60,000-\$70,000	\$70,000-\$80,000	\$80,000-\$90,000	\$90,000-\$100,000	\$100,000-\$150,000	\$150,000-\$250,000	\$250,000+
# of taxable returns	10,300	45,820	67,030	255,610	621,660	630,110	600,480	587,950	548,830	559,740	474,100	416,490	722,710	600,530	482,420	389,400	986,980	404,640	202,340
<b>Deductions (\$ thousands)</b>																			
RRSP	\$ 10,561	\$ 9,527	\$ 16,461	\$ 38,464	\$ 77,797	\$ 117,351	\$ 161,769	\$ 220,901	\$ 289,975	\$ 368,224	\$ 444,439	\$ 497,674	\$ 1,135,370	\$ 1,234,687	\$ 1,293,505	\$ 1,305,483	\$ 5,537,910	\$ 5,139,728	\$ 4,962,791
RPP	\$ 6,679	\$ 2,622	\$ 5,012	\$ 9,186	\$ 16,598	\$ 27,836	\$ 46,999	\$ 76,433	\$ 128,679	\$ 223,098	\$ 291,657	\$ 320,806	\$ 775,045	\$ 900,877	\$ 996,847	\$ 1,070,139	\$ 3,894,464	\$ 1,256,778	\$ 447,463
Union	\$ 5,494	\$ 7,148	\$ 11,459	\$ 14,555	\$ 18,362	\$ 23,479	\$ 31,860	\$ 40,087	\$ 51,650	\$ 69,064	\$ 79,492	\$ 81,201	\$ 177,030	\$ 187,021	\$ 191,330	\$ 187,329	\$ 536,040	\$ 116,061	\$ 29,441
Carrying Charges	\$ 11,752	\$ 7,886	\$ 11,813	\$ 19,950	\$ 32,820	\$ 42,921	\$ 50,813	\$ 60,615	\$ 66,721	\$ 78,507	\$ 84,836	\$ 84,291	\$ 174,054	\$ 179,825	\$ 184,379	\$ 173,561	\$ 656,663	\$ 706,197	\$ 1,482,844
<b>Credits (\$ thousands)</b>																			
Canada Pension Plan	\$ 32,175	\$ 44,095	\$ 82,623	\$ 124,119	\$ 187,305	\$ 279,985	\$ 402,615	\$ 505,248	\$ 596,105	\$ 688,100	\$ 734,055	\$ 724,535	\$ 1,405,987	\$ 1,212,505	\$ 1,024,867	\$ 868,318	\$ 2,297,924	\$ 865,108	\$ 381,972
Employment Insurance	\$ 17,482	\$ 22,259	\$ 35,494	\$ 47,771	\$ 66,217	\$ 97,482	\$ 136,679	\$ 169,451	\$ 197,836	\$ 227,111	\$ 240,202	\$ 233,964	\$ 427,555	\$ 385,102	\$ 308,772	\$ 259,415	\$ 679,884	\$ 237,089	\$ 96,047
Charity	\$ 122	\$ 295	\$ 725	\$ 3,387	\$ 8,738	\$ 15,154	\$ 22,147	\$ 28,762	\$ 32,664	\$ 36,909	\$ 37,172	\$ 36,790	\$ 74,151	\$ 76,217	\$ 67,857	\$ 60,792	\$ 209,100	\$ 181,157	\$ 816,357
<b>AVERAGE PER RETURN</b>																			
<b>Deductions</b>																			
RRSP	\$ 1,025.34	\$ 207.92	\$ 245.58	\$ 150.48	\$ 125.14	\$ 186.24	\$ 269.40	\$ 375.71	\$ 528.35	\$ 657.85	\$ 937.44	\$ 1,194.92	\$ 1,570.99	\$ 2,056.00	\$ 2,681.28	\$ 3,352.55	\$ 5,610.96	\$ 12,701.98	\$ 24,526.99
RPP	\$ 648.45	\$ 57.22	\$ 74.77	\$ 35.94	\$ 26.70	\$ 44.18	\$ 78.27	\$ 130.00	\$ 234.46	\$ 398.57	\$ 615.18	\$ 770.26	\$ 1,072.41	\$ 1,500.14	\$ 2,066.35	\$ 2,748.17	\$ 3,945.84	\$ 3,204.77	\$ 2,211.44
Union	\$ 533.40	\$ 156.00	\$ 170.95	\$ 56.94	\$ 29.54	\$ 37.26	\$ 53.06	\$ 68.18	\$ 94.11	\$ 123.39	\$ 167.67	\$ 194.97	\$ 244.95	\$ 311.43	\$ 396.60	\$ 481.07	\$ 543.11	\$ 311.54	\$ 145.50
Carrying Charges	\$ 1,140.97	\$ 172.11	\$ 176.23	\$ 78.05	\$ 52.79	\$ 68.12	\$ 84.62	\$ 103.10	\$ 121.57	\$ 140.26	\$ 178.94	\$ 202.38	\$ 240.84	\$ 299.44	\$ 382.20	\$ 445.71	\$ 665.33	\$ 1,745.25	\$ 7,328.48
<b>Credits</b>																			
Canada Pension Plan	\$ 3,122.79	\$ 962.35	\$ 1,232.63	\$ 485.58	\$ 301.30	\$ 444.34	\$ 670.49	\$ 859.34	\$ 1,086.14	\$ 1,229.32	\$ 1,548.31	\$ 1,739.62	\$ 1,945.44	\$ 2,019.06	\$ 2,124.43	\$ 2,229.89	\$ 2,328.24	\$ 2,137.97	\$ 1,887.77
Employment Insurance	\$ 1,697.28	\$ 485.79	\$ 529.52	\$ 186.89	\$ 106.52	\$ 154.71	\$ 227.62	\$ 288.21	\$ 360.47	\$ 405.74	\$ 506.65	\$ 561.75	\$ 591.60	\$ 607.97	\$ 640.05	\$ 666.19	\$ 688.85	\$ 585.93	\$ 474.68
Charity	\$ 11.84	\$ 6.44	\$ 10.82	\$ 13.25	\$ 14.06	\$ 24.05	\$ 36.88	\$ 48.92	\$ 59.52	\$ 69.51	\$ 78.41	\$ 88.33	\$ 102.60	\$ 126.92	\$ 140.66	\$ 156.12	\$ 211.86	\$ 447.70	\$ 4,034.58

## Employment Insurance Premiums

In 2023, employees in Canada paid employment insurance (EI) premiums equal to 1.63% of earnings up to a maximum of \$1,002.45 per year. (Maximum insurable earnings are \$61,500). Employers paid EI premiums equal to 1.4 times employee premiums.

### **Estimation Method and Results**

The employee premium rate is applied to total payroll costs for employees earning less than \$61,500 per year. The maximum contribution was used for employees earning more than \$61,500 per year.

Estimated employee payments are about \$630,000.

The employer rate is applied to the employee payments. Estimated employer payments were about \$880,000.

## Canada Pension Plan Contributions

### **Tax Base and Rates**

In 2023, employee contributions for the Canada Pension Plan (CPP) were 5.95 % of pensionable earnings. Pensionable earnings are actual earnings less \$3,500, to a maximum of \$66,600. The maximum annual employee contribution is \$3,754. The employer contribution is the same as the employee contribution.

### **Estimation Method and Results**

The employee contribution rate is applied to average payroll for employees who are earning less than \$66,600 a year. The maximum contribution was used for employment earning more than the maximum pensionable earnings.

Estimated employer and employee contributions are about \$2.35 million each, for a total of \$4.7 million.

## Workplace Safety and Insurance Board Contributions

Employers in Ontario are required to make contributions to the Workplace Safety and Insurance Board (WSIB), the provincial workplace compensation board for provincially regulated workplaces in Ontario. Employers are classified into industry groups. The contribution rate for each group is based on the injury costs associated with all companies in that group.<sup>30</sup> The group contribution rate varies widely among industries and provinces. Some major companies are not included in the general “rateable” method of contribution but simply pay the actual cost of their claims plus an allowance for WSIB administration costs. As it is not generally known which firms contribute in this manner, nor the value of their claims, an estimate based on reported payroll has been made for all firms.

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<sup>30</sup> [2023 Premium Rates Manual \(wsib.ca\)](https://www.wsib.ca/2023-premium-rates-manual)

It is possible that some companies are self-insured, and their payments could be viewed as a business expense rather than a tax. However, we have chosen to include their contribution because they are required to be part of this government-mandated program.

### **Estimation Method and Results**

The contribution rates for each employment classification at YKF have been applied to the total payroll for that group. It is estimated that businesses paid an estimated \$780,000 to WSIB.

## **Aviation Fuel Tax**

The federal and provincial governments levy taxes on aviation fuel. The aviation fuel tax rates are shown in **Table F-2**.

**Figure F-2: Fuel Tax Rates, 2023**

Federal	Ontario
\$/Litre	
\$0.04	\$0.067

### **Estimation Method and Results**

The amount of taxable aviation jet fuel and aviation gasoline (Avgas) sold at YKF in 2023 was approximately 16.6 million litres.<sup>31</sup> The total jet fuel and Avgas tax revenues at YKF amount to approximately \$1.8 million. Of this total, about \$665,800 went to the federal government and the Government of Ontario collected \$1.1 million.

## **Property Taxes**

Governments levy property taxes to help them finance local services. Property taxes paid by YKF tenants amounted to \$595,100 in 2023.<sup>32</sup>

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<sup>31</sup> Amount of taxable aviation jet fuel and aviation gasoline (Avgas) sold was provided by YKF.

<sup>32</sup> Property taxes paid by YKF tenants were provided by YKF.

## Appendix G:

# Tax Revenues Attributable to Airport Users

### YKF Passengers in 2023

In 2023, over 445,300 passengers enplaned and/or deplaned at YKF.

### HST on Air Fares, the Airport Passenger Facility Charge (APFF) and General Terminal Fee

#### Tax Base and Rate

The 13% Harmonized Services Tax (HST) applies to all tickets purchased in Canada and includes all domestic, transborder and international flights. The GST portion of the HST is equivalent to 5%. The PST portion of the HST is equivalent to 8%.

All passengers originating their journey at YKF is charged an Airport Passenger Facility Fee (APFF) is collected for funding various airport infrastructure projects. HST is levied on the fee.

All passengers originating their journey at YKF is charged a General Terminal Fee (GTF). HST is levied on this charge.

**Conceptual Issues.** Taxes levied on the air fare should be shared among airports in Canada associated with the journey. General assumption is that 50% of taxes accrue to YKF.

#### Estimation Method and Results

HST is levied on all air fares; however, due to the sharing assumption stated above, only a percentage of the estimated taxes per departing passenger are attributable to YKF. Total tax on airfares is estimated to be close to \$3.6 million, of which \$1.4 million is the GST portion of the HST and \$2.2 million is the PST portion of the HST.

YKF collected nearly \$3.3 million in APFF in 2023. The total HST collected amounts to \$433,800, the GST portion of the HST amounts to \$166,800 and the PST portion of the HST amounts to \$266,900.

YKF collected nearly \$382,900 in GTF in 2023. The total HST collected amounts to \$49,800, the GST portion of the HST amounts to \$19,100 and the PST portion of the HST amounts to \$30,600.

## **HST on Air Traveller Security Charge**

The Canadian Government enacted the Air Traveller Security Charge (ATSC) on April 1, 2002, to help fund security improvements at airports across Canada, because of the terrorist attacks on September 11, 2001. There is a flat rate fee of \$9.46 for each chargeable enplanement for domestic travel, \$16.08 for transborder travel, and \$34.42 for international travel.

### **Tax Base and Rate**

The HST applies to the domestic and transborder ATSC.

### **Estimation Method**

Based on the estimated local passengers originating from YKF, a total of \$1.3 million in ATSC revenue was collected across the three sectors of travel. The total HST collected for domestic and transborder sectors amount to \$148,500, of which \$57,100 is attributed to the GST portion of the HST and \$91,400 is attributed to the PST portion of the HST.

## Appendix H: Glossary of Terms

**Air Traveller Security Charge (ATSC):** A fee collected by the Federal Government from air travellers to help fund security improvements at Canadian airports. The fee varies by region of travel and is charged to the passenger per enplanement.

**Airport Improvement Fee (AIF):** A fee collected by the airport authority from passengers to help with funding capital improvements at the airport. In some regions of Canada, this is also referred to as the Passenger Facility Charge (PFC).

**Contract Work:** Any work which is done for a company by an individual who is not on the payroll or work done for a company by another company. Firms will contract out work in areas in which they do not have expertise or when there are cost advantages to doing so.

**Direct Employment:** Direct employment is employment that can be directly attributable to the operations in an industry, firm, etc. It is literally a head count of those people who work in a sector of the economy. In the case of the airport, all of those people who work on airport property and in an aviation related capacity would be considered direct employment.

**Economic Activity:** (also Output, Production) The end product of transforming inputs into goods. The end product does not necessarily have to be a tangible good (for example, knowledge), nor does it have to create utility (for example, pollution). Or, more generally, the process of transforming the factors of production into goods and services desired for consumption.

**Economic Output:** (also Economic Activity, Production) The end product of transforming inputs into goods. The end product does not necessarily have to be a tangible good (for example, knowledge), nor does it have to create utility (for example, pollution). Or, more generally, it is defined as the process of transforming the factors of production into goods and services desired for consumption.

**Employment Impact:** Employment impact analysis determines the economic impact of employment in terms of jobs created and salaries and wages paid out. In the case of the airport, the direct, indirect, induced, and total number of jobs or full-time equivalents created at the airport is examined to produce a snapshot of airport operations.

**Gross Domestic Product:** (GDP, also value-added) A measure of the value added by labour and capital services used to produce final goods and services, as a result of economic activity in the nation. This measure is net of the value of intermediate goods and services used up to produce the final goods and services.

**Ground Transportation:** Ground Transportation at the airport includes any vehicles which transport passengers from the airport to the cities or from the cities to the airport. This would include taxicab service, limousine service and hotel van service. Valet services as well as skycaps are included in this category.

**Indirect Employment:** Indirect employment is employment which results because of direct employment. For the airport, it would include that portion of employment in supplier industries which are dependent

on sales to the air transport sector. In some cases, contract work would be considered indirect employment.

**Induced Employment:** Induced employment is employment created because of expenditures by direct and indirect employees.

**Multiplier Analysis:** Analysis using economic multipliers in which indirect and induced economic impacts is quantified. Essentially, a multiplier number is applied to the "directly traceable economic impact" to produce indirect and total effects (see Multiplier.)

**Multiplier:** Economic multipliers are used to infer indirect and induced effects from a particular sector of the economy. They come in a variety of forms and differ in definition and application. A multiplier is a number which would be multiplied by direct effects to calculate indirect or induced effects. In the case of the airport, as in many other cases, multipliers can lead to illusory results, and thus must be used with great care.

**Seasonality:** Seasonality results when the supply and demand for a good is directly related to the season in which is consumed. For example, ski resorts experience changes in net income as a result of seasonality. Airports and airport services also experience seasonality because of vacation times for families (typically during the summer) and/or temperatures abroad (typically at Christmas time). As a result of seasonality in demand for flights, some air carriers increase frequency of flights to certain areas during the busy season.

**Tenant:** A firm which pays a lease to a leasing company or to the airport authority directly.

**Value-Added:** (also GDP) A measure of the money value of final goods and services produced as a result of economic activity in the nation. This measure is net of the value of intermediate goods and services used up to produce the final goods and services.



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