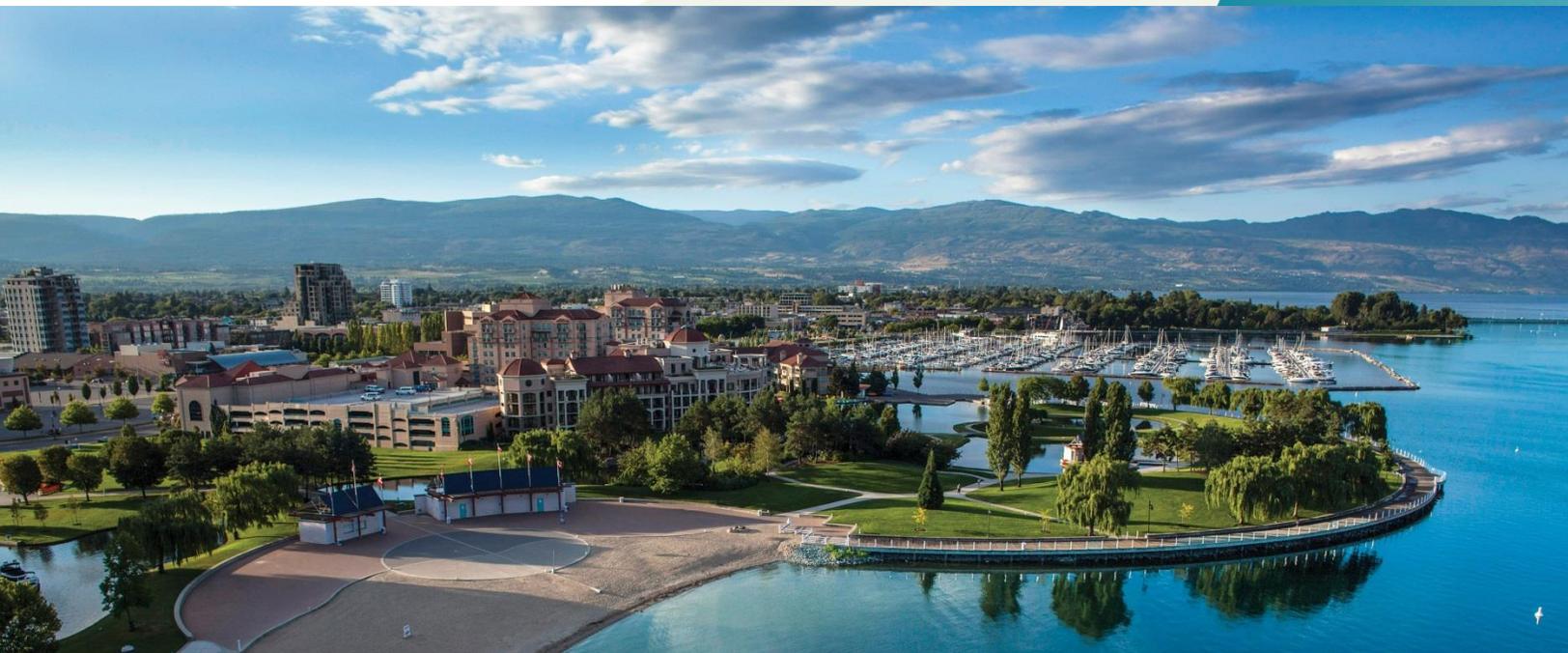


InterVISTAS

a company of Royal HaskoningDHV

FINAL REPORT

Economic Impact of Tourism in Kelowna and the Greater Kelowna Area, B.C.



PREPARED FOR
Tourism Kelowna

PREPARED BY
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2 March 2017

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Executive Summary

Tourism is a major economic generator for the City of Kelowna and its surrounding municipalities and region. Tourism contributes directly to employment and economic growth in the region through the ongoing operations and activities of different firms that serve tourists. The tourism industry is a significant economic generator that makes contributions to the local economy, the Province of British Columbia and beyond.

Area of Study ~ Kelowna and the Greater Kelowna Area

The geographic scope of this study includes the City of Kelowna and the adjacent municipalities, together comprising the Kelowna Census Metropolitan Area and, beyond that, the Central Okanagan Regional District. Big White Ski Resort, which is located outside of the Central Okanagan Regional District, is also included in the study. Throughout this report, references to Kelowna and the greater Kelowna area refer to the geographic jurisdictions described above, unless noted otherwise. It is noted that visitor counts and visitor spending at Big White are not included in the analysis, as the visitation counts are only for Kelowna CMA, which does not include Big White. However, the economic contribution associated with jobs at Big White is accounted for in the analysis (i.e., including jobs, wages, GDP, economic output and tax revenue).

Economic Impact of Tourism in the Greater Kelowna Area

Economic impact is a measure of the spending and employment associated with a sector of the economy (e.g., tourism), 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 the greater Kelowna area's tourism sector. This study measures the total economic and tax impacts of tourism activity from three main sources, as follows:

- **Accommodations Employment Impacts.** A wide range of accommodation options are available in the Greater Kelowna Area from bed and breakfasts, motels, hotels and resorts. Over 4,400 rooms are offered to non-local visitors by the greater Kelowna area's accommodation providers.¹
- **Other Tourism Industries Employment Impacts.** Kelowna is home to a wide range of different attractions that include prestigious golf courses, globally renowned wineries, and a variety of other entertainment options. These impacts reflect employment in other tourism industries, such as attractions, air transportation and other supporting businesses and organizations of the tourism sector, in the region.²
- **Visitor Spending Impacts.** Beyond the accommodations and other tourism industry employment impacts, spending by non-local visitors in Kelowna, B.C. also contributes a significant amount of

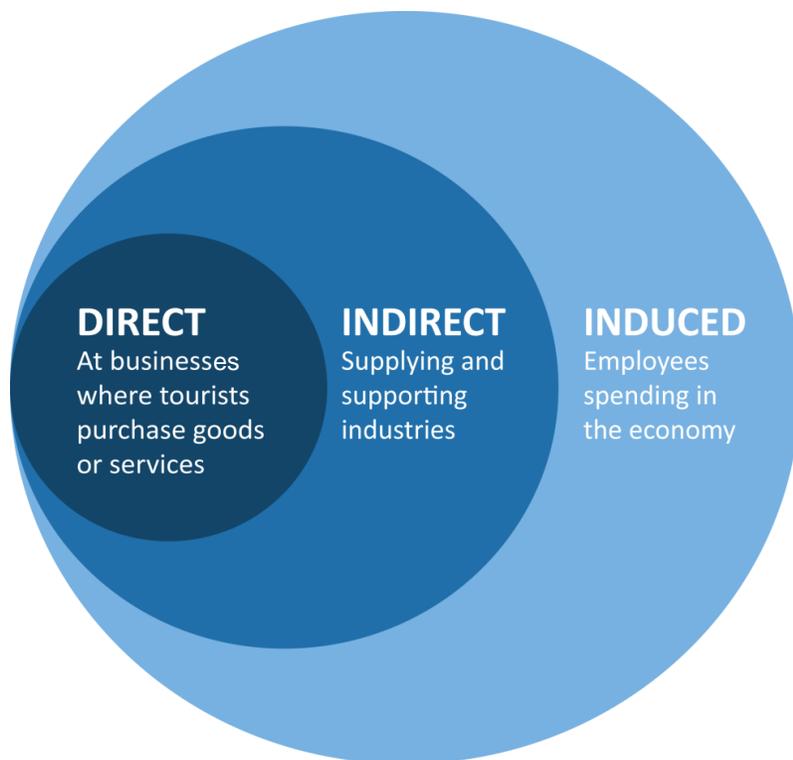
¹ Source: Tourism Kelowna.

² Air transportation employment related to the inbound air visitors to the area included in this section is based on the *2015 Kelowna International Airport Economic Impact Study* conducted by SNC Lavalin.

economic impact to the tourism sector in the area, amounting to \$176 million in non-accommodation and non-entertainment spending.³

The three major components of economic impact are classified as *direct, indirect and induced impacts*. Collectively, these impacts measure the role of Kelowna's tourism industry on the broader economy at a local, provincial and/or national level. **Figure ES-1** illustrates the various elements that account for the economic impact of Kelowna's tourism industry.

Figure ES-1:
Economic Impact of the Greater Kelowna Area's Tourism Industry



³ For the analysis of visitor non-accommodation and non-entertainment spending impacts in Kelowna, visitor spending data was taken from the *2016 Visitor Intercept Survey* conducted by InterVISTAS. Visitor spending includes expenditure on retail, food & beverage and local transportation within the Kelowna area.

Ongoing Economic Impact

Direct economic impact measures the employment directly associated with the greater Kelowna areas tourism industry. This includes employment from organizations such as accommodations providers, restaurants, retail, ground transportation (e.g., transit/taxi/car rental) and other related industries where tourists of Kelowna spend their money. *Indirect* impacts include employment in industries that supply or provide services to the primary tourism related firms, e.g., a food wholesaler who supplies food to Kelowna-area restaurants that serve tourists. *Induced* employment is employment that is created because of expenditures by individuals employed both directly and indirectly by businesses related to the tourism industry. *Total* impacts are calculated by adding together the direct, indirect, and induced impacts.

Direct Economic Impact

Ongoing activities carried out by firms that serve tourists in Kelowna directly account for approximately 5,570 full-time equivalents (FTEs) or person years of employment (8,350 jobs),⁴ earning \$240 million in total direct wages and salaries. Direct employment generates \$370 million in direct gross domestic product (GDP) and \$810 million in direct economic output in the province annually.

Combined, accommodations and outdoor attractions firms make up nearly 50% of the total direct tourism related employment in Kelowna, equal to roughly 2,500 FTEs or 3,900 jobs. Total visitor spending amounted to nearly \$340 million. Estimated taxation revenue from the tourism industry amounts to over \$140 million.

Kelowna's tourism industry is a source of employment for a wide variety of industries. Based on surveyed data, the largest sector is accommodations, followed by outdoor attractions and food/beverage providers.

Ongoing Direct Economic Impact of Kelowna's Tourism Sector

Annual Direct Impact:

- 1.9 million visitors annually
- 8,350 direct jobs
- 5,570 full time equivalents (FTEs)
- \$240 million in earnings (wages)
- \$337 million in visitor spending
- \$370 million in gross domestic product (GDP)
- \$810 million in economic output
- \$142 million in tax revenue

▪ ⁴ For purposes of this study, one full-time equivalent of employment corresponds to 1,832 hours of work annually.

Total Economic Impact of Tourism in Kelowna

Including indirect and induced multiplier impacts, the ongoing economic impact of tourism in Kelowna in the Province of British Columbia is estimated to be a total of 7,940 FTEs, of which 5,570 FTEs are directly related to the tourism industry. Total earnings of all employees amount to \$370 million in wages and salaries. Furthermore, Kelowna's tourism industry contributes an estimated \$620 million and \$1.25 billion in total gross domestic product (GDP) and total economic output to the provincial economy, respectively. The total economic impacts of Kelowna's tourism sector are summarized in **Figure ES-2**.

Figure ES-2: Total Economic Impact of Tourism in Greater Kelowna Area, 2016

Impact	Employment		Wages (\$ Millions)	GDP (\$ Millions)	Output (\$ Millions)
	Jobs	FTEs			
Direct					
Accommodations	2,200	1,600	70	100	160
Other Tourism Industries*	3,900	2,220	120	190	500
Visitor Spending**	2,250	1,750	60	70	150
Total Direct	8,350	5,570	240	370	810
Indirect***	2,060	1,380	80	130	250
Induced***	1,480	990	50	120	180
Grand Total	11,890	7,940	370	620	1,250

Notes:

* Other tourism industries impact reflects employment in attractions, transportation and other supporting businesses and organizations of the tourism sector in the region.

** An estimated 2,250 jobs are associated with visitor spending that takes place in the Kelowna area. The level of visitor spending is based on the 2016 Visitor Intercept Survey conducted by InterVISTAS, and includes expenditure on retail, food & beverage and local transportation.

*** Does not include indirect and induced impacts for visitor spending (only for Accommodations and Other Tourism Industries) to mitigate the possibility of double-counting of impacts.

-- Figures may not sum to totals due to rounding.

Annual Tax Impacts of Ongoing Operations in the Greater Kelowna Area's Tourism Industry

Tourism in Kelowna is also an important generator of taxation revenues to all levels of government. Total taxes in 2016, attributable to tourists, employers and employees in Kelowna's tourism industry, are estimated at \$142 million per annum.

The majority of taxes collected (56%) accrue to the federal government at \$80 million. The provincial government received an estimated \$49 million in tax revenues (34% of total). Municipal governments also benefit from Kelowna's tourism industry through the collection of property taxes estimated at approximately \$13 million, as shown in **Figure ES-3** and **Figure ES-4**.

Annual Tax Impacts of Kelowna's Tourism Industry

Federal Government:

- \$80 million (56% of total)

Provincial Government:

- \$49 million (34% of total)

Municipal Government:

- \$13 million (9% of total)

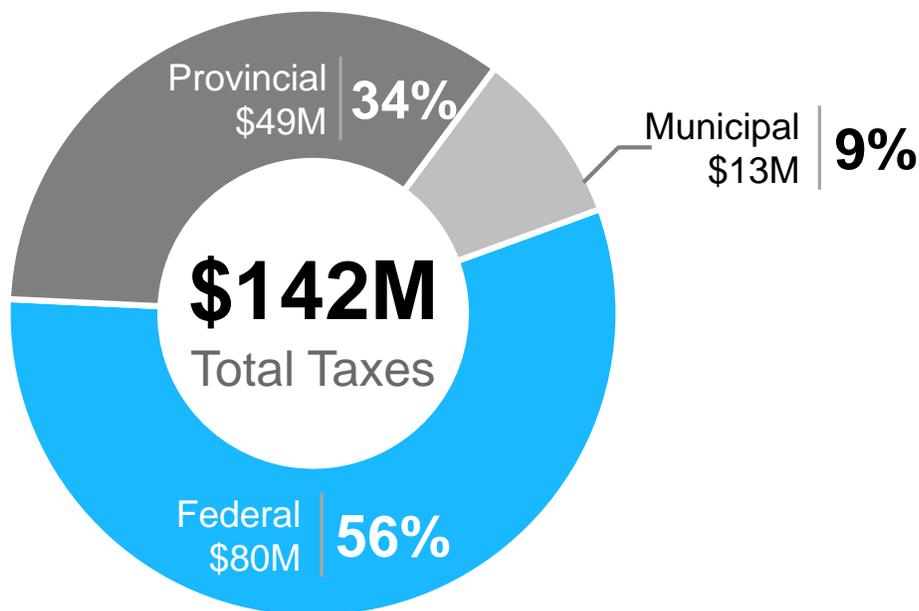
Total Taxes → \$142 million

Figure ES-3: Annual Tax Contributions of Tourism in Kelowna, by Taxpayer (\$ millions)

Taxpayer	Federal	Provincial	Municipal	Total
Tourism Employees and Employers	66	30	12	108
Tourists	14	18	2	34
<i>Total</i>	<i>80</i>	<i>49</i>	<i>13</i>	<i>142</i>

Note: Totals may not sum, due to rounding.

Figure ES-4: Annual Estimated Tax Revenues of Tourism in Kelowna, 2016



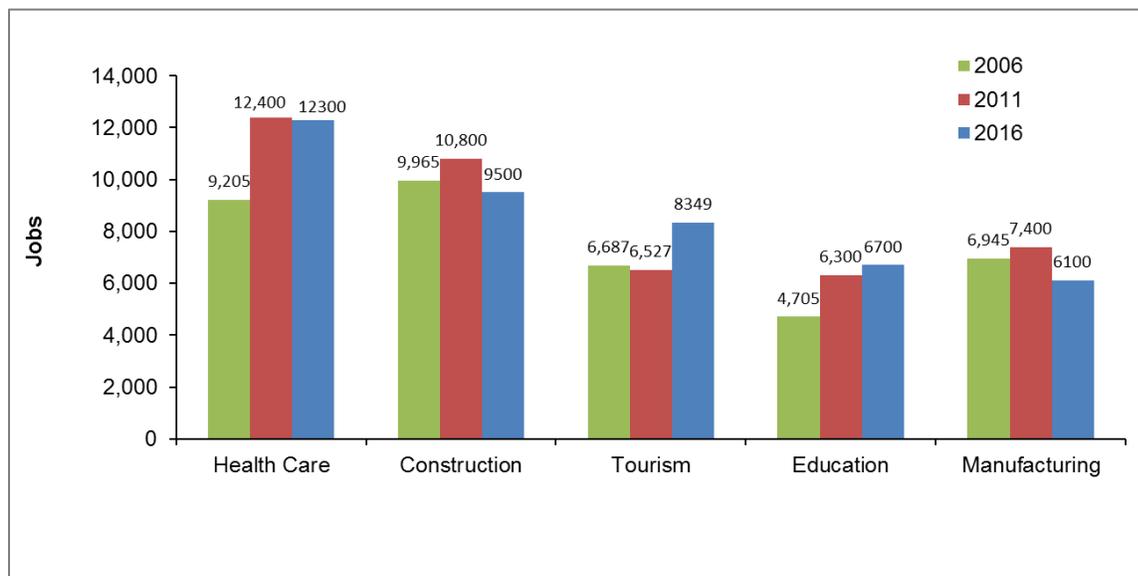
Characteristics of Tourism Employment in the Greater Kelowna Area

Tourism continues to be a growing industry, retaining its position as one of the largest employers in the greater Kelowna area in 2016, similar to 2011. In 2011 and 2016, the tourism industry ranked higher than education and manufacturing in terms of total number of employees. **Figure ES-5** provides a comparison of tourism employment and other industries in the area between 2011 and 2016.

A breakdown of the amount of direct tourism-related jobs in Kelowna, by business type, is shown in **Figure ES-6**. According to 2016 labour force statistics published by Statistics Canada, it was estimated that Kelowna had over 90,900 jobs in the city.⁵ This implies that direct tourism related jobs make up roughly 9% of all jobs in the city. The accommodations, outdoor attractions and food/beverage sectors make up over 60% (or 3,530 FTEs) of the total direct tourism related employment in Kelowna.

⁵ Source: <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/labor35-eng.htm>

**Figure ES-5:
Comparison of Employment in Tourism and Other Industries in Kelowna**



Source:
Statistics Canada – Employment by Industry for the Metropolitan Area, Kelowna CMA (2011 and 2016), Experienced Labour Force 15 years and over, Kelowna CMA (2006).

**Figure ES-6:
Tourism Related Direct Employment in the Greater Kelowna Area by Business Type –
Based on 8,350 Direct Jobs in 2016**

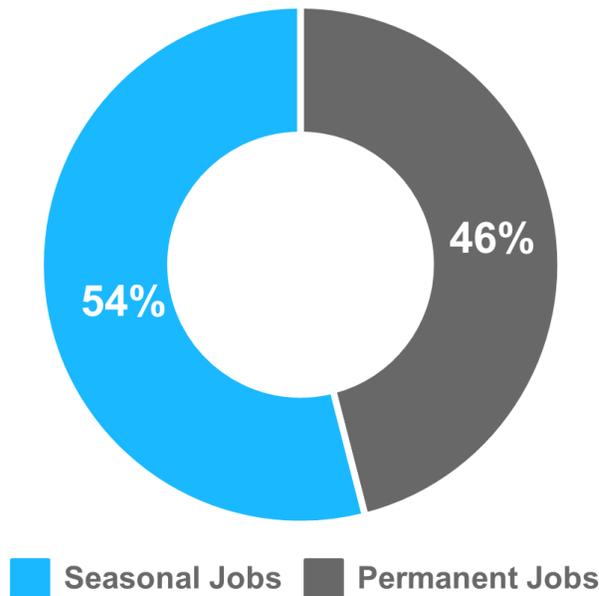
Business Type	Jobs	Person Years or Full-Time Equivalents	% (FTEs)
Accommodations	2,200	1,600	29%
Outdoor Attractions	1,710	910	16%
Food & Beverage	1,360	1,020	18%
Transportation	1,350	890	16%
Winery	860	480	9%
Retail	670	550	10%
Arts & Culture	120	80	1%
Other	80	50	1%
Total	8,350	5,570	100%

Note: Amounts may not add to totals due to rounding.

Traditionally, one measures employment by the number of jobs. However, when part-time and/or seasonal workers are used, this can be a misleading measure resulting in an overstatement of economic impact. Whenever possible, employment impacts are measured both in terms of the number of jobs and the number of person years (or Full-time equivalents (FTE)).⁶

Based on surveyed direct jobs, approximately 46% of tourism-related jobs in the greater Kelowna area are permanent positions, while 54% of tourism jobs are seasonal positions. **Figure ES-7** shows the permanent and seasonal components of employment attributable to tourism operations in Kelowna. Approximately 70% of the permanent positions are full-time positions. Similarly, over 75% of the seasonal jobs consist of full-time positions. The breakdown of permanent and seasonal jobs by full-time and part-time positions is presented in **Figure ES-8**.

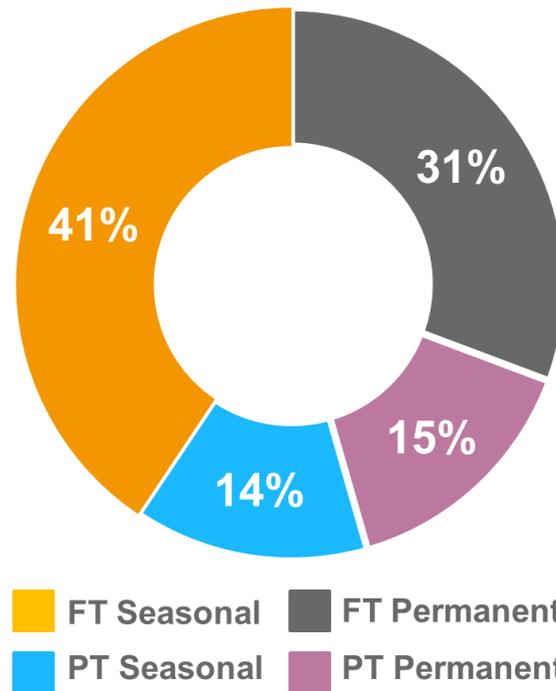
Figure ES-7: Permanent vs. Seasonal Tourism Employment in Kelowna



Note: This chart is based on surveyed direct jobs only.

⁶ One person year is equivalent to 1,832 hours of work. See **Appendix C** for a detailed calculation of the number of hours per person year. 1 person year (PY) is equal to 1 full time equivalent (FTE).

Figure ES-8: Full-Time vs. Part-Time Tourism Employment in Kelowna



Note: This chart is based on surveyed direct jobs only.

Comparison Summary of 2006, 2011 and 2016 Results

The changed economic conditions in recent years is reflected in the results from the 2006, 2011 and 2016 economic impact studies of the tourism industry in the greater Kelowna area. **Figure ES-9** provides a comparison summary for the three years in which the study was conducted.⁷

⁷ The results from the 2011 study used in the comparisons in this section were adjusted to match the study area examined in the 2016 study. The 2011 impacts have been adjusted to remove three previously surveyed firms, which were excluded in the 2016 study as they reside outside of the greater Kelowna area.

Figure ES-9: Summary of Economic Impact of Tourism in Kelowna

Metric	2006	2011	2016	% Increase/Decrease (2011 to 2016)
Total Person Visits*	1,193,300	1,514,700	1,930,900	27.5%
Visitor Spending				
Accommodations**	\$72,000,000	\$81,000,000	\$91,000,000	12.3%
Activities & Entertainment***	\$18,000,000	\$15,000,000	\$70,000,000	366.7%
Other****	\$198,000,000	\$183,000,000	\$176,000,000	-3.8%
<i>Total Visitor Spending</i>	<i>\$288,000,000</i>	<i>\$279,000,000</i>	<i>\$337,000,000</i>	<i>20.8%</i>
Employment Impacts (Number of Jobs)				
<i>Direct Impacts</i>	6,690	6,530	8,350	27.9%
Employment Impacts (Number of Person Years)				
<i>Direct Impacts</i>	4,960	4,640	5,570	20.0%
Wages				
<i>Direct Impacts</i>	\$126,000,000	\$164,000,000	\$241,000,000	47.0%
GDP				
<i>Direct Impacts</i>	\$223,000,000	\$317,000,000	\$367,000,000	15.8%
Economic Output				
<i>Direct Impacts</i>	\$387,000,000	\$622,000,000	\$809,000,000	30.1%
Tax Revenues				
Federal	\$55,000,000	\$55,000,000	\$80,000,000	45.5%
Provincial	\$29,000,000	\$33,000,000	\$49,000,000	48.5%
Municipal	\$5,000,000	\$8,000,000	\$13,000,000	62.5%
<i>Total Tax Revenues</i>	<i>\$89,000,000</i>	<i>\$96,000,000</i>	<i>\$142,000,000</i>	<i>47.9%</i>

* Total Person Visits: Statistics Canada, *Travel Survey of Residents of Canada & International Travel Survey*, (2004, 2010 and 2015).

** Accommodation visitor spending is equivalent to hotel room revenue, and is taken from BC Stats data for 2006, 2010 and 2015 for the Central Okanagan Regional District and Kelowna.

*** Activities and entertainment visitor spending is taken from Kettle Valley Research's *2006 and 2011 Visitor Survey Spending Profile* well as InterVISTAS' *2016 Visitor Intercept Survey*, and includes expenditure on entertainment in Kelowna.

**** Other includes non-accommodation and non-entertainment visitor spending data taken from the *2006 and 2011 Visitor Survey Spending Profile* conducted by Kettle Valley Research, as well as the *2016 Visitor Intercept Survey* conducted by InterVISTAS. Visitor spending includes expenditure on retail, food & beverage and local transportation within the greater Kelowna area.

1 Introduction

1.1 The Kelowna Area

The greater Kelowna area is a tourism hotspot in the Okanagan Valley of British Columbia. Located on the shores of Okanagan Lake and adjacent to a bevy of mountains, forests, vineyards and orchards, this area offers attractions for outdoor enthusiasts and casual vacationers alike.

Home to over 30 wineries, 18 golf courses and several outdoor adventure experiences, the greater Kelowna area now attracts leisure travelers year-round. In addition Kelowna has a growing scene for microbreweries, cideries, and distilleries and boasts a diverse food scene with farm-to-table options, lake-side bistros, street-side café, and nightlife.

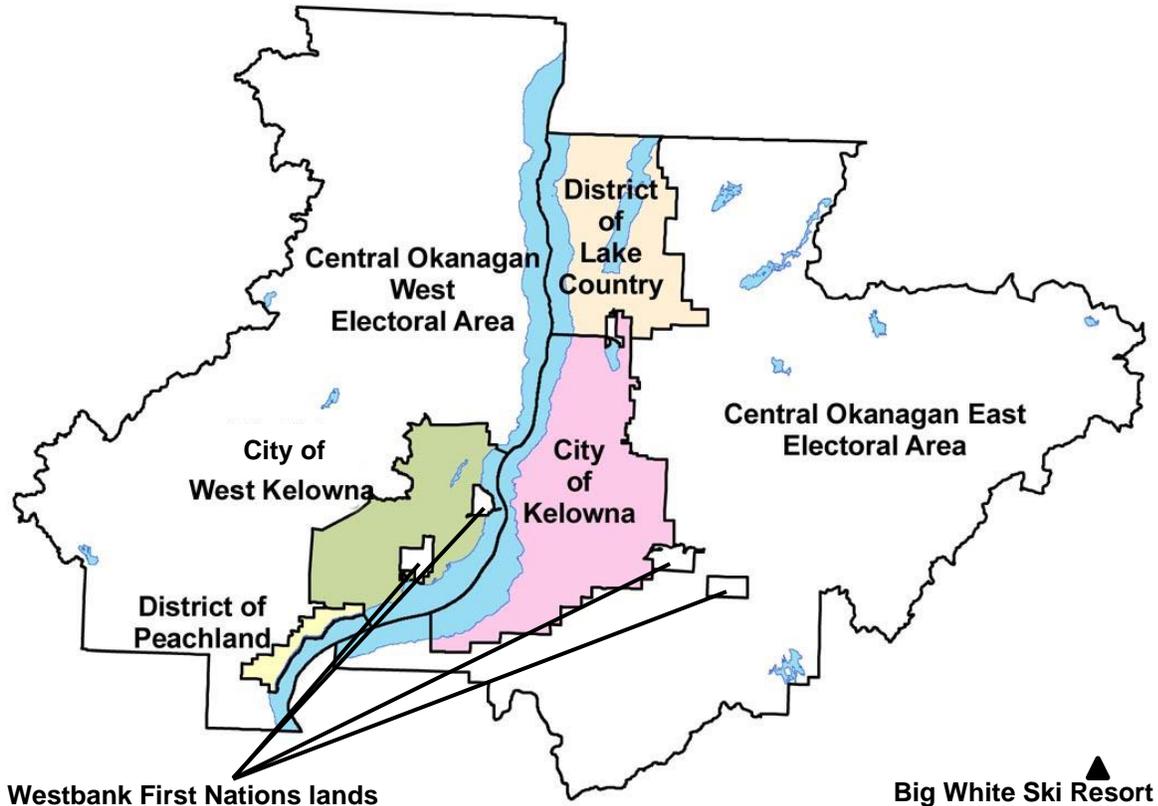
During the winter season, skiing, snowboarding and other winter activities are available at nearby Big White Resort and other wilderness lodges.

The population of the Kelowna Census Metropolitan Area is nearly 195,000, with the City of Kelowna accounting for 127,000.⁸ This region is supported by its own international airport located 15 km from the city center, offering connections to major cities including Calgary, Vancouver, Seattle, and Toronto.

A map of the greater Kelowna area is shown in **Figure 1-1**. The Central Okanagan Regional District includes the City of Kelowna, the District of Peachland, the City of West Kelowna, Westbank First Nations, the District of Lake Country and rural areas in the Central Okanagan Regional District. Big White Ski Resort, which is located outside of the Central Okanagan Regional District, is included in the analysis. The associated economic contribution of jobs at Big White is accounted for in this study (i.e., including jobs, wages, GDP, economic output and tax revenue). References to Kelowna and the greater Kelowna area in this study include the City of Kelowna and the surrounding Central Okanagan Regional District/Kelowna Census Metropolitan Area.

⁸ Statistics Canada, 2016 Census Profile for the City of Kelowna and the Kelowna Census Metropolitan Area.

Figure 1-1: Map of the Greater Kelowna Area



Source: Regional District of Central Okanagan

1.2 What is Economic Impact?

Economic impact is a measure of the spending and employment associated with a sector of the economy (e.g., tourism), a specific project (such as the construction of a new facility), economic activity or a change in government policy or regulation. In this case, economic impact refers to the economic contribution associated with the ongoing activities of Kelowna’s tourism sector, which includes accommodations, food/beverage and retail, local attractions and transportation providers. Economic impact can be measured in various ways including employment, income, Gross Domestic Product (GDP) and economic output, as summarized in **Figure 1-2**. All of these are used to express the gross level of activity or expenditure from a sector of the economy, a specific project or a change in policy or regulation. Although they are not “net” measures that weigh benefits against costs, these measures can be useful in developing an appreciation of projects, investments and economic sectors.

Figure 1-2: Measures of Economic Impact

<p>Employment</p>	<ul style="list-style-type: none"> • Employment is measured in terms of jobs or number of employees. However, as some employment are part-time and/or seasonal employees, they are converted into full-time equivalents (FTEs). • The FTEs employed by businesses directly or indirectly linked to activities and operations in Kelowna's firms that serve non-local visitors to the city.
<p>Wages</p>	<ul style="list-style-type: none"> • The wages, salaries, bonuses, benefits and other remuneration earned by people linked to activities and operations of Kelowna's tourism sector.
<p>Gross Domestic Product (GDP)</p>	<ul style="list-style-type: none"> • The value of the operating surpluses (i.e. the "value-add") of businesses linked to activities and operations serving Kelowna's visitors, plus the remuneration and net indirect taxes paid to government.
<p>Economic Output</p>	<ul style="list-style-type: none"> • The total gross spending (i.e. capital improvement plus revenue) by firms, organizations and individuals involved in activities linked to operations at Kelowna's tourism-related firms, including intermediate consumption.

1.3 Categories of Economic Impact

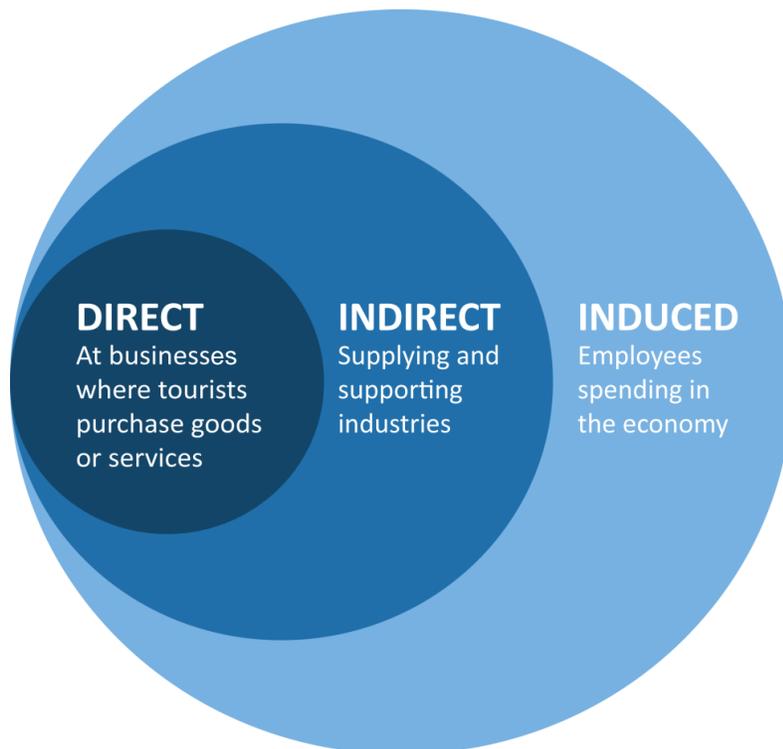
The three major components of economic impact of this study are classified as *direct*, *indirect* and *induced* impacts, which collectively capture how the economic impact of Kelowna's tourism industry can impact the local and provincial economy. **Figure 1-3** illustrates the various elements that account for the economic impact of the tourism industry.

- **Direct** impacts account for the economic activity of the target sector itself. Direct employment impacts are measured by counting those individuals who work in a particular sector of the economy. In the tourism sector, this includes all those people who work in providing services to non-local visitors (e.g. a Kelowna hotel manager, a chef at a restaurant that serves tourists in Kelowna, a staff member of Tourism Kelowna, etc.).
- **Indirect** impacts are those that result because of the direct impacts. This involves employment, wages, GDP and economic output generated by downstream industries that arise from the presence

of the tourism industry. For example, indirect employment could include food suppliers for Kelowna restaurants that host visitors to Kelowna (i.e. any businesses that supply or provide services to those firms directly serving Kelowna's tourism sector).

- **Induced** impacts are economic impacts created by the spending of wages, salaries, and profits earned by those working in direct and indirect economic activities related to tourism in Kelowna. For instance, if a hotel employee decides to re-model his/her home, this would result in additional (induced) employment hours in the general economy. The home renovation project would support hours of induced employment in the construction industry, the construction materials industry, etc. Induced impact is often called the "household-spending effect".
- **Total** impacts are the sum of direct, indirect, and induced effects.⁹

Figure 1-3: Economic Impact of the Tourism Industry



⁹ Multiplier impacts (indirect and induced) 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.

1.4 Scope of the Study

The tourism industry in the greater Kelowna area generates employment for individuals with jobs involved in accommodations, attractions and other supporting businesses and organizations. In addition, the tourism industry will bring in non-local visitors who will spend money on hotels, local ground transportation, food and beverage, entertainment, etc. This study estimates the economic impacts and tax impacts generated by Kelowna's tourism sector, including:

- **Employment Impacts:** economic impacts associated with employment in the tourism sector of the greater Kelowna area (e.g., employment at accommodation providers, attractions and other tourism support firms).
- **Visitor Spending Impacts:** economic impacts generated by visitor spending in Kelowna (e.g., on food, retail and local ground transportation).
- **Tax Impacts:** tax revenues generated by the employment impacts and visitor spending impacts of Kelowna's tourism sector.

The economic impacts are measured in a number of ways including: additional spending in the local economy, additional full-time employment, and contribution to Gross Domestic Product (GDP).

1.5 Outline of the Study

This report provides an estimate of the economic impacts of tourism in Kelowna and the greater Kelowna area, B.C.

- **Chapter 2** provides an introduction to the area's tourism industry and trends.
- **Chapter 3** explains the methodology used for estimating the economic impacts and tax impacts of the employment and visitor spending associated with the tourism sector.
- **Chapter 4** measures and describes the annual *direct* economic impacts of the tourism industry.
- **Chapter 5** measures and describes the annual *indirect and induced* economic impacts of the tourism industry.
- **Chapter 6** measures and describes the annual tax revenue impacts of current direct ongoing tourism activities.
- **Chapter 7** provides a comparison of the results with that of the 2006 and 2011 study on the economic impact of tourism in Kelowna previously conducted by InterVISTAS.

2 Tourism Industry Snapshot

2.1 Introduction

The greater Kelowna area has a number of events and attractions to offer its visitors. It boasts a robust accommodations industry which includes over 90 hotels, motels and bed and breakfasts and many vacation rentals. It is uniquely situated to provide year-round activities and entertainment options including outdoor adventure, water-based recreation, golf, winery and farm touring, visual and performing arts, and nearby skiing; and it supports a spectrum of dining and shopping establishments. **Figure 2-1** shows the diversity of the different firm types that contribute to its tourism industry.

Figure 2-1: Firm Types in the Greater Kelowna Area that Contribute to the Tourism Sector

Firm Type	Number of Firms	%
Attractions & Activities	99	31%
Food Service & Wineries	96	30%
Accommodations	90	28%
Golf, Arts & Entertainment	30	9%
Other	8	2%
Total	323	100%

Source: Tourism Kelowna. Note that these firms collectively serve both local residents and non-local visitors.

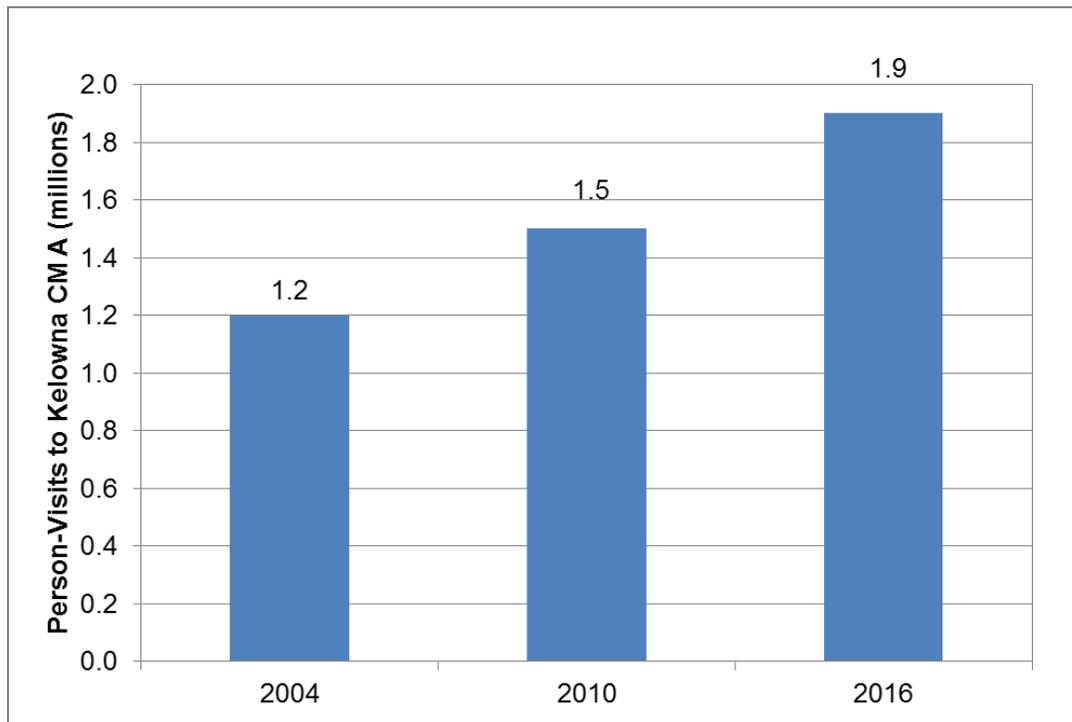
2.2 Accommodations Industry

Kelowna is home to over 90 accommodations providers, ranging from bed and breakfasts, motels, hotels and resorts. A growing number of vacation rentals are also a popular accommodation option. As Kelowna's tourist activity has grown over the years, the volume of hotel tax revenues collected has also increased, reaching nearly \$2 million in 2016. This part of Kelowna's tourism sector contributes 1,600 FTEs of employment and offers over 4,400 rooms, generating an estimated \$200 million in economic output in 2016.

2.3 Visitors to Kelowna CMA

Based on Statistics Canada's *Travel Survey of Residents of Canada and International Travel Survey* for 2014-2015, there were over 1.9 million person visits to Kelowna CMA in 2016. This compares to 1.2 million in 2004 and 1.5 million in 2010, the visitor metrics that were used in the 2006 and 2011 studies respectively, as shown in **Figure 2-2**.

Figure 2-2: Person-visits to Kelowna, 2004, 2010 and 2016



Source: Statistics Canada's *Travel Survey of Residents of Canada and International Travel Survey*. Data includes domestic, U.S., and other international person-visits to Kelowna. Note that for the 2006 study, the most current data available from Statistics Canada was from 2004.

3 Methodology



SUMMARY

- **49% of tourism related firms responded** to the survey and telephone follow-up
- **70% of total full-time equivalents** covered by the survey and telephone follow-up
- **Visitor expenditure data from Kelowna Visitor Intercept Survey** conducted in 2016, by Inter VISTAS Consulting
- Study time frame: 2016 operations
- Economic multiplier and ratios source: Statistics Canada

3.1 Introduction

Inter VISTAS conducted this study from September to December 2016. The study estimates the economic impact of Kelowna's tourism related activities and operations in 2016.

To compute the direct employment impacts, the study team reviewed and surveyed the employment and activity of Kelowna's tourism related firms. This included hotel accommodations, tour operators, and the city's attractions. These firms were provided an online survey to complete. The results of the online survey produced estimates of the number of individuals employed in directly-related occupations, as well as the total amount of earnings paid to all employees. The employment survey was used to classify the total employment and average wages paid by business type. Impacts related to Kelowna's tourism visitor spending was also assessed based on expenditures on food/beverage, retail, ground transportation and other visitor related expenses, which was collected through the Inter VISTAS Consulting 2016 Visitor Spending Survey.

Inter VISTAS Consulting estimates the indirect and induced effects using economic multipliers and ratios developed by Statistics Canada. Inter VISTAS Consulting utilizes a proprietary model to conduct multiplier analysis and estimate indirect and induced impacts. Data from the survey and telephone calls was used to calculate the associated tax impacts (government revenue) generated by Kelowna's tourism industry activities and operations.

3.2 Estimating Current Direct Economic Impact

The direct employment base related to the tourism sector in the greater Kelowna area is first measured. 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.

The economic impact study then assesses the indirect and induced (or "multiplier") employment supported by Kelowna's tourism related activities, as well as economic activity in terms of economic

output and GDP using Statistics Canada’s economic multipliers. The tax revenues generated annually by the tourism sector are also estimated.

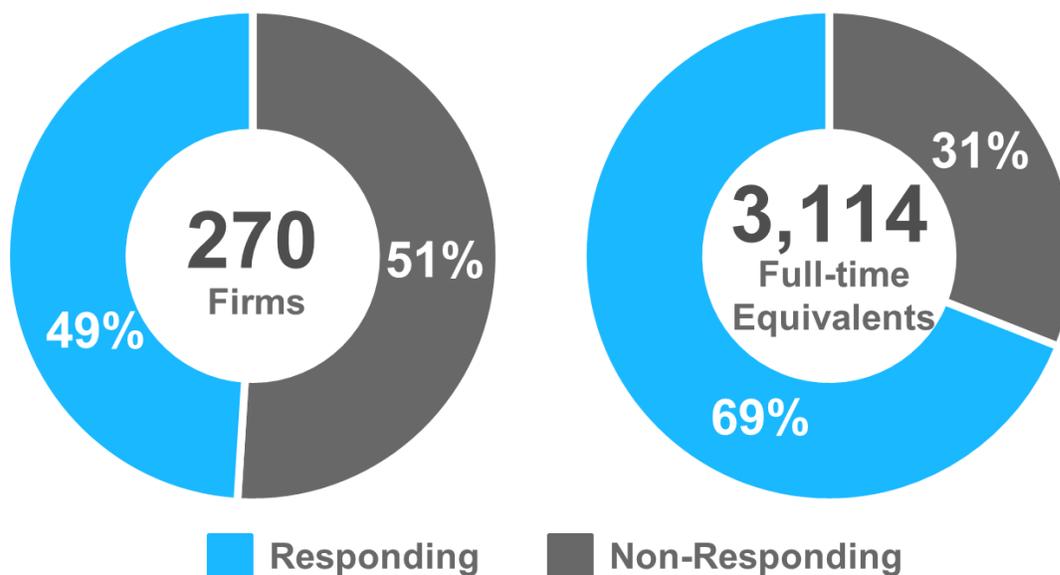
3.2.1 Surveyed Direct Employment

Accommodations and Other Tourism Industries Employment Survey

Employment at accommodation providers, the destination marketing organization, attractions and other tourism service providers was measured by surveying over 270 related businesses and organizations. Of the 270 surveys emailed, 132 firms replied, for a response rate of 49%.¹⁰

A total of 69% of the total person years of employment were covered by the survey. The list of businesses surveyed was developed using a stakeholder contact list provided by Tourism Kelowna. This list was supplemented with additional tourism-related businesses and organizations identified by Inter VISTAS using standard listings, such as Yellow Pages, hotel directories, etc. Surveys were completed online and Tourism Kelowna staff provided assistance with the survey follow-up via e-mail to prompt non-responding firms to complete the survey. Specifics of the survey methodology are contained in the Appendices, including a description of the sampling techniques in **Appendix A**. The employment survey was conducted from September through December 2016, and results reflect employment as of 2016. A summary of the response rate and the amount of employment that is covered by responding firms is provided in **Figure 3-1**.

Figure 3-1: Response Rate for Kelowna Tourism Sector Employment Survey



¹⁰ Excludes surveys sent out to food/beverage and retail firms.

3.3 Inferring Direct Employment

For firms that did not respond to the survey or telephone calls, employment and other metrics were conservatively estimated using a proven and accepted methodology. This includes referencing the survey results for firms of similar business types. There may be firms that were not surveyed because of their unknown existence. Employment for these non-surveyed firms was not estimated because there was no basis for assessment. It is expected that the volume of missed employment would be minimal. For Kelowna's tourism sector direct employment, 31% of total direct employment was inferred. Refer to **Appendix B** for details on our methodology for inferring employment. Employment was "inferred" for firms that did not respond to the survey using a proven and accepted methodology.¹¹

3.4 Jobs versus Person Years

Traditionally, one measures employment by the number of jobs. However, when part-time and/or seasonal workers are used, this can be a misleading measure resulting in an overstatement of economic impact. Whenever possible, employment impacts are measured both in terms of the number of jobs and the number of person years (or Full-time equivalents (FTE)).¹²

Based on surveyed direct jobs, approximately 46% of tourism-related jobs in the greater Kelowna area are permanent positions, while 54% of tourism jobs are seasonal positions. **Figure 3-2** shows the permanent and seasonal components of employment attributable to tourism operations in Kelowna. Approximately 70% of the permanent positions are full-time positions. Similarly, over 75% of the seasonal jobs consist of full-time positions. The breakdown of permanent and seasonal jobs by full-time and part-time positions is presented in **Figure 3-3**.

3.5 Categories of Economic Impact

As discussed in detail in **section 1.3**, the three major components of economic impact of this study are classified as *direct*, *indirect* and *induced* impacts, which collectively capture how the economic impact of Kelowna's tourism industry can impact the local and provincial economy.

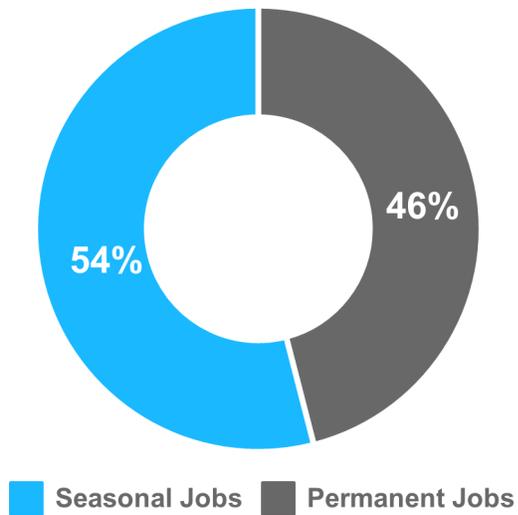
3.6 Multiplier Economic Impacts

Measurement of indirect and induced economic activity is difficult. While it might be possible to conduct a survey of such employers, the survey would need to cover thousands of firms for indirect employment. For induced employment, the entire economy would need to be scrutinised. In addition to the time and financial resources needed to conduct such surveys, the quality of responses would be suspect.

¹¹ 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.

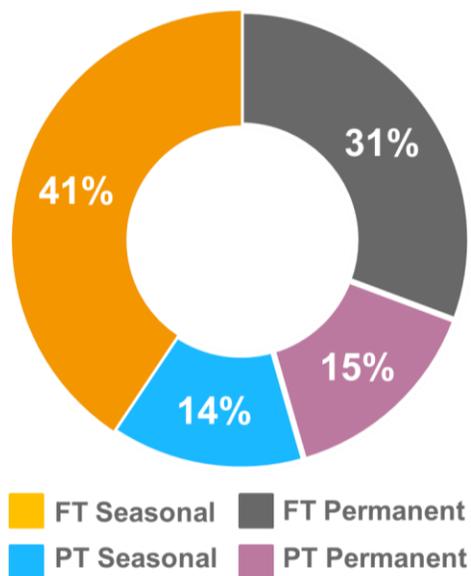
¹² One person year is equivalent to 1,832 hours of work. See **Appendix C** for a detailed calculation of the number of hours per person year. 1 person year (PY) is equal to 1 full time equivalent (FTE).

Figure 3-2: Permanent vs. Seasonal Tourism Employment in Kelowna



Note: This chart is based on surveyed direct jobs only.

Figure 3-3: Full-Time vs. Part-Time Tourism Employment in Kelowna



Note: This chart is based on surveyed direct jobs only.

As an alternative to costly and inaccurate surveys, indirect and induced effects are typically measured by the use of economic multipliers.¹³ Multipliers are derived from economic, statistical, and/or accounting 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 a number of 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 should be aware of the limitations on the use of multipliers. Mindful of these limitations, this study has undertaken multiplier analysis to estimate indirect and induced employment.

3.6.1 Other Economic Impacts: Economic Output and GDP

In addition to employment, the economic impact of the tourism industry can be measured in terms of the dollar impacts on the economy.

The two most common measures of economic contribution (in addition to employment) are *gross domestic product* (GDP) and *economic output*. Economic output roughly corresponds to the gross revenues of goods or services produced by an economic sector, while GDP measures only *value-added* revenues. As such, GDP removes the revenues to suppliers of *intermediate* goods and services and only includes the revenue from value-added production. Alternatively, economic output adds all revenues at each stage of production together as a measure of total production in the economy. Economic output will usually be greater than GDP (also termed value-added).

To estimate economic output for a sector, one might add up the gross revenues of the various firms in that sector. However, to find GDP for a sector, care must be taken to avoid double-counting. The revenues of one firm providing service to another are not incremental GDP. For example, in the automobile sector, one cannot add the value (gross revenue) of a finished auto to the value of the tires. The tires are already included in the value of the automobile.

One approach to measuring economic output and value-added is to ask firms in a survey to provide information on their gross revenues, payments to suppliers, etc. However, there are several problems with the approach. First, it is much too expensive to capture all of this information in a survey. Second, the double counting problem makes this approach impractical.

¹³ The multipliers used for the analysis are based on Statistics Canada economic multipliers for British Columbia from the 2010 Interprovincial Input-Output model, the most recent data available. These multipliers were updated with Consumer Price Indices to account for inflation.

An alternative is to infer economic output and GDP for an economic sector from employment data using economic multipliers. Statistics Canada produces economic multipliers for Canada, and these are more cost effective and more accurate than obtaining the data from surveys. This method, using Statistics Canada economic multipliers and ratios for Canada, is the approach adopted here.¹⁴

3.7 Visitor Spending Impacts

Non-local travellers spend money in the local economy when they visit the greater Kelowna area – on hotels, taxis, recreation, food and beverage, entertainment, etc. By bringing money into a region and spending it there, visitors exert an immediate and direct impact on the local economy. This study includes an estimate of the economic impact of non-local, non-accommodation and non-entertainment visitor spending.¹⁵

3.7.1 Surveying Visitor Spending ~ InterVISTAS Consulting 2016 Visitor Spending Survey

Tourism Kelowna commissioned InterVISTAS Consulting to design and conduct a visitor intercept survey program in 2016. The survey collected information on Kelowna visitor characteristics, visitor needs and preferences, as well as visitors' average expenditures. The survey was conducted in 2016 during the Spring, Summer and Fall. Visitors were interviewed at four locations throughout the City of Kelowna. In total, 1,400 visitor interviews were conducted between May and October 2016. The results from this survey were used to estimate the annual expenditure of non-local visitors to the greater Kelowna area for the economic impact study.

3.8 Tax Impacts

Tourism activity in the greater Kelowna area also generates tax revenues. This includes revenues received by federal, provincial and municipal levels of government. The tax revenue contributions to the federal, provincial, and municipal levels of government that are associated with Kelowna's tourism industry are also estimated. This includes taxes paid by employers and employees (such as payroll taxes) and an estimation on municipal taxes paid. Estimated tax revenues are for calendar year 2016, using tax rates for that year in the computations.

¹⁴ The multipliers used for the analysis are based on Statistics Canada economic multipliers for British Columbia from the 2010 Interprovincial Input-Output model, the most recent data available. These multipliers were updated with Consumer Price Indices to account for inflation.

¹⁵ Visitor spending does not include amounts spent on accommodations and entertainment in order to avoid double counting of employment already taken into account in the employment survey of tourism related employers, including accommodation providers and attractions. Visitor spending includes expenditure on retail, food & beverage and local transportation within the Kelowna area.

4 Current Direct Economic Impacts



SUMMARY

In terms of direct tourism activity, this sector of Kelowna's economy supports:

- 1.9 million visitors annually
- 8,350 direct jobs
- 5,570 direct full-time equivalents or person years
- \$240 million in direct earnings
- \$337 million in visitor spending
- \$370 million in direct gross domestic product (GDP)
- \$810 million in direct economic output

4.1 Introduction

This section describes the direct employment in terms of full-time equivalents (FTEs) or person years, and estimated payroll attributable to employers directly related to ongoing activity and operations in Kelowna's tourism industry. Employment by business category is also provided. In addition, the broader economic impacts of tourism in Kelowna are measured using dollar values, GDP and economic output, are also presented.

4.2 Direct Economic Impacts

Direct employment related to ongoing operations in Kelowna's tourism industry amounts to 5,570 direct FTEs. Employees working directly in Kelowna's tourism industry receive an estimated \$240 million in wages, providing an average of roughly \$43,300 per FTE. This compares to an average annual wage of \$46,600 in British Columbia and a national average of \$ 47,600.¹⁶ The direct employment generates \$370 million in direct GDP and \$810 million in direct economic output. The direct economic impact figures are summarized in **Figure 4-1** for all measures.

¹⁶ Based on Statistics Canada's December 2016 data on average hourly wages, and assuming 1 FTE = 1,832 hours. (<http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/labr69b-eng.htm>); (<http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/labr69a-eng.htm>)

Figure 4-1: Annual *Direct* Economic Impact of Tourism Employment in Kelowna, 2016

Impact	Employment		Wages (\$ Millions)	GDP (\$ Millions)	Output (\$ Millions)
	Jobs	FTEs			
Direct					
Accommodations	2,200	1,600	70	100	160
Other Tourism Industries	3,900	2,220	120	190	500
Visitor Spending	2,250	1,750	60	70	150
Total Direct	8,350	5,570	240	370	810

Note: Amounts may not add to totals due to rounding

4.2.1 Direct Employment by Business Type

A breakdown of direct employment related to Kelowna's tourism industry by business type provides insight into the different industries that contribute to tourism in Kelowna. The following summary details direct employment of each business category:¹⁷

There are nearly 5,600 FTEs related to tourism in Kelowna, roughly equivalent to 9% of the jobs in Kelowna.

- **Shopping/Retail** accounts for 550 FTEs or 10% of direct employment.
- **Hotel** employment accounts for 1,600 FTEs or 29% of direct employment.
- **Food/Beverage** accounts for 1,020 FTEs or 18% of direct employment. This includes employment at restaurants and bars, coffee shops, and grocery stores.
- **Transportation** accounts for 890 FTEs or 16% of direct employment. This includes taxi, bus, car rental, fuel and other amounts spent on transportation at Kelowna.
- **Other industries** accounts for 1,520 FTEs with the remaining 27% of direct employment.

A breakdown of direct employment in Kelowna's tourism industry, by business type, is illustrated in **Figure 4-2**. According to 2016 labour force statistics published by Statistics Canada, it was estimated that Kelowna had nearly 91,000 jobs in the city.¹⁸ This implies that tourism related jobs make up roughly 9% share of all jobs in the city.

¹⁷ Totals may not sum due to rounding.

¹⁸ Source: <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/labor35-eng.htm>

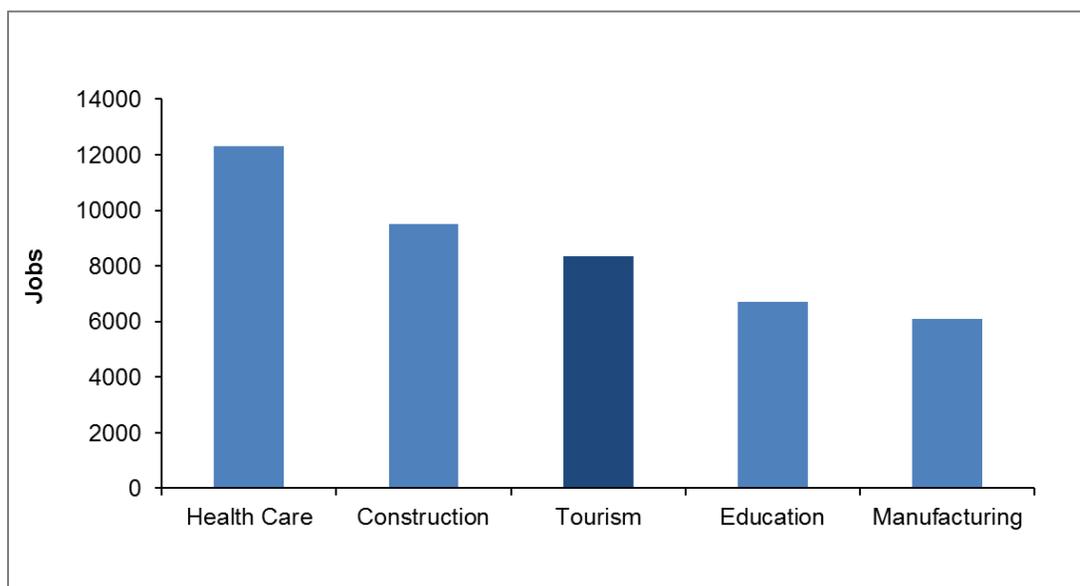
Tourism is one of the largest employers in the greater Kelowna area, generating more jobs than manufacturing and education. **Figure 4-3** provides a comparison of tourism employment in Kelowna versus other industries in the area.

Figure 4-2:
Tourism Related Direct Employment in Kelowna by Business Type – Based on 8,350 Direct Jobs in 2016

Business Type	Jobs	Person Years or Full-Time Equivalents	% (FTEs)
Accommodations	2,200	1,600	29%
Outdoor Attractions	1,710	910	16%
Food & Beverage	1,360	1,020	18%
Transportation	1,350	890	16%
Winery	860	480	9%
Retail	670	550	10%
Arts & Culture	120	80	1%
Other	80	50	1%
Total	8,350	5,570	100%

Note: Amounts may not add to totals due to rounding.

Figure 4-3: Employment in Tourism versus Other Industries in Kelowna



Source: Statistics Canada – Employment by Industry for the Metropolitan Area, Kelowna CMA (2016).

5 Current Indirect and Induced Economic Impacts



SUMMARY

Including indirect and induced impacts, Kelowna's tourism contributions to the economy of British Columbia include, in total:

- 11,890 jobs or 7,940 full-time equivalents or person years of employment
- \$370 million in direct earnings
- \$620 million in gross domestic product (GDP)
- \$1,250 million in economic output

5.1 Introduction

The previous section presented the direct economic impacts related to ongoing operations in Kelowna's tourism industry. However, the economic impact of the tourism sector does not end there, as other sectors of the economy are dependent on these employers' businesses. This includes *indirect impacts* in businesses that supply the goods and services to the direct activities linked to tourism in Kelowna, and *induced impacts* resulting from direct and indirect employees spending their wages in the general economy. Therefore, the *total economic impact* of Kelowna's tourism industry includes the sum of direct, indirect and induced effects. The indirect and induced impacts were estimated using Statistics Canada's economic multipliers for the Province of British Columbia.¹⁹

5.2 Indirect Impacts

Indirect impacts are generated by suppliers to the businesses directly related to tourism. Based on the application of economic multipliers, it was estimated that 1,380 indirect FTEs are related to Kelowna's tourism industry. In other words, 1,380 FTEs are indirectly generated in industries that supply the businesses directly related to operations of Kelowna's tourism sector. The wages associated with the total indirect employment is estimated at \$80 million per annum. Indirect GDP contribution is estimated at \$130 million per year, and economic output at \$250 million annually.

¹⁹ The multipliers used for the analysis are based on Statistics Canada economic multipliers for British Columbia from the 2010 Interprovincial Input-Output model, the most recent data available. These multipliers were updated with Consumer Price Indices to account for inflation.

5.3 Induced Impacts

The induced employment is the result of demand for goods and services generated by wages earnings of those directly or indirectly linked to the Kelowna's tourism industry. The induced employment attributable to tourism in Kelowna in 2016 is estimated at 990 FTEs, generating \$50 million per annum in wages. Induced GDP and economic impact contributions amount to \$120 million and \$180 million, respectively, in 2016.

5.4 Total Economic Impacts

Ongoing operations in Kelowna's tourism sector generate a total of 7,940 FTEs and \$370 million in wages, including induced and indirect effects. Including multiplier effects, tourism in Kelowna supports \$620 million in total GDP and \$1,250 million in total economic output. **Figure 5-1** summarizes the direct, indirect, induced, and total impact of employment and wages in the surrounding regional economy attributable to ongoing operations in Kelowna's tourism industry, as well as annual GDP and economic output contributions.

Figure 5-1:
Annual Direct, Indirect, Induced and Total Employment Impacts of Tourism in Kelowna, 2016

Impact	Employment		Wages (\$ Millions)	GDP (\$ Millions)	Output (\$ Millions)
	Jobs	FTEs			
Direct					
Accommodations	2,200	1,600	70	100	160
Other Tourism Industries*	3,900	2,220	120	190	500
Visitor Spending**	2,250	1,750	60	70	150
Total Direct	8,350	5,570	240	370	810
Indirect***	2,060	1,380	80	130	250
Induced***	1,480	990	50	120	180
Grand Total	11,890	7,940	370	620	1,250

Notes:

* Other tourism industries impact reflects employment in attractions, air transportation and other supporting businesses and organizations of the tourism sector in the region.

** ** An estimated 2,250 jobs are associated with visitor spending that takes place in the Kelowna area. The level of visitor spending is based on the 2016 Visitor Intercept Survey conducted by InterVISTAS, and includes expenditure on retail, food & beverage and local transportation.

*** Does not include indirect and induced impacts for visitor spending (only for Accommodations and Other Tourism Industries) to mitigate the possibility of double-counting of impacts.

-- Totals may not add to totals due to rounding.

6 Tax Revenue Impacts of Current Ongoing Operations in Kelowna's Tourism Industry



SUMMARY

Annual contribution to government revenues related to tourism in Kelowna amounts to **\$142 million in total**, including:

- Federal Government: \$80 million (56% of total)
- Provincial Government: \$49 million (35% of total)
- Municipal Government: \$13 million (9% of total)

6.1 Introduction

This part of the report documents the current contribution to government revenues resulting from current operations in Kelowna's tourism industry and associated economic activity. This includes an estimate of revenues received by federal, provincial and municipal governments.

Tax revenue contributions are divided into two groups, based on who is making the payment:

- **Taxes paid by employers and employees.** These are taxes paid by the employers and employees. They include wages and payroll taxes, social insurance contributions (such as employment insurance premiums). This also includes an estimate of property taxes paid firms.
- **Taxes paid by same day overnight visitors to Kelowna.** Payments include GST and PST paid on hotel accommodations and other goods and services (e.g., food/beverage and retail purchases).

As with all such studies, a conceptual decision has to be 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 (e.g. GST and PST) paid by tourism industry employees when they spend their wages.

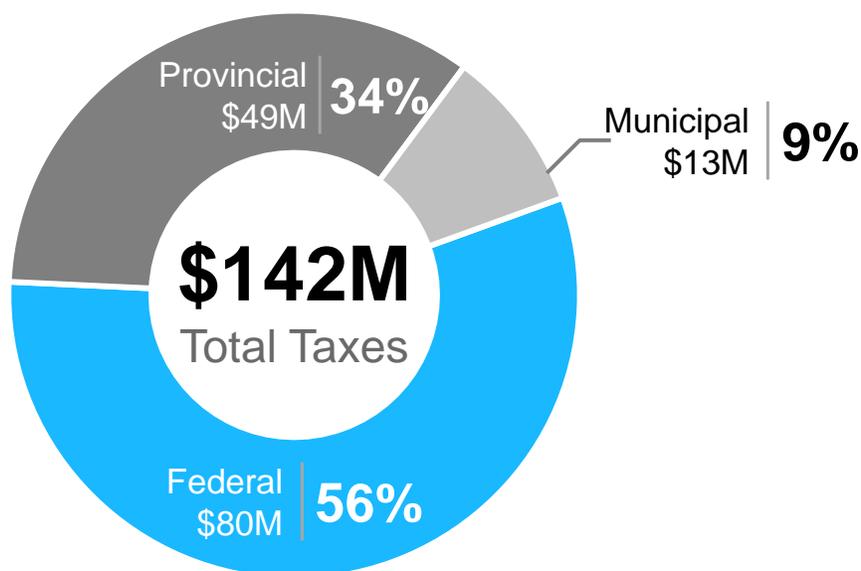
It would be exceedingly complex to broaden the scope of the tax base in this analysis to include taxes generated by indirect and induced employment. The level of detail collected on direct employment by the survey is critical to the tax analysis while such information is not available for the indirect and induced employment. This being the case, impacts and speculation about the general economy would be complex and averages would not necessarily be precise or accurate. Therefore, the tax analysis in this study is limited to revenues attributable to direct employment only.

6.2 Tax Contributions by Level of Government of Current Ongoing Tourism Industry Operations

Ongoing economic activity by Kelowna's tourism industry generates tax revenue for all levels of government. In 2016, total tax contributions from tourism-related direct employment to all levels of government were approximately \$142 million. **Figure 6-1** provides a breakdown of tax impacts by level of government.

- The federal government was the largest recipient of tax revenue, receiving approximately \$80 million (56% of total tax revenue impacts). The vast majority of that total is attributable to taxes paid by employers and employees such as income tax, corporate income tax, and CPP contributions.
- The provincial government received \$49 million (34% of total tax revenue impacts). This total is from income taxes, and aviation fuel taxes.
- The municipal government collected the remaining \$13 million in tax revenue (9% of total tax revenue impacts) in the form of property taxes paid by businesses.

Figure 6-1:
Annual Estimated Tax Revenues of Kelowna's Tourism Industry, by Level of Government, 2016



7 Comparison of Results from Prior Studies²⁰

7.1 Comparison of Tourism Employment

InterVISTAS conducted previous studies on the economic impact of tourism in the greater Kelowna area in December 2006 and in December 2011. **Figure 7-1** and **Figure 7-2** show the baseline of *direct* employment of the tourism industry in Kelowna in 2006 and 2011 compared to *direct* employment impacts estimated in 2016. The total *direct* jobs increased by approximately 25%, while the total *direct* person years increased by approximately 12% in 2016 compared to 2006.

Figure 7-3 provides a comparison of the breakdown of permanent and seasonal jobs by full-time and part-time positions in 2006, 2011 and 2016. There has been a shift away from permanent, year-round positions in favour of more seasonal employment. Through the three study time frames, the jobs to person years ratio has increased from 1.35 in 2006 to 1.5 in 2016, the higher jobs to person years ratio is reflected in the greater share of part-time permanent and full-time seasonal employment found in 2016.

Figure 7-1: Comparison of *Direct* Tourism Employment Impacts

Type of Impact	Employment (Jobs)	Employment (Person Years)	Jobs to Person Years Ratio
Total Direct Impacts (2006)	6,690	4,960	1.35
Total Direct Impacts (2011)	6,530	4,640	1.41
Total Direct Impacts (2016)	8,350	5,570	1.50
% Change (2006-2016)	25%	12%	11%

Note: Figures are rounded.

²⁰ The 2016 study surveyed three fewer firms that were previously included in the 2011 study. As those firms are now deemed outside of the Kelowna catchment area, the 2011 study results presented in this section of the study have been adjusted to allow a direct comparison of results between the 2011 and 2016 studies.

Figure 7-2: Comparison of Direct Tourism Employment Impacts

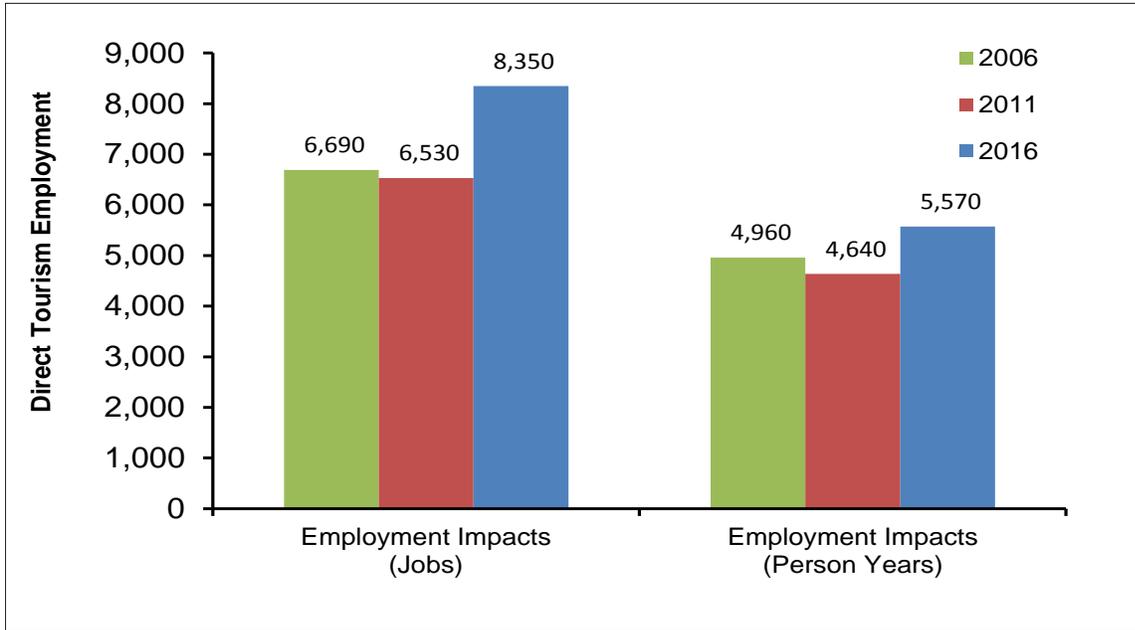
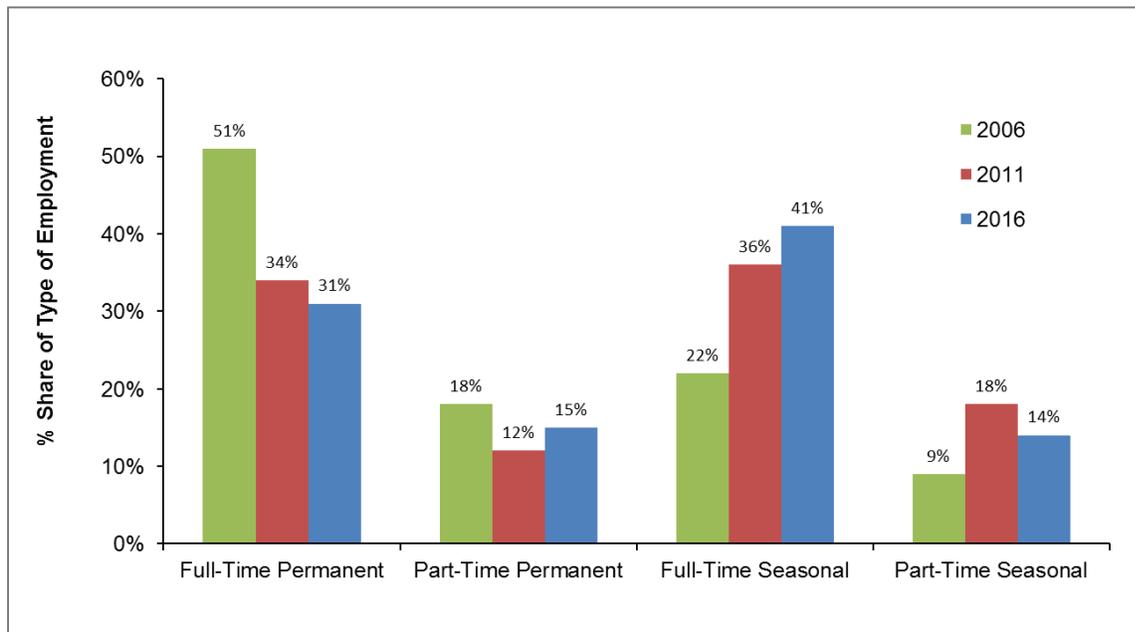


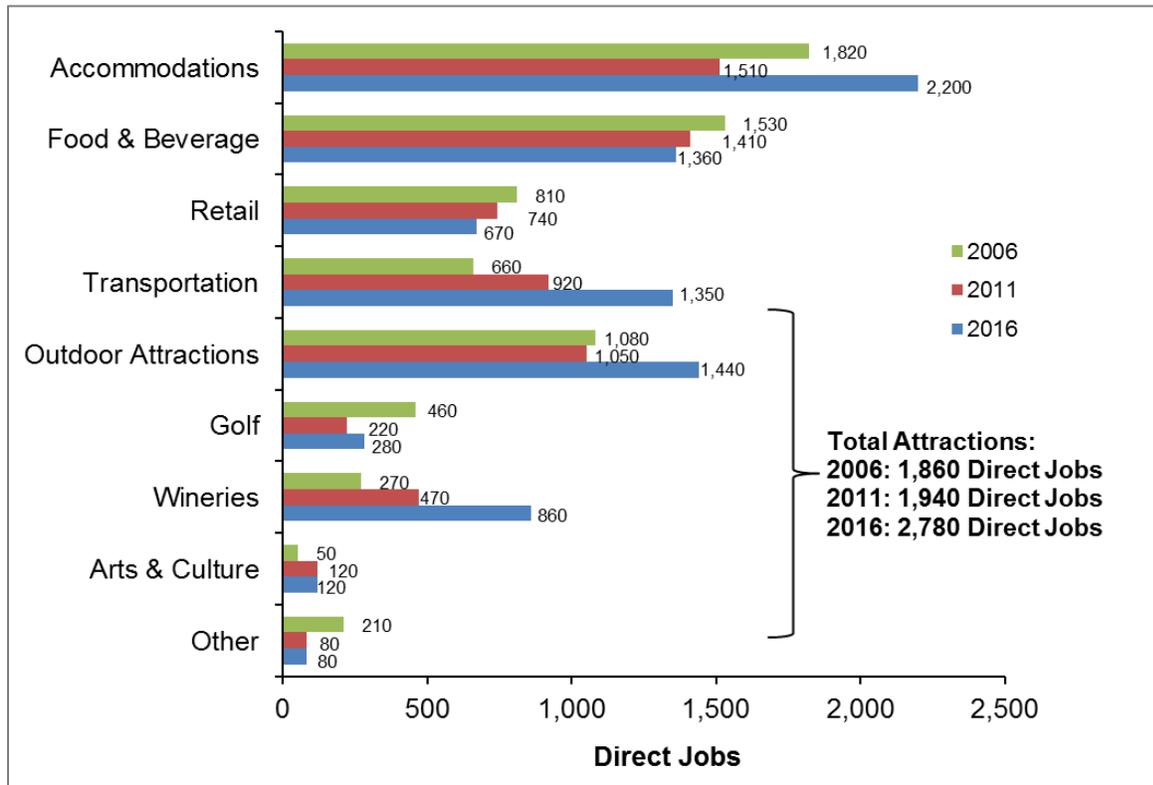
Figure 7-3: Comparison of Full-Time, Part-Time and Seasonal Tourism Employment



Note: This chart is based on surveyed direct jobs.

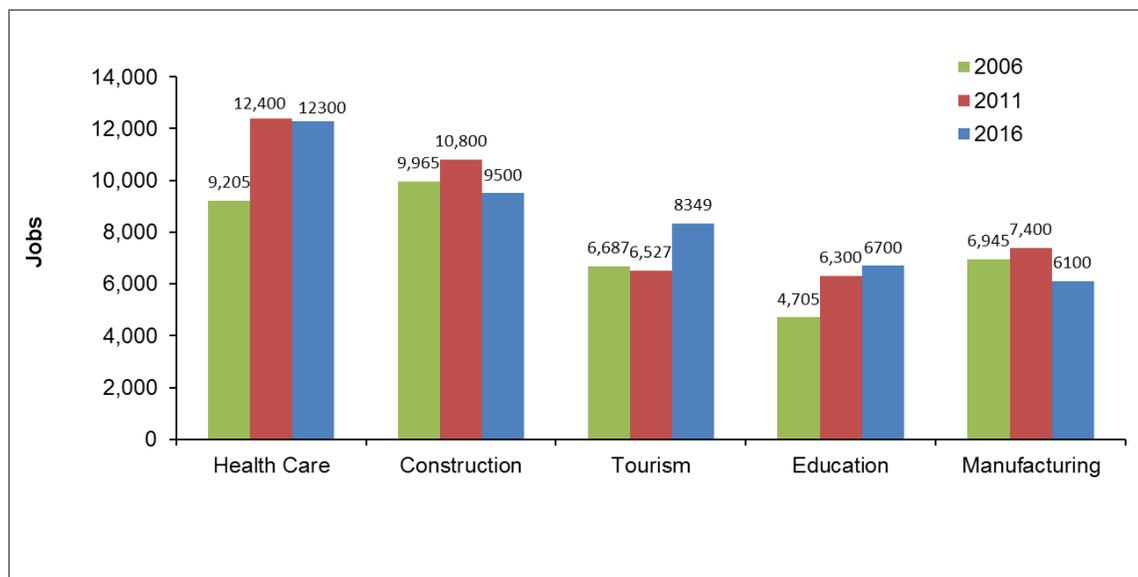
Accommodations providers were the largest employer group in 2006, 2011 and 2016. Together, employment in food and beverage establishments and retail shops generated by tourism expenditure showed an 11% decline in 2016 compared to 2006. Tourist attractions in the region, including outdoor attractions, golf, wineries, and arts and culture, employed 45% more people in 2016. A comparison of the total tourism employment in Kelowna by business type (based on direct jobs) is provided in **Figure 7-4**.

Figure 7-4:
Comparison of Total Tourism Employment by Business Type (Direct Jobs)



Tourism continues to be a growing industry, retaining its position as one of the largest employers in the greater Kelowna area in 2016, similar to the prior years of the study. In 2011 and 2016, the tourism industry ranked higher than education and manufacturing in terms of total number of employees. **Figure 7-5** provides a comparison of tourism employment and other industries in the area in 2006, 2011 and 2016.

Figure 7-5: Comparison of Employment in Tourism and Other Industries in Kelowna



Source:

Statistics Canada – Employment by Industry for the Metropolitan Area, Kelowna CMA (2011 and 2016), Experienced Labour Force 15 years and over, Kelowna CMA (2006).

7.2 Comparison of Visitor Spending

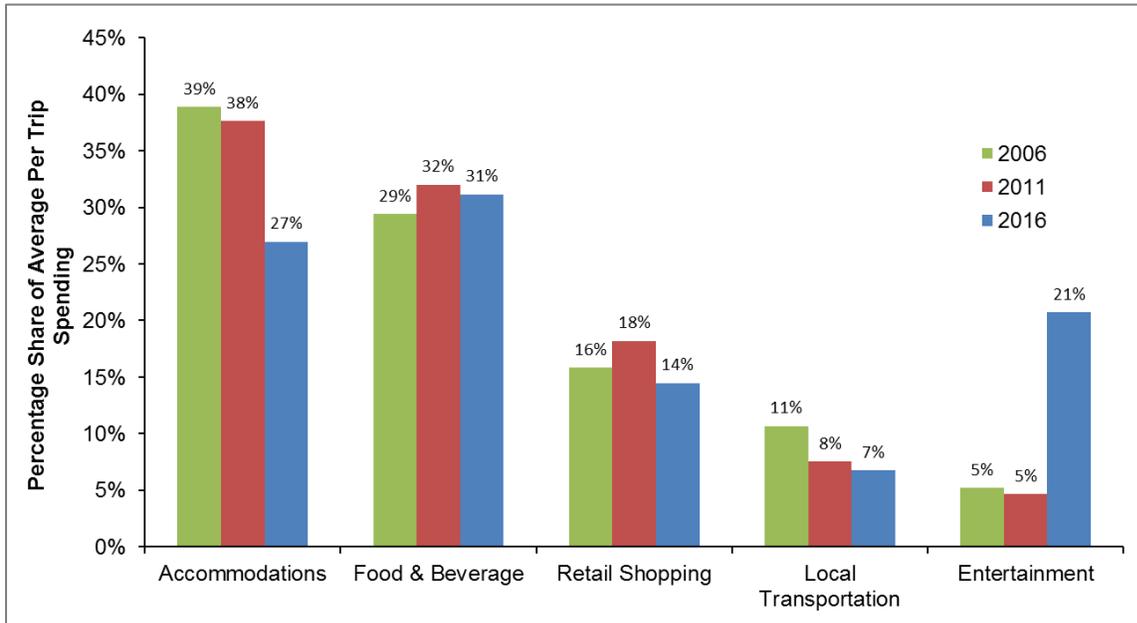
The *Visitor Survey Spending Profile* conducted by Kettle Valley Research in 2006 and 2011. The *InterVISTAS' 2016 Visitor Intercept Survey* provide a breakdown of tourism expenditure by four categories – accommodations, food and beverage, retail shopping, local transportation and entertainment. It is important to note that the 2016 visitor intercept survey undertook a more extensive survey timeframe than the prior study by Kettle Valley Research. The 2016 visitor intercept survey enabled the capture of a greater sample of visitors to the Kelowna region during different time periods in the year which reflects some differences in visitor spending patterns between 2006 and 2011 compared to 2016.

Figure 7-6 provides a comparison of percentage share of average per trip spending per category. In 2016, food and beverage expenditure surpassed accommodations expenditure as the largest percentage share of visitor spending at 31%, while local transportation had the smallest share at approximately 7%. Non-local visitors spent a lower percentage of their total spending on accommodations in 2016 (27%) than in 2016 (39%). The share of retail shopping of total visitor expenditure decreased over the ten years by two percentage points, from 16% in 2006 to 14% in 2016. Entertainment expenses within Kelowna made up 21% of total visitor expenditure in 2016, which is 16% percentage points more than its share of the total expenditure in 2006 (5%).

Part of the marked increase in share of visitor spending allocated to entertainment expenses in 2016 may be attributed to the broader and deeper entertainment product that is currently available to visitors to Kelowna which has encouraged greater spending by visitors. As well, the changes in surveying time periods and methodologies described above related the work undertaken by Kettle Valley Research in

2011, versus the recent survey conducted by InterVISTAS Consulting may also contribute to the differences in average spending pattern in 2006 and 2011 versus 2016.

Figure 7-6:
Comparison of Percentage Share of Average per Trip Spending by Category



Sources: 2006 and 2011 Visitor Survey Spending Profile conducted by Kettle Valley Research; 2016 Visitor Intercept Survey conducted by InterVISTAS

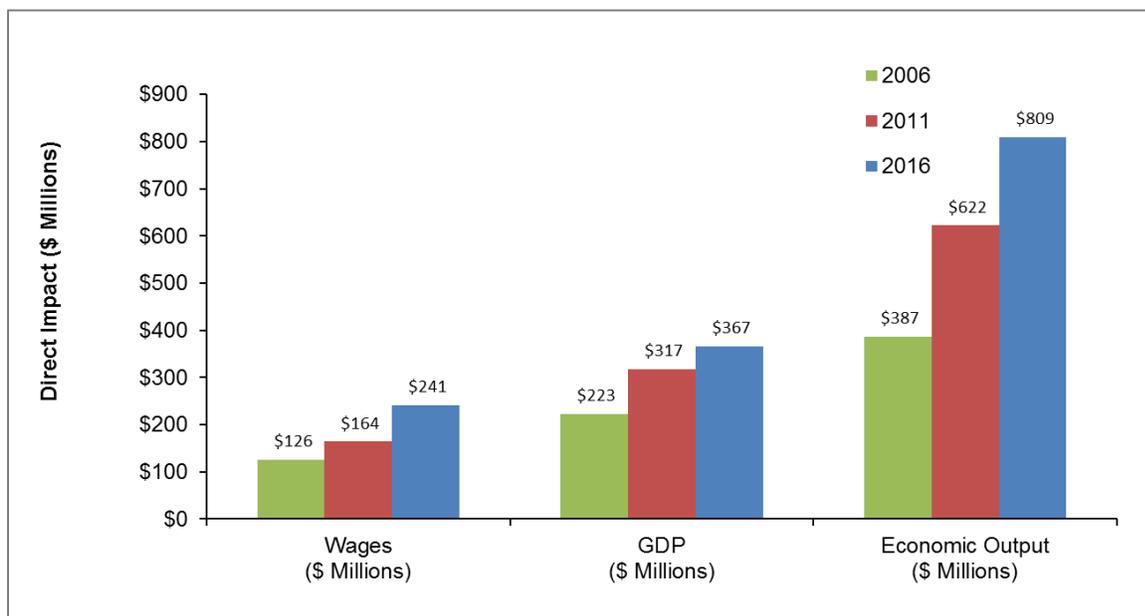
7.3 Comparison of Direct Economic Impacts (Wages, GDP, and Economic Output)

Figure 7-7 and Figure 7-8 show the baseline of total *direct* economic impacts of the tourism industry in Kelowna in 2011 compared to total *direct* economic impacts estimated in 2016, in terms of wages, GDP and economic output. The total *direct* wages increased by approximately 47% in 2016 (\$241 million) compared to 2011 (\$164 million). Over the same period, the GDP and economic output contribution of the greater Kelowna area’s tourism sector to the province of British Columbia also grew by approximately 16% and 30%, respectively.

**Figure 7-7:
Comparison of Direct Economic Impacts (Wages, GDP & Economic Output)**

Type of Impact	Wages (\$ Millions)	GDP (\$ Millions)	Economic Output (\$ Millions)
Total Direct Impacts (2006)	\$126	\$223	\$387
Total Direct Impacts (2011)	\$164	\$317	\$622
Total Direct Impacts (2016)	\$241	\$367	\$809
% Difference (2006-2016)	90%	66%	109%

**Figure 7-8:
Comparison of Direct Economic Impacts (Wages, GDP & Economic Output)**



7.4 Comparison of Tax Revenue Contribution

Kelowna's tourism industry continues to be an important generator of tax and other revenues for all levels of government. The total tax impact of tourism in the greater Kelowna area increased by 60% in 2016 compared to 2006, resulting in a total tax impact of approximately \$142 million versus \$89 million. The federal government continues to be the largest recipient of tax revenues in 2016 (56% of total tax revenue) similar to 2006 (62% of total tax revenue). The share of total tax revenue received by the provincial government remained relatively constant around 33-35%, and the share received by municipal governments increased over the same period from 5% to 9%, respectively. **Figure 7-9** summarise the tax revenue contribution by taxpayer in 2006, 2011 and 2016, while **Figures 7-10 and 7-11** provides a comparison of the percentage share of total tax revenues received by each level of government over the three study time periods.

Figure 7-9:
Comparison of Tax Revenue Contribution by Taxpayer (\$ Millions)

Taxpayer	Federal			Provincial			Municipal			Total		
	2006	2011	2016	2006	2011	2016	2006	2011	2016	2006	2011	2016
Tourism Employers and Employees	37	44	66	14	19	31	3	7	12	54	70	108
Tourists	18	11	14	15	14	18	2	1	2	35	26	33
Total	55	55	80	29	33	49	5	8	13	89	96	142
% Difference of Total (2006-2016)	45%			69%			160%			60%		

Note: Amounts may not add to totals due to rounding.

Figure 7-10:
Comparison of Tax Revenue Contributions by Government Level

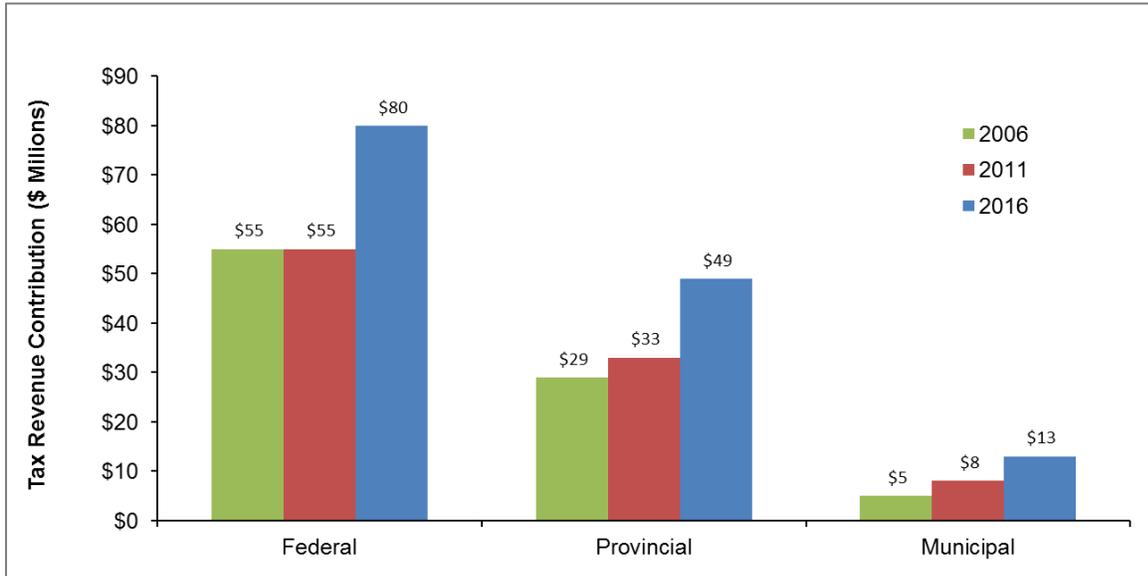
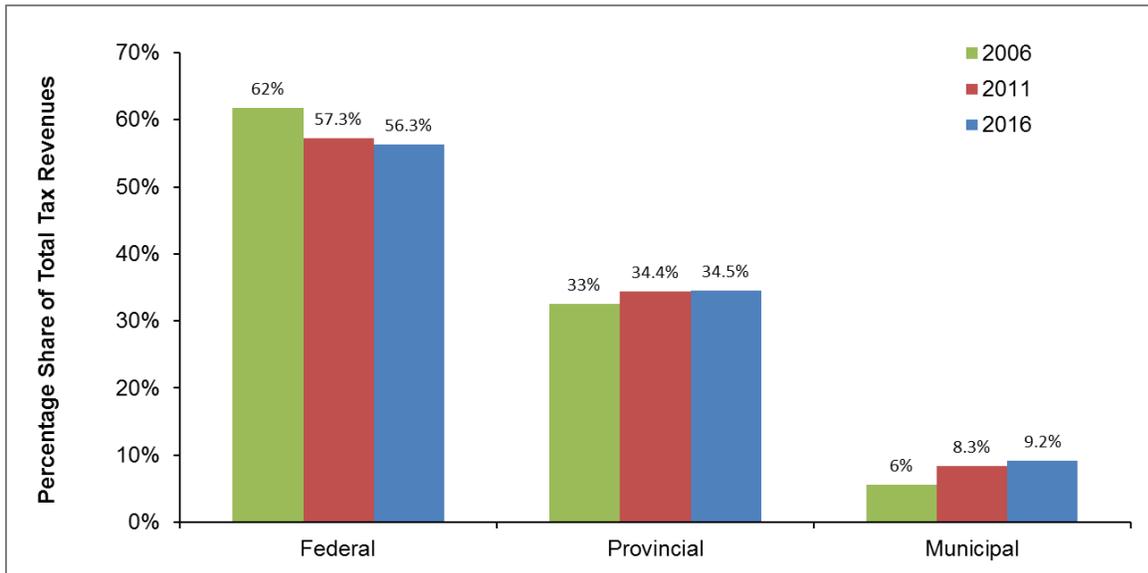


Figure 7-11:
Comparison of Percentage Share of Tax Revenue Contributions by Government Level



7.5 Comparison Summary of 2006, 2011 and 2016 Results

The changed economic conditions in recent years is reflected in the results from the 2006, 2011 and 2016 economic impact studies of the tourism industry in the greater Kelowna area. **Figure 7-12** provides a comparison summary of the results from all three studies discussed in detail in the prior sections.²¹

²¹ The results from the 2011 study used in the comparisons in this section were adjusted to match the study area examined in the 2016 study. The 2011 impacts have been adjusted to remove three previously surveyed firms, which were excluded in the 2016 study as they reside outside of the Kelowna catchment area.

Figure 7-12: Summary of Economic Impact of Tourism in Kelowna

Metric	2006	2011	2016	% Increase/Decrease (2011 to 2016)
Total Person Visits*	1,193,300	1,514,700	1,930,900	27.5%
Visitor Spending				
Accommodations**	\$72,000,000	\$81,000,000	\$91,000,000	12.3%
Activities & Entertainment***	\$18,000,000	\$15,000,000	\$70,000,000	366.7%
Other****	\$198,000,000	\$183,000,000	\$176,000,000	-3.8%
<i>Total Visitor Spending</i>	<i>\$288,000,000</i>	<i>\$279,000,000</i>	<i>\$337,000,000</i>	<i>20.8%</i>
Employment Impacts (Number of Jobs)				
<i>Direct Impacts</i>	6,690	6,530	8,350	27.9%
Employment Impacts (Number of Person Years)				
<i>Direct Impacts</i>	4,960	4,640	5,570	20.0%
Wages				
<i>Direct Impacts</i>	\$126,000,000	\$164,000,000	\$241,000,000	47.0%
GDP				
<i>Direct Impacts</i>	\$223,000,000	\$317,000,000	\$367,000,000	15.8%
Economic Output				
<i>Direct Impacts</i>	\$387,000,000	\$622,000,000	\$809,000,000	30.1%
Tax Revenues				
Federal	\$55,000,000	\$55,000,000	\$80,000,000	45.5%
Provincial	\$29,000,000	\$33,000,000	\$49,000,000	48.5%
Municipal	\$5,000,000	\$8,000,000	\$13,000,000	62.5%
<i>Total Tax Revenues</i>	<i>\$89,000,000</i>	<i>\$96,000,000</i>	<i>\$142,000,000</i>	<i>47.9%</i>

* Total Person Visits: Statistics Canada, *Travel Survey of Residents of Canada & International Travel Survey, (2004, 2010 and 2015)*.

** Accommodation visitor spending is equivalent to hotel room revenue, and is taken from BC Stats data for 2006, 2010 and 2015 for the Central Okanagan Regional District and Kelowna.

*** Activities and entertainment visitor spending is taken from Kettle Valley Research's *2006 and 2011 Visitor Survey Spending Profile* well as InterVISTAS' *2016 Visitor Intercept Survey*, and includes expenditure on entertainment in Kelowna.

**** Other includes non-accommodation and non-entertainment visitor spending data taken from the *2006 and 2011 Visitor Survey Spending Profile* conducted by Kettle Valley Research, as well as the *2016 Visitor Intercept Survey* conducted by InterVISTAS. Visitor spending includes expenditure on retail, food & beverage and local transportation within the greater Kelowna area.

Appendix A: Sample Employment Survey



ECONOMIC IMPACT SURVEY

Contact Information

Name of Company: (Required)*: _____

Address of the Company: (Required)*:

Contact Person: (Required)*: _____

Phone Number: (i.e. (999) 999-9999)*:

Email: (Required)*: _____

Question 1

Please choose the industry that best describes your business. (Select one only.)

- Accommodations
- Art, Culture & Entertainment
- Conference & Meeting Facilities/ Services
- Food & Beverage Services
- Golf Course
- Outdoor Recreation, Sport and Adventure Tourism
- Retail
- Guided Tour Operator
- Transportation Services
- Travel Agency
- Tourist Attraction (e.g., family attraction, orchards, gardens etc.)
- Tourism Trade (e.g., Destination Marketing Organizations)
- Winery
- Other (please specify below): _____ *

Accommodations - Total Rooms in Facility

How many rooms are there in your facility?

Food & Beverage Services - Total Seats in Facility

How many seats are there in your facility?

Question 2

Please estimate the **total proportion of your total business revenues that are generated by tourism by non-local visitors.**

For example, if you are a restaurant and approximately half of your revenues are from customers that are non-local visitors (*e.g., those who reside outside of the Greater Vancouver Lower Mainland*), please indicate that 50% of your business is tourism related.*

____ (%)

Question 3

Please state the total number of employees (**permanent and seasonal staff on the company payroll**) you have at present.

Please break down the employment into permanent, seasonal, full-time and part-time.

	Full-Time	Part-Time
Permanent Employees		
Seasonal Employees		

Permanent Part-Time Employees

Please indicate how many hours per week **part-time employees** worked in 2016, on average.

Seasonal Employees

Please indicate how many weeks **seasonal employees** worked in 2016, and how many hours per week **seasonal part-time employees** worked in 2016, on average.

	Number of Weeks per Year	Number of Weekly Hours
Seasonal Employees		

Please state the total payroll paid by your company in 2016 for the employees included in **Question 3**.

This figure should include all full-time, part-time and seasonal employees. If you are unable to estimate payroll for 2016, please provide figures for your last financial year, and indicate which year that was.

Total payroll includes gross (pre-tax) wages or salaries, including overtime pay, commissions, allowances and bonuses.

Total Annual Payroll (2016):: _____

Financial Year (if not calendar year 2016)::

Alternatively, if you are unable to answer this question, please provide an estimate of the average annual wage/salary **per employee** (including overtime pay, commissions, allowances and bonuses), or select one of the options below.

Or: Estimate of the average annual salary range per employee

- Less than \$20,000
- \$20,000 - \$39,999
- \$40,000 - \$59,999
- \$60,000 - \$79,999
- \$80,000 - \$99,999
- \$100,000 or more

Please estimate below the number of employees included in Question 3 that are in the following occupation categories, as well as the average annual salary per employee for each occupation category.

The figures entered below should sum to the same total as Question 2 or sum to 100%.

	Number of Employees
Managerial/Supervisory	
Administrative/Clerical	
Accounting/Finance/Information Technology	
Marketing/Sales	
Hotel Front Desk Clerks	
Housekeeping/Janitors	
Tour/Travel Guides	
Recreation/Sports Guides and Instructors	
Cooks/Kitchen Staff	
Food Servers/Hosts/Hostesses/Bussers/Bartenders	
Retail Sales/Cashiers	
Drivers/Other Transportation	
Other (Please Specify)	

During which seasons do you operate?

- Spring
- Summer
- Fall
- Winter
- Year-Round, All 12 Months

Please use the space below to provide any additional comments.

Appendix B: Inferred Employment

This appendix describes how employment was inferred for non-responding tourism-related firms.

InterVISTAS' approach was to utilise information from responding firms for each type of business and use it, along with publicly available information on individual non-responding firms, to make inferences. This approach is generally deemed to be the best approach, and indeed is often used for developing the national income and products account (i.e. partial survey with inference for non-surveyed or non-responding firms based on responses of surveys received). The approach was conservative in that, unlike the national income and products account inference, we assumed that the non-responding firms were smaller than respondents.²²

The employment data in this report was constructed from a combination of two 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 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 adjusted downwards. For example, especially large firms were excluded from the "mean without outliers" to obtain conservative results. This "adjusted mean" employment for each business type was then applied to the non-respondent firms.

²² As with the national income and products account approach, we recognise and discard outliers in the survey respondents when making inferences for non-respondents.

Appendix C: Calculation of Full-Time Equivalent or Person-Years of Employment

The following are details of calculations for the average number of hours per full-time equivalent (FTE) or person year of employment.

Table B-1: Full-time Equivalent Hours per Year

Calculation of FTE hours per year:	
365	days per year
Less: (104)	weekend days
(11)	legal holidays
(15)	average vacation days
(6)	sick leave
229	days per person year
* 8	hours per work day
1,832	hours per person year

Workdays vary anywhere from 6.5 to 8 hours; however, in order to be conservative, an 8 hour workday was assumed.²³ Similarly, numbers of vacation and sick leave days may also vary.

²³ Essentially, we are using a measure of paid hours per year. Using a measure of productive hours per year with 6.5 hour workdays (8 hours less 1 hour for lunch less two 15 minute work breaks) would give 1,489 hours per person year. Using this lower figure would result in inferring a greater number of FTEs from seasonal and part-time jobs. Using the 1,832 figure, we infer a lower number of FTEs.

Appendix D: Tax Revenues Attributable to Tourism Employees and Employers in Kelowna

Introduction

This appendix describes the employment and other assumptions on which tax revenues 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 for the 2015 calendar year.

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

Employment Generated and Supported by Tourism Activity

The tax calculations in this report are separated into two - the tax revenue contributions of employers and employees in accommodation providers and tourism service providers; and, the contributions of visitors. This appendix focuses on the analysis of taxes paid by employers or employees.²⁴ The total direct employment, in person years, used for the calculations of the tax revenue paid by employers and employees is 5,570 person years (rounded). The total payroll is estimated at over \$241 million.

Personal Income Tax (Federal and Provincial)

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

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

Estimation Method and Results

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.

Each employee is assumed to pay tax as a single tax filer. Estimated income tax payable is \$21 million in federal tax and \$8 million in provincial tax.

²⁴ See **Appendix E** for details on the analysis of taxes paid by non-local visitors to the greater Kelowna area.

Table D-1: Income Tax Revenues

					Average Income		Estimated Income Tax	
					Tax Rates (%)		(\$m)	
					Person Years	Average Payroll	Payroll (\$m)	Federal
	Food & Beverage Services (Restaurant)	687	\$ 32,089.82	\$22.05	8.5%	3.1%	\$1.88	\$0.69
	Food & Beverage Services (Groceries)	336	\$ 32,089.82	\$10.79	8.5%	3.1%	\$0.92	\$0.34
	Retail Trade	548	\$ 32,727.75	\$17.92	8.5%	3.1%	\$1.53	\$0.56
	Car Rental	6	\$ 56,370.97	\$0.37	8.5%	3.1%	\$0.03	\$0.01
	Taxi	174	\$ 38,492.15	\$6.70	8.5%	3.1%	\$0.57	\$0.21
	Accommodations	1,596	\$ 41,675.05	\$66.51	8.5%	3.1%	\$5.68	\$2.08
	Art, Culture & Entertainment	80	\$ 51,208.27	\$4.10	8.5%	3.1%	\$0.35	\$0.13
	Conference & Meeting	6	\$ 59,355.12	\$0.36	8.5%	3.1%	\$0.03	\$0.01
	Golf Course	178	\$ 51,208.27	\$9.12	8.5%	3.1%	\$0.78	\$0.29
	Outdoor Recreation & Sports	426	\$ 51,208.27	\$21.81	8.5%	3.1%	\$1.86	\$0.68
	Tour Operator/Travel Agency	27	\$ 50,641.13	\$1.37	8.5%	3.1%	\$0.12	\$0.04
	Tourism Trade	17	\$ 50,641.13	\$0.86	8.5%	3.1%	\$0.07	\$0.03
	Tourist Attraction	301	\$ 51,208.27	\$15.41	8.5%	3.1%	\$1.32	\$0.48
	Winery	483	\$ 45,569.67	\$22.01	8.5%	3.1%	\$1.88	\$0.69
	Airport	706	\$ 59,590.00	\$42.04	8.5%	3.1%	\$3.59	\$1.32
TOTAL		5,571		\$241.42			\$21	\$8

The average tax rates used are derived from the more detailed calculations of taxes payable shown in **Table D-2**. 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. CPP, EI and charitable contributions). Average credits are calculated from Revenue Canada, *General Income Tax Forms, 2016*.

Table D-2: British Columbia Single Tax Filer Income Tax Calculation – 2016

British Columbia Single Tax Filer Income Tax Calculation																		
	5,000	10,000	15,000	20,000	25,000	30,000	35,000	40,000	45,000	50,000	55,000	60,000	70,000	80,000	90,000	100,000	150,000	
Income																		
Employment	5,000	10,000	15,000	20,000	25,000	30,000	35,000	40,000	45,000	50,000	55,000	60,000	70,000	80,000	90,000	100,000	150,000	
TOTAL	5,000	10,000	15,000	20,000	25,000	30,000	35,000	40,000	45,000	50,000	55,000	60,000	70,000	80,000	90,000	100,000	150,000	
Deductions																		
RPP	110	35	31	39	57	102	176	300	475	692	802	1,059	1,385	1,852	2,547	2,446	2,163	
RRSP	762	196	156	220	265	363	484	626	795	1,068	1,352	1,590	1,957	2,485	3,186	4,108	6,497	
Carrying Charges	1,143	194	119	114	111	119	133	149	165	206	227	250	292	350	409	554	748	
Union	312	108	64	53	50	67	90	121	162	214	243	309	374	474	602	554	453	
TOTAL	2,328	533	371	426	483	650	882	1,196	1,597	2,179	2,624	3,208	4,006	5,162	6,744	7,662	9,861	
Taxable Income	2,672	9,467	14,629	19,574	24,517	29,350	34,118	38,804	43,403	47,821	52,376	56,792	65,994	74,838	83,256	92,338	140,139	
Credits																		
Basic Federal	11,474.00	11,474.00	11,474.00	11,474.00	11,474.00	11,474.00	11,474.00	11,474.00	11,474.00	11,474.00	11,474.00	11,474.00	11,474.00	11,474.00	11,474.00	11,474.00	11,474.00	
Basic Provincial	\$ 10,027.00	\$ 10,027.00	\$ 10,027.00	\$ 10,027.00	\$ 10,027.00	\$ 10,027.00	\$ 10,027.00	\$ 10,027.00	\$ 10,027.00	\$ 10,027.00	\$ 10,027.00	\$ 10,027.00	\$ 10,027.00	\$ 10,027.00	\$ 10,027.00	\$ 10,027.00	\$ 10,027.00	
CPP	2,020	608	585	589	583	675	808	959	1,127	1,365	1,523	1,633	1,710	1,762	1,878	1,900	1,865	
EI	1,575	488	324	284	259	288	333	385	446	531	562	601	623	639	677	679	642	
Charity	78	35	45	33	138	190	250	295	333	377	423	459	521	620	671	765	1,021	
Fed. Total	15,146	12,606	12,428	12,437	12,455	12,628	12,865	13,113	13,380	13,748	13,983	14,168	14,327	14,495	14,701	14,818	15,001	
Prov. Total	13,699	11,159	10,981	10,990	11,008	11,181	11,418	11,666	11,933	12,301	12,536	12,721	12,880	13,048	13,254	13,371	13,554	
Federal Tax Credit Rate	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	
Provincial Tax Credit Rate	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	
Federal Credits	2,272	1,891	1,864	1,868	1,868	1,894	1,930	1,967	2,007	2,062	2,097	2,125	2,149	2,174	2,205	2,223	2,250	
Provincial Credits	693	565	556	556	557	566	578	590	604	622	634	644	652	660	671	677	686	
Tax Payable																		
Federal - Bracket 1	401	1,420	2,194	2,936	3,678	4,402	5,118	5,821	6,510	6,792	6,792	6,792	6,792	6,792	6,792	6,792	6,792	
Federal - Bracket 2	0	0	0	0	0	0	0	0	0	521	1,454	2,360	4,246	6,059	7,785	18,565	18,565	
Federal - Bracket 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	462	12,890	
Federal - Bracket 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Federal - Bracket 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Federal Total	401	1,420	2,194	2,936	3,678	4,402	5,118	5,821	6,510	7,313	8,247	9,152	11,038	12,851	14,577	25,819	38,248	
Basic Federal	0	0	330	1,070	1,809	2,508	3,188	3,854	4,503	5,251	6,149	7,027	8,889	10,677	12,372	23,597	35,997	
BC - Bracket 1	135	479	740	990	1,241	1,485	1,726	1,933	1,933	1,933	1,933	1,933	1,933	1,933	1,933	1,933	1,933	
BC - Bracket 2	0	0	0	0	0	0	0	46	400	740	1,091	1,431	2,139	2,820	2,942	2,942	2,942	
BC - Bracket 3	0	0	0	0	0	0	0	0	0	0	0	0	0	718	1,189	1,189	1,189	
BC - Bracket 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	565	2,311	
BC - Bracket 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,939	
BC Total	135	479	740	990	1,241	1,485	1,726	1,979	2,333	2,673	3,024	3,364	4,073	4,754	5,593	6,629	13,314	
Basic Provincial	0	0	185	434	684	919	1,149	1,389	1,729	2,051	2,390	2,721	3,421	4,094	4,923	5,953	12,628	
TOTAL TAX PAYABLE	0	0	515	1,505	2,493	3,428	4,337	5,242	6,233	7,302	8,539	9,747	12,310	14,771	17,294	29,549	48,625	
Average Rate of Tax	0.0%	0.0%	3.5%	7.7%	10.2%	11.7%	12.7%	13.5%	14.4%	15.3%	16.3%	17.2%	18.7%	19.7%	20.8%	32.0%	34.7%	
Federal	0.0%	0.0%	2.3%	5.5%	7.4%	8.5%	9.3%	9.9%	10.4%	11.0%	11.7%	12.4%	13.5%	14.3%	14.9%	25.6%	25.7%	
Provincial	0.0%	0.0%	1.3%	2.2%	2.8%	3.1%	3.4%	3.6%	4.0%	4.3%	4.6%	4.8%	5.2%	5.5%	5.9%	6.4%	9.0%	

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.

Estimation Method and Results

1. 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 provinces. Therefore, an approximate method has been used.
2. In British Columbia, the federal corporate income tax collected per employee was \$2,300 and the provincial corporate income tax collected per employee was \$1,200 in 2016.
3. Assuming all companies pay tax at the average rate per employee calculated above, the 2015/16 corporation income tax liability of the tourism employment sector is estimated to be \$13 million toward federal revenues and \$6 million toward provincial revenues. The estimated total corporate income tax revenue is about \$19 million as shown in **Table D-3**.

Table D-3: Estimated Corporate Income Tax Paid by the Tourism Industry

Government	Revenue (\$ Millions)
Federal	12.56
Provincial	6.44
Total	19.00

Employment Insurance premiums

Tax base and rates. In 2016, employees in Canada paid employment insurance (EI) premiums equal to 1.63% of earnings up to a maximum of \$836 per year. (Maximum insurable earnings are \$51,300). 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 \$51,300 per year. The maximum contribution was used for employees earning more than \$51,300 per year. Estimated employee payments were approximately \$4 million in 2016.

The employer rate is applied to the employee payments. Estimated employer payments were approximately \$5 in 2016.

Canada Pension Plan contributions

Tax base and rates. In 2016, employee contributions for the Canada Pension Plan (CPP) were 4.95% of pensionable earnings. Pensionable earnings are actual earnings less \$3,500, to a maximum of \$55,300. The maximum annual employee contribution is \$3,500. 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 earning less than \$55,300 a year. The maximum contribution was used for employment earning more than the maximum pensionable earnings.

Estimated employer and employee contributions are an estimated \$12 million each, for a total of \$24 million.

Workers' Compensation Board contributions

Tax base and rates. Employers in each province are required to make contributions to the Workers' Compensation Board to help offset the cost of on-the-job injuries. 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.²⁵ 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 WCB 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.

Conceptual issues. 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 the airport have been applied to the total payroll for that group. Tourism firms' employees paid an estimated \$4 million to Worker's Compensation in 2016.

Medical Services Plan premiums

Tax base and rates. Medical Services Plan (MSP) premiums for British Columbia in 2016 were:

Single	- \$75 per month
Family of two	- \$136 per month
Family of three or more	-\$150 per month

²⁵ Subject to Experience Rating Adjustment for individual companies.

Conceptual issue. Premiums must be paid by any person registered with the Plan, whether they are employed or not.²⁶ Therefore, premiums are not directly related to employment. Nevertheless, many employers pay premiums on behalf of their employees. Therefore, premiums are included as a tax contribution.

Estimation Method and Results

Many employees may be covered by premiums paid by or on behalf of a spouse. Therefore, an employee may not need the coverage offered by an employer. For any group of employees it is difficult to know how many have coverage through a spouse. Therefore, we have assumed that all employees are covered as a result of employment, but that the premium required is only the rate for single persons.

Total employment of 5,571 person years at \$900 per employed person annually (\$75 x 12 months) equals a total contribution of an estimated \$5 million.

Property Tax Estimates of Businesses Related to Tourism in Kelowna

Local governments levy property taxes to help them finance local services. Rates for various categories of property (e.g., residential, business, industry, recreation, etc.) are applied to the assessed value of a particular property, as determined by BC Assessment. Rates vary by category and are determined by individual local governments. Property taxes also include some taxes which are collected on behalf of the provincial government, such as school taxes.

Estimation Method and Results

1. Property tax levies or collected by the City of Kelowna per the City of Kelowna 2015 Annual Report were used.
2. Tourism-related property taxes were estimated using the percentage of tourism employment out of total jobs based on Statistics Canada Labour Force data and Census associated with the business and recreational property classifications.
3. Tourism-related businesses paid approximately \$12 million in property taxes to the municipalities in 2015, and approximately \$7 million in property taxes to the provincial government.

Table D-4: Estimated Property Taxes Paid

	Provincial (\$ Millions)	Municipal (\$ Millions)	Total (\$ Millions)
Kelowna	\$11.6	\$7.4	\$19

²⁶ Low income persons may qualify for premium assistance.

Appendix E: Tax Revenues Attributable to Non-Local Visitor Spend in Kelowna

Introduction

This appendix describes the visitor spending and other assumptions on which tax revenues calculations are based. As well, the approaches used to estimate non-local visitor contributions to local, provincial and federal governments are presented. Tax revenues paid by visitors are based on 2016 non-local visitor spending information.

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

Spending Generated and Supported by Tourism Activity

The tax calculations in this report are separated into two - the tax revenue contributions of employers and employees in accommodation providers and tourism service providers; and, the contributions of visitors. This appendix focuses on the analysis of taxes paid by non-local visitors to the Kelowna area.²⁷ Visitors to Kelowna contribute to tax revenues through consumption taxes levied on items such as accommodations, food & beverage, retail, transportation and tours/attractions. The contributions of visitors are calculated based on visitor spending data estimated from the Inter VISTAS Visitor Survey conducted in 2016. In this study, it is estimated that Kelowna handles more than 1.9 million person-visits and non-local visitors are estimated to spend more than \$337 million in Kelowna, B.C. each year.²⁸

Tax on Accommodation Costs

Tax base and rates. The tax rate of 12% (includes 5% Goods and Services Tax (GST) and 7% Provincial Sales Tax (PST)) applies to accommodation costs by non-local visitors to Kelowna, B.C. staying in hotels.

In addition, according to the Hotel Association of Canada, a hotel tax of 2% is also levied on accommodation expenditure in in specified areas on behalf of local tourism organisations. Kelowna is one of those municipalities that charge the additional 2% tax.

²⁷ See **Appendix D** for details on the analysis of taxes paid by employees and employers of tourism-related firms in the greater Kelowna area.

²⁸ Statistics Canada, *Travel Survey of Residents of Canada & International Travel Survey (2015)*

Estimation Method and Results

1. Based on the BC Stats hotel room revenue data for the year 2015 for Kelowna, total accommodation expenditures were more than \$80 million (excluding taxes).
2. Applying the 5% GST to the total accommodations expenditure totalled \$4 million.
3. Applying the 7% PST to the total accommodations expenditure totalled \$5.6 million.
4. Applying the 2% local hotel tax to the total accommodations expenditure totalled \$1.6 million.

Table E-1: Estimated Hotel Taxes Paid

	GST (\$ Millions)	Provincial Hotel Tax (\$ Millions)	Local Hotel Tax (\$ Millions)	Total (\$ Millions)
Kelowna	4.0	5.6	1.6	11.1

Note: Total may not add up due to rounding.

Tax on Retail Spending

Tax Base and Rates. The tax of 12% (includes 5% Goods and Services Tax (GST) and 7% Provincial Sales Tax (PST)) applies to most retail purchases by non-local visitors to Kelowna, B.C. Some products are exempt from the PST including children’s clothing and books. Basic grocery purchases are also exempt from the GST and PST.

Simplifying Assumptions

1. Because some goods are exempt from the PST, it was assumed that only 75% of retail purchases would include the PST.

Estimation Method and Results

1. Based on the InterVISTAS *Visitor Survey Spending Profile*, average spending on retail purchases was estimated at \$10 per day for visitors, *including* taxes.
2. GST on retail receipts totalled to \$2.2 million.
3. Assuming that 25% of retail purchases would be exempt from the PST, this results in total PST of \$2.3 million in revenue for the provincial government.

Table E-2: Estimated Taxes Paid on Retail Spending

	GST (\$ Millions)	PST (\$ Millions)	Total (\$ Millions)
Kelowna	2.2	2.1	4.5

Tax on Food and Beverage Spending

Tax base and rates. The tax rate of 12% (includes 5% Goods and Services Tax (GST) and 7% Provincial Sales Tax (PST)) applies to all food and beverage purchases made at restaurants and bars in B.C. The GST and PST would not be charged on the majority of grocery items.

Simplifying Assumptions

1. In order to remove gratuities from the total, it was assumed that on average, gratuities were 15%.
2. It was assumed that 0% GST applied to grocery purchases.

Estimation Method and Results

1. Based on the InterVISTAS *Visitor Survey Spending Profile*, average spending on food & beverage, including restaurants, bars, groceries, etc., made during a trip was estimated at nearly \$22 per day, *including* taxes and gratuities.
2. Total food & beverage spending for same day versus overnight visits was allocated between grocery purchases and restaurants based on expenditures of visitors to B.C. in 2015 from Statistics Canada's *Travel Survey of Canadian Residents*.
3. Total restaurant spending was scaled down by 15% to remove tips.
4. GST from food and beverage expenditure totalled \$3.1 million.
5. PST from food and beverage expenditure totalled \$4.3 million.

Table E-3: Estimated Taxes Paid on Food & Beverage Spending

	GST (\$ Millions)	PST (\$ Millions)	Total (\$ Millions)
Kelowna	3.1	4.3	7.4

Tax on Entertainment, Attractions, Outdoor Activities and Tours

Tax base and rates. The tax rate of 12% (includes 5% Goods and Services Tax (GST) and 7% Provincial Sales Tax (PST)) is charged on entrance fees for attractions, outdoor activities and tours.

Estimation Method and Results

1. Based on the InterVISTAS *Visitor Survey Spending Profile*, average spending on entertainment, such as theatre tickets, admission to sports events or attractions etc., was estimated at \$15 per day for visitors, *including* taxes.
2. Applying the 5% GST to entertainment expenditure by all visitors results in approximately \$3.3 million in tax revenue.
3. Applying the 7% PST to entertainment expenditure by all visitors results in nearly \$4.6 million in tax revenue.

Table E-4: Estimated Taxes Paid on Attractions, Activities & Tours Spending

	GST (\$ Millions)	PST (\$ Millions)	Total (\$ Millions)
Kelowna	3.3	4.6	7.9

Tax on Ground Transportation and Car Rentals

Tax base and rates. The tax rate of 12% (includes 5% Goods and Services Tax (GST) and 7% Provincial Sales Tax (PST)) applies to taxi and limousine, as well as to car rentals.

Conceptual issues. Transportation spending by Canadian resident visitors to the province is available at a detailed level, including vehicle rental, vehicle operation, local transportation and intercity transportation (bus, air, etc.) in Statistic Canada's *Travel Survey of Canadian Residents 2015*.

Simplifying Assumptions

1. For U.S. and international visitors, it was assumed that 50% of transportation spending was on car rentals.

Estimation Method and Results

1. Based on the InterVISTAS *Visitor Survey Spending Profile*, average spending on local transportation, such as rental car, taxis, etc. (within the Kelowna area only) was estimated at \$5 per day for visitors, including taxes.
2. Total Canadian resident visitors' local transportation spending including car rental was based on expenditures of visitors to B.C. in 2015 from Statistics Canada's *Travel survey of residents of Canada*, with intercity transportation spending removed.
3. GST on car rental expenditures totalled to \$0.2 million and GST on other transportation (e.g., taxi) totalled close to \$0.9 million in GST.
4. PST on car rental expenditures totalled to \$0.2 million and PST on other transportation (e.g., taxi) totalled over \$1.3 million in PST.

Table E-5: Estimated Taxes Paid on Transportation Spending

	GST on Car Rentals (\$ Millions)	GST on Other Transportation (\$ Millions)	PST on Car Rentals (\$ Millions)	PST on Other Transportation (\$ Millions)	Total (\$ Millions)
Kelowna	0.16	0.91	0.22	1.25	2.54

Appendix F: Glossary of Terms

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 in an aviation related capacity would be considered direct employment.

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 person years created at the airport is examined to produce a snapshot of airport operations.

Full Time Equivalent (FTE): (also Person Year) One full time equivalent (FTE) year of employment is equivalent to the number of hours that an individual would work on a full time basis for one year. In this study, we have calculated one full time equivalent year to be equivalent to 1,832 hours. Full time equivalent years are useful because part time and seasonal workers do not account for one full time job.²⁹

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.

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, induced 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 in order 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.

Value-Added: (also GDP) A dollar measure of the value-added amount in 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 service.

²⁹ *The Dictionary of Modern Economics*, David W. Pearce, General Editor, The MIT Press, Cambridge Mass., 1984



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