

# Northern BC Value of Tourism Study

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September 3, 2022

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Dear Ms. Moore:

#### Re: Value of Tourism Study

In accordance with the terms of our engagement, we have completed a Value of Tourism Study for Northern BC.

This study has been prepared for the Northern BC Tourism Association to demonstrate the estimated economic and employment impacts resulting from travel and tourism in Northern BC.

We thank you for your co-operation and assistance during this assignment. We would be pleased to discuss the findings with you, at your convenience.

Yours sincerely,

Jennifer Nichol

BA, Certified Management Consultant

Principal

#### i

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## **Executive Summary**

#### Introduction

This Executive Summary provides highlights from a Value of Travel and Tourism Study conducted for Northern BC in 2022. This should be read in conjunction with the full report.

#### 2018 - 2021 Visitor Spending

Total estimated visitor spending for four years is shown below for Northern BC and the province as a whole. The impact of the Pandemic starting in 2020 is very evident, with estimated visitor spending declining 35.3% in Northern BC and 52.7% in BC as a whole. The year 2019 is used as the baseline year for the detailed economic impact analysis shown later in this report, as this is considered the last "normalized" year prior to the advent of the Pandemic.

#### In 2019:

- BC experienced an estimated \$21.0 billion in total direct visitor spending 1; and,
- Northern BC experienced an estimated \$1.1 billion in total direct visitor spending (5.3% of the BC total).

Total Visitor Spending (Millions)	NORTHERN BC					
(minus consumer taxes)	2018	2019	2020	2021		
Total Gross Spending	\$1,061.8	\$1,104.6	\$714.7	\$739.7		
% Change		4.0%	-35.3%	3.5%		

	ALL PRO	OVINCE	
2018	2019	2020	2021
\$20,549.9	\$21,024.7	\$9,940.9	\$12,833.7
	2.3%	-52.7%	29.1%

#### **Visitor Spending and Market Highlights for 2019**

Visitor spending by market for 2019 is shown in the following diagram.

## **Total Visitor Spending**

\$1.1 billion

#### **Visitor Spending by Market**

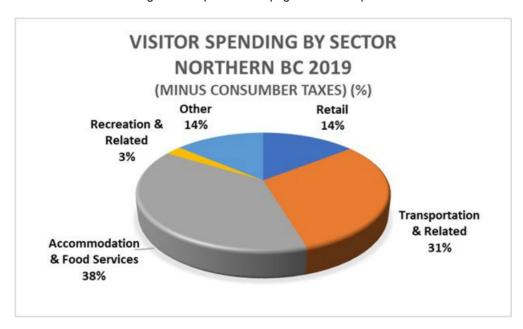
Domestic = \$593 million (54%) Interprovincial = \$395 million (36%) International = \$117 million (11%)

<sup>&</sup>lt;sup>1</sup> This excludes spending by BC residents on tourism-related durables such as RVs, ATV, camping equipment – a total of \$1.2 billion, as durable spending statistics for Northern BC are not available.



#### **Visitor Spending by Sector for 2019**

The estimated proportion of visitor spending by sector in 2019 is as follows. Accommodation and Food Services (38%) and Transportation and Related (31%) accounted for the largest amounts of visitor spending. However, it should be noted that the proportion of visitor spending for Recreation and Related is likely higher and Accommodation and Related is likely lower, as spending at all-inclusive adventure/fishing resorts is fully attributed to the Accommodation & Food Services category. Definitions for these categories are provided on page 10 of the report.



#### **Direct GDP, Tax Revenue and Employment for 2019**

The direct visitor spending of 1.1 billion (see previous page) is associated with the following direct GDP<sup>2</sup>, tax revenue and full time equivalent ("FTE") employment in the Northern BC region.

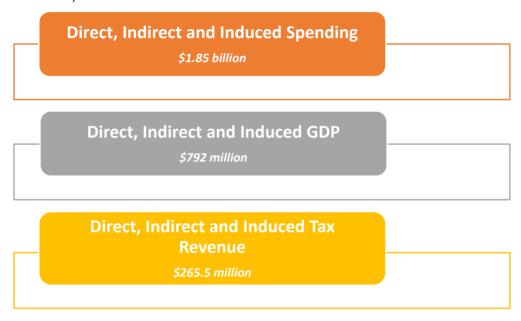


<sup>&</sup>lt;sup>2</sup> Gross domestic product is the total market value of all final goods and services produced in relation to the direct spending.



#### **Direct, Indirect and Induced Impacts Combined for 2019**

The above impacts are considerably larger when indirect (supplier industry) and induced (wages spent in the local and regional economies) are included.<sup>3</sup>



#### **Conclusions**

The direct spending resulting from travel and tourism for 2019 that is documented in this study is considerable. In 2019, estimated visitor spending in Northern BC was \$1.1 billion, which is 5.3% of total visitor spending in BC.

When the indirect and induced impacts are also factored in, the overall economic and employment impacts resulting from travel and tourism activity are much larger. Total (direct, indirect and induced) visitor spending in 2019 is estimated to be \$1.85 billion, while total GDP is estimated to be \$792 million, and total tax revenue, \$265.5 million (municipal, provincial and federal tax revenue combined).

The domestic market generated an estimated 54% of visitor spending, followed by the interprovincial market (36%) and the international market (10%). Alberta is the largest interprovincial market for Northern BC, while the US is the largest international market.

<sup>&</sup>lt;sup>3</sup> Note that some of the impacts are experienced in other areas of BC (e.g., if certain goods and services are produced outside of Northern BC, some of the indirect and induced impacts will be experienced in those locations). While 100% of direct visitor spending occurs in Northern BC, approximately 50% of the indirect and induced impacts occurs elsewhere in BC.



## 1. Introduction and scope of work

#### Introduction

The Northern BC Tourism Association (NBCTA) and its stakeholders would like to better understand the value of tourism for their region, Northern BC. Understanding the value of tourism has been identified in tourism strategies for several years, including the 10-Year Destination Development Strategies for Northwestern BC and Northeastern BC. The results of this Value of Tourism Study can be used to demonstrate to governments, politicians, residents and the tourism industry the magnitude of tourism's economic and employment impacts in the region. The results can also be used as a baseline to understand tourism growth in future years.

As such, NBCTA engaged Jennifer Nichol Consulting and Pacific Analytics to conduct this Value of Tourism Study. The study was conducted between June and August 2022.

#### Scope

The scope of work to complete this study included the following components:

- · Project planning and start-up;
- Data collection and validation, with a focus on data from confirmed valid sources;
- Data validation and development of key assumptions;
- · Conduct of the economic and employment impact assessment, categorized by sector; and,
- Preparation of draft and final reports and supporting appendices.

It should be noted that, due to lack of sufficient data from Statistics Canada at this time, visitor volumes at the regional level could not be estimated as part of this study.



# 2. Approach and methodology

#### **Approach and Methodology**

The approach used by the consulting team is presented below. Additional information regarding the economic impact methodology is presented in Appendix A.

#### PHASE 1: Project Planning & Start-Up

1.1 Discussed expectations and confirmed the approach and key data sources with the client.

#### PHASE 2: Data Collection and Validation

- 2.1 **Statistics Canada**: Through known data sources, we collected relevant data that served as a key input for the economic impact analysis.
- 2.2 **Data validation and development of assumptions**: After the completion of the data collection, we assembled, reviewed and validated the data and information. We formatted the data so that it could be used in the Input-Output model.

#### **PHASE 3: Impact Analysis**

We conducted the economic impact analysis, using the approach outlined below. A more detailed description of the methodology is presented in **Appendix A**. Note that the methodology used in this analysis is the <u>exact</u> same approach that Statistics Canada and BC STATS uses to determine the economic impacts of other industry sectors such as the Forestry Industry or the Mining Industry. As such, the estimates presented in this report are comparable to other Statistics Canada/BC STATS measures.

- 3.1 Visitor spending:
  - As described in more detail in Appendix A, detailed spending estimates for international, interprovincial and domestic tourists for the years 2018, 2019, 2020, and 2021 were determined, based on the Statistics Canada visitor surveys and Destination Canada's regional tourist spending estimates using credit card information.
- 3.2 Economic impact analysis:
  - We used the visitor spending estimates, in addition to assumptions where data was not available, as key inputs for the BC Regional Input-Output Model (BC RIO Model).<sup>4</sup>
  - · Prior to using the BC RIO Model, we:

<sup>&</sup>lt;sup>4</sup> The BC RIO Model is a regionalized Input-Output Model that uses the <u>exact</u> same provincial data as the model used by Statistics Canada and follows the same methodology used by Statistics Canada in their own modelling. Pacific Analytics first developed a regionalized version of the provincial I/O Model for the Ministry of Transportation for their internal use. In 2016, Pacific Analytics was commissioned by Destination BC to develop a regionalized version (by Regional District) specific for tourism impacts and in 2018 the Model was updated to enable municipal estimates to be calculated. In 2019, BC STATS retired their own Model and licenced the Pacific Analytics model for undertaking all internal government impact assessments. Accordingly, NBCTA is assured that the economic impacts calculated in this study will meet the full requirements of the provincial government.



- o Adjusted all the financial data for margins and taxes; and,
- Mapped items to their appropriate Input-Output (I/O) category.
- We then entered these data into the BC RIO Model itself where the level of interprovincial and international imports
  was determined and subtracted, and the direct, indirect<sup>5</sup> and induced<sup>6</sup> impacts were calculated.

#### **PHASE 4: Reporting**

- 4.1 We then prepared a draft report that documents the methodology, research and the results of the impact analysis and provided this to Northern BC Tourism for review, discussion and comment.
- 4.2 Following the above review and discussions, we prepared and submitted the final report.

<sup>&</sup>lt;sup>6</sup> <u>Induced Impacts</u>: the impacts resulting from the spending of wages paid by a firm or industry. When wages and salaries are spent (less taxes and savings), the economic activity of the firms supplying those consumer goods and services increases. As well, the supplying firms themselves will pay additional wages and salaries to their own employees which, when spent, generates more economic activity.



<sup>&</sup>lt;sup>5</sup> <u>Indirect Impacts</u>: the impacts resulting from the purchase of goods and services by a firm or industry used in the production process. The purchase of goods or services increases the economic activity of the supplying firms and, in turn, the supplying firms themselves must purchase their own goods and services which generates further economic activity in those supplying firms.

## 3. Destination overview

#### **Location and Size**

Covering 569,000 square kilometres, Northern BC is larger than California and is BC's most extensive tourism region. Northern BC borders the Yukon and the Northwest Territories to the north, the Pacific Ocean and the Alaska Panhandle to the west, Alberta to the east, and the Cariboo Chilcotin Coast Tourism Region to the south.



Source: https://www.hellobc.com/places-to-go/northern-british-columbia/

#### **Characteristics**

Northern BC is characterized by its vastness, touring routes, parks, wildlife, paleontological resources, diverse Indigenous cultures and the resource sectors that support oil and gas, mining, hydroelectric power generation and forestry. In addition, agriculture is an established sector of the region's economy that also contributes to Northern BC's cultural fabric. The expansive size of the destination lends itself to diversity in natural environments, which feature prairies, agricultural lands, mountains, glaciers, coastline, expansive parks, lakes, rivers, hot springs, and forests. With the exception of Prince George (population over 70,000), communities in the area are relatively small.



Northern BC has more than 60 provincial, national and marine parks, and wildlife refuges that offer access to globally unique ecosystems and rich cultural and heritage treasures. Highlights include Monkman Provincial Park, Haida Gwaii archipelago, Tatshenshini-Alsek Provincial Park UNESCO World Heritage Site, the Tumbler Ridge UNESCO Global Geopark, the epic 2,237-kilometre (1,387-mile) Alaska Highway, the Great Bear Rainforest, Khutzeymateen Park, Nisga'a Memorial Lava Bed Park, Mount Edziza Provincial Park, Spatsizi Wilderness Park, the Ancient Forest/Chun T'oh Whudujut Park (located in the traditional territory of the Lheidli T'enneh, the Park protects a portion of the only inland temperate rainforest in the world), North Tweedsmuir Park, Kitlope Heritage Conservancy, to name a few.

#### **Transportation**

Access to Northern BC is primarily by highway, air and/or ocean (private boat, BC Ferries, cruise ship). Passenger airports are located in Prince George, Fort St. John, Dawson Creek, Fort Nelson, Terrace, Smithers, Prince Rupert, Sandspit and Masset. Smaller airports that support industry and chartered flights are also available. Passenger bus service between communities has been available. Via Rail services some communities.

Touring is a long-standing experience available in Northern BC. The primary highway/road touring routes are Highway 16 (also known as the Yellowhead Highway), Highway 37 (also known as the Stewart-Cassiar Highway), the Alaska Highway (Highway 97), and the Great Northern Circle Route. BC Ferries also provides access and touring options with the following routes: BC Ferries Route 10 (Port Hardy to/from Prince Rupert) and Routes 11 and 26 (Prince Rupert to/from Skidegate and Alliford Bay). Currently, there are efforts to create additional circle tours and travel routes in the area, including the Nisga'a Lisims Government's Circle Tour Project featuring several circle tours in the Nisga'a area.

#### **Tourism and Travel**

Northern BC's visitor economy is diverse, with spending generated by business, industrial and leisure travellers. The region's resource-based industries – oil and gas, hydro-electric power, forestry, fishing and mining – and related travel contribute considerably to visitor spending year-round. Leisure tourism in this region is strongest during the peak summer months (July to September). Spring, fall and winter also draw certain leisure markets, with world-class heliskiing attracting international markets during the winter season. The primary leisure activities driving visitation are focused on touring and outdoor adventure. Key outdoor activities include sport fishing (fresh and salt water), boating, wildlife viewing, visiting national/provincial parks, hiking, rafting, camping, mountain biking and skiing. Cultural activities, including visiting historic sites and museums/art galleries and experiencing the region's diverse Indigenous cultures, also rank as top trip activities among many travellers to Northern BC. Indigenous communities are increasingly developing and offering rich cultural and outdoor experiences.



## 4. Economic impact analysis methodology

#### Introduction

This section provides a description of the methodology used for the economic impact assessment, including definitions for key terms. The results of the economic impact assessment are presented in the sections that follow.

#### **Theory**

The conceptual basis and rationale of the economic impact model used here is borrowed from economic base theory. The first fundamental basis of the conceptual model involves direct, indirect and induced expenditures. As an example, tourists and business travellers visiting Northern BC spend "new money" in the region. This new money is incremental to the area's economy as it could have been spent elsewhere had it not been for the tourists and travelers who visited the area. The new money is typically spent on products and services in the region. The region therefore "exports" its products and services to tourists and travelers in return for revenue. This injection of "new money" into the region represents the tourism export base of the region.

New money in the region (its tourism revenue) starts to work in the economy once businesses and the employees of businesses in the region begin to spend it. Businesses in the region incur costs for goods sold, hire contractors to provide some of the services, pay for insurance and other services, and pay their staff in operations, sales and administration wages and salaries, commissions, bonuses and other employment related compensation.

Local businesses also acquire and invest capital in equipment, buildings and long-term maintenance in order to provide their products and services. Employees of these businesses and their suppliers receive wages, which they spend on goods and services. All of these expenditures create rounds of additional spending in the economy. These rounds are captured by the indirect and induced impacts estimated in the economic impact model.

The basic concepts of economic impacts are presented below.

#### **Economic Impact Analysis: Concepts, Terms and Methodology**

A dollar spent on visiting an attraction or spending in a local business circulates and recirculates within the economy, multiplying the effects of the original expenditures on overall economic activity. This process is referred to as the economic multiplier effect. It operates at several levels (see below), which are measured using the BC Regional Input/Output Model (BC RIOM).

- **Direct effect** the change in domestic output required to satisfy an initial change in demand. This would include the actual expenditures and the employment directly generated (each person-year of employment is the equivalent of one full-time job).
- Indirect effect the change in domestic output generated by the activity in sectors that supply goods and services used in the project.
- Induced effect the overall impact of more income (wages and salaries) accruing to the household sector.



Economic impacts take a number of forms.

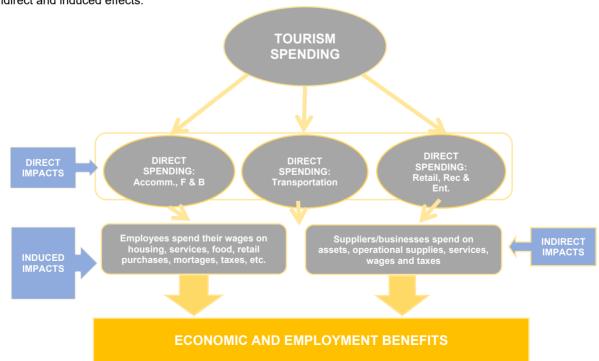
- Output the simple sum of all expenditures in the BC economy that results from the project under study. However, this figure
  to some extent exaggerates the impacts because the purchase of finished products often involves the purchase of
  components of those products at some earlier stage in the overall production process. Domestic output excludes imports
  and indirect taxes.
- Labour Income the total amount of income that accrues to households because of employment generated by the activities
  under study.
- Gross Domestic Product ("GDP") a measure of the value added (the unduplicated total value of goods and services) to the BC economy by current productive activities attributable to the project and taking place within the region and province.
- Provincial and Federal Revenues estimates made up of the provincial and federal shares of personal income taxes and commodity taxes (PST and GST), as well as other commodity taxes such as gas taxes or air transportation tax.

Economic impact analysis is a useful mathematical tool capable of quantifying the patterns and magnitudes of interdependence among sectors and activities and the economic "benefits" that communities and regions derive from the export of their products and services. It is predicated on two fundamental propositions:

- First, regardless of the inherent value of primary activities such as recreation or tourism, to the extent that these activities involve the use of scarce resources they generate economic consequences that can be measured and compared.
- Second, economic impacts are only partially captured by assessing direct expenditures. Inasmuch as the economy is a
  complex whole of interdependent and interacting activities, there are some significant indirect and induced impacts
  associated with the direct expenditure. These indirect and induced impacts are often larger than the direct impacts.

#### Flow of Travel and Tourism Spending

The following diagram illustrates the flow of travel and tourism spending, and how direct spending results in larger impacts due to indirect and induced effects.





#### **Destination BC's Estimates of Tourism Spending**

Each year Destination BC (through Pacific Analytics Inc.) produces estimates of provincial tourism spending based on Statistics Canada's 2014 and 2017 Tourism Satellite Accounts, annual BC Input-Output Supply and Demand Tables (latest 2018), and Destination Canada detailed tourism spending estimates 2018 to 2021 derived from Credit Card data. Unpublished data subdivide these data into International, Interprovincial, and Domestic tourism spending and then, using various other unpublished estimates, these are broken down by 494 commodities consistent with Input-Output commodity definitions. By entering these data into the BC Input-Output Model, estimates of direct, indirect, and induced impacts can be generated. Using detailed regional responses from Statistics Canada's visitor surveys (Visitor Travel Survey – "VTS" and the International Travel Survey – "ITS"), these data can be used to break down spending at the Tourism Region level.

Since visitor spending is broken out by 494 separate commodities, roll-ups by aggregate industry sector can be generated.

- "Retail Commodities" refers to the factory gate value of all the goods purchased by tourists while the "Retail –
  Margins" refers to the wholesale and retail markups added to the factory gate cost.
- "Transportation and Related" refers to all of the transport services purchased by tourists including air, rail, and interurban bus fares, urban transport (transit and taxis), gasoline purchases, vehicle rentals and the like.
- "Accommodation and Food Services" comprises spending on all accommodation (including on AirBnB-type facilities)
  and spending in Restaurants, Bars and other facilities providing food and beverages. Note that spending at allinclusive resorts/lodges is captured in this category; this includes spending on recreation activities, such as sport
  fishing, that are part of the resort/lodge experience.
- "Recreation and Related" encompasses spending on recreation, sports and sightseeing activities, and all cultural and
  entertainment activities. Note that total spending in this category is understated, given that spending on recreational
  activities that are part of a resort/lodge experience are included in "Accommodation and Food Services" (see above).
- "Oher" refers to all other spending not included in the above, such as: conference fees, laundry services, hair care, other personal care, propane, medical (although not medical insurance, which is typically purchased outside the destination).



# 5. Visitor spending

#### Introduction

This section presents visitor spending data for Northern BC and for BC as a whole. It includes year-over-year comparisons, in addition to spending breakdowns for the year 2019 by:

- Sector (retail, transportation and related, accommodation and food services, recreation and related, and other);
- Market (domestic, interprovincial and domestic); and,
- Market (Alberta and US).

Note that "total visitor spending" includes consumer taxes. When consumer taxes are not included in the visitor spending figure, this is noted with "minus consumer taxes".

#### Visitor Spending 2018 - 2021

The year 2019 is used as the baseline year for the detailed economic impact analysis shown later in this report, as this is considered the last "normalized" year prior to the advent of the Pandemic in 2020. In 2019:

- BC experienced an estimated \$21.0 billion in total visitor spending<sup>7</sup>; and,
- Northern BC experienced an estimated \$1.1 billion in total visitor spending (5.3% of the BC total).

Year-over-year visitor spending for Northern BC and BC is shown below. In 2020, the year the Pandemic hit, visitor spending:

- Declined 36% in Northern BC; and,
- Declined 53% in BC.

Total Visitor Spending (\$ Millions)	NORTHERN BC			BRITISH COLUMBIA				
	2018	2019	2020	2021	2018	2019	2020	2021
Total Visitor Spending <sup>1</sup>	\$1,061.8	\$1,104.6	\$714.7	\$739.7	\$20,549.9	\$21,024.7	\$9,940.9	\$12,833.7
Minus Consumer Taxes	\$965.9	\$1,004.7	\$642.1	\$666.2	\$18,701.6	\$19,124.7	\$8,950.7	\$11,572.5
Year-over-Year % Change		4.0%	-36.1%	3.7%		2.3%	-53.2%	29.3%
Visitor Spending by Sector (minus consumer taxes)								
Retail	\$150.4	\$144.1	\$106.8	\$112.0	\$2,925.5	\$2,812.5	\$1,566.2	\$1,880.2
Transportation & Related	\$291.8	\$311.7	\$122.9	\$129.4	\$5,372.0	\$5,657.0	\$1,999.7	\$2,652.3
Accommodation & Food Services	\$354.9	\$385.7	\$296.4	\$296.8	\$6,471.6	\$6,706.9	\$3,456.6	\$4,609.3
Recreation & Related	\$26.8	\$25.1	\$17.4	\$17.8	\$1,312.4	\$1,311.4	\$528.7	\$603.6
Other	\$141.9	\$138.1	\$98.5	\$110.2	\$2.620.1	\$2.636.8	\$1.399.5	\$1,827.1

<sup>1</sup> Total Visitor Spending includes Forward Consumer Taxes (e.g., accommodation taxes on hotel visits are included in spending).

<sup>&</sup>lt;sup>7</sup> This excludes spending by BC residents on tourism-related durables such as RVs, ATV, camping equipment – a total of \$1.2 billion. Note: Durable spending for Northern BC is not available.

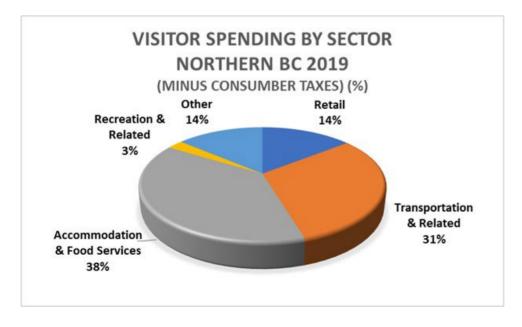


#### **Visitor Spending: By Sector**

A breakdown of visitor spending (minus consumer taxes) is presented below. Definitions for each of the sectors is as follows.

Sector	Description
Retail	Commodities" refers to the factory gate value of all the goods purchased by tourists while the "Retail – Margins" refers to the wholesale and retail markups added to the factory gate cost
Transportation and Related	Refers to all of the transport services purchased by tourists including air, rail, and interurban bus fares, urban transport (transit and taxis), gasoline purchases, vehicle rentals and the like
Accommodation and Food Services	Refers to spending on all accommodation (including on AirBnB-type facilities) and spending in restaurants, bars and other facilities providing food and beverages. Spending at all-inclusive resorts/lodges is also captured in this category; this includes spending on recreation activities, such as sport fishing, that are part of the resort/lodge experience
Recreation and Related	Refers to spending on all recreation, sports and sightseeing activities, and all cultural and entertainment activities; note that total spending in this category is understated, given that spending on recreational activities that are part of a resort/lodge experience are included in "Accommodation and Food Services" (see above)
Other	Refers to all other spending not included in the above, such as: conference fees, laundry services, hair care, other personal care, propane, medical (although not medical insurance, which is typically purchased outside the destination)

As shown below, visitor spending is highest for Accommodation & Food Services (38.4%) and Transportation & Related (31.0%). It should be noted that spending at an adventure-style resort, such as a fishing lodge, will be attributed to Accommodation & Food Services. Consequently, the spending allocated to Recreation & Related may be under-stated.

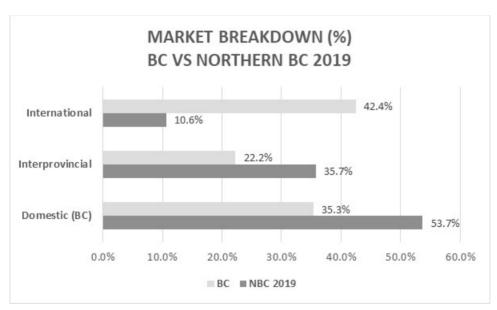




Visitor Spending by Sector 2019	Northern	% of
(minus consumer taxes) (Millions)	ВС	Total
Retail	\$144.1	14.3%
Transportation & Related	\$311.7	31.0%
Accommodation & Food Services	\$385.7	38.4%
Recreation & Related	\$25.1	2.5%
Other	\$138.1	13.7%
Total	\$1,004.7	100%

#### **Visitor Spending: By Market**

Proportions of visitor spending by market vary considerably between Northern BC and BC. In 2019, the domestic market generated an estimated 53.7% of visitor spending for Northern BC, compared to 35.3% for BC as a whole. Interprovincial visitor spending accounted for an estimated 35.7% for Northern BC and 22.2% for BC. International visitor spending contributed the highest proportion of spending for BC at 42.4%, compared to 10.6% for Northern BC.



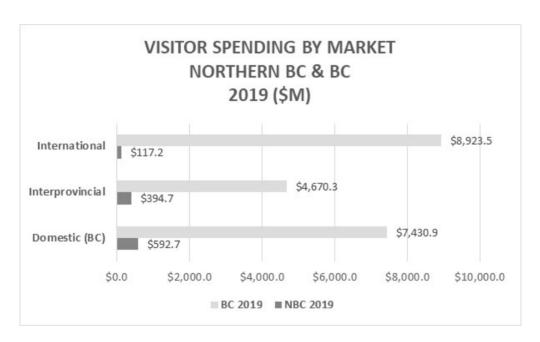
<sup>\*</sup> Note that some percentage figures may not add up precisely to 100% due to rounding.

The following two tables present estimated spending by market year-over-year, first for Northern BC and second for BC. Both Northern BC and BC experienced the largest decline in international visitor spending in 2020 (-72% for Northern BC and -71% for BC), due to the shut-down of most international travel due to the Pandemic.

Visitor Spending by Market (Millions) Northern BC						
	2018	2019	2020	2021		
Domestic (BC)	\$576.0	\$592.7	\$464.5	\$413.0		
Year-over Year % Change		2.9%	-21.6%	-11.1%		
Interprovincial	\$352.6	\$394.7	\$216.9	\$264.7		
Year-over Year % Change		11.9%	-45.0%	22.0%		
International	\$133.3	\$117.2	\$33.3	\$61.9		
Year-over Year % Change		-12.0%	-71.6%	86.3%		
Total	\$1,061.8	\$1,104.6	\$714.7	\$739.7		



Visitor Spending by Market (Millions) British Columbia					
	2018	2019	2020	2021	
Domestic (BC)	\$7,520.7	\$7,430.9	\$5,110.8	\$5,802.6	
Year-over Year % Change		-1.2%	-31.2%	13.5%	
Interprovincial	\$4,266.2	\$4,670.3	\$2,199.4	\$3,466.1	
Year-over Year % Change		9.5%	-52.9%	57.6%	
International	\$8,763.0	\$8,923.5	\$2,630.7	\$3,564.9	
Year-over Year % Change		1.8%	-70.5%	35.5%	
Total	\$20,549.9	\$21,024.7	\$9,940.9	\$12,833.7	



Alberta is a long-standing, important market for Northern BC. The table below shows that Alberta generated an estimated 14% of total visitor spending and 40% of interprovincial visitor spending in Northern BC in 2019.

Direct Visitor Spending:					
Total, Interprovincial & Alberta (2019)					
Total	\$	1,104,600,000			
Interprovincial	\$	394,700,000			
Alberta	\$	157,836,000			
Interprovincial as % of Total		35.7%			
AB as % of Total		14.3%			
AB as % of Interprovincial		40.0%			

When considering international markets, the US market generates the largest amount of visitor spending in Northern BC. The table below shows that the US generated an estimated 7% of total visitor spending and 69% of total international visitor spending in Northern BC in 2019.



Direct Visitor Spending:					
Total, International & US (2019)					
Total	\$ 1,104,600,000				
International	\$ 117,200,000				
US	\$ 81,389,000				
International as % of Total	10.6%				
US as % of Total	7.4%				
US as % of International	69.4%				

#### **Conclusions**

Northern BC's total direct visitor spending in 2019 is estimated to be \$1.1 billion, which equals 5.3% of total visitor spending in BC. The estimated proportion of visitor spending by sector in 2019 is as follows:

•	Retail:	14%
•	Transportation & Related:	31%
•	Accommodation & Food Services:	38%
•	Recreation & Related*:	3%
•	Other:	14%

<sup>\*</sup>Regarding Recreation & Related, the proportion of visitor spending is likely higher, as spending at all-inclusive adventure/fishing resorts is fully attributed to the Accommodation & Food Services category.

In Northern BC, the domestic (BC) market generated the most spending (53.7%), followed by the interprovincial market (35.7%) and the international market (10.6%). Alberta is the most important interprovincial market for Northern BC, generating an estimated 40% of total interprovincial visitor spending in 2019. The US is the most important international market for Northern BC, generating an estimated 69.4% of total international visitor spending in 2019.



## 6. Employment impacts

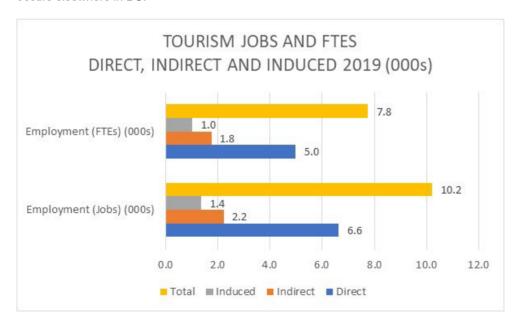
#### Introduction

Estimated employment impacts related to travel and tourism in Northern BC are presented in this section. The year 2019 has been selected as a baseline for this analysis, as this is the most recent stabilized year prior to the advent of the Covid Pandemic in 2020. Direct, indirect and induced employment impacts are presented.<sup>8</sup>

#### **Employment**

In 2019, tourism was responsible for an estimated 6,641 jobs (part-time and full-time) and 4,973 full time equivalent (FTE) jobs in Northern BC.

When factoring in the indirect and induced employment, total estimated employment resulting from tourism in Northern BC is much larger. As shown in the graph below, the estimated total (direct, indirect and induced) FTEs resulting from tourism in 2019 was 7,800. The total number of jobs (part-time and full-time) was estimated at 10,200. Note that the indirect and induced impacts are for the province as a whole, as some production, supplies and services take place outside of Northern BC. Therefore, while 100% of direct employment occurs in Northern BC, approximately 50% of indirect and induced employment occurs elsewhere in BC.



<sup>•</sup> **B Direct effect** – is the change in domestic output required to satisfy an initial change in demand. This would include the actual expenditures and the employment directly generated (each person-year of employment is the equivalent of one full-time job).

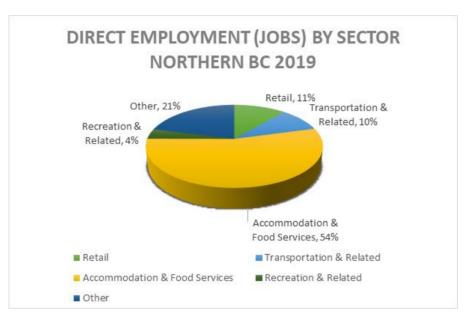
Induced effect – is the overall impact of more income (wages and salaries) accruing to the household sector.



<sup>•</sup> Indirect effect - is the change in domestic output generated by the activity in sectors that supply goods and services used in the project.

#### **Employment: By Sector**

Estimated employment by sector is shown in the graph and table below. It should be noted that Recreation & Related (4%) is understated and Accommodation & Food Services (54%) is overstated, as jobs related to all-inclusive lodges/fishing lodges are attributed to Accommodation & Food Services in the source data set used for this analysis.



\*"Other" includes employment in sectors that do not fall under the traditional tourism categories, such as laundry services, hair care, other personal care, etc.

Direct Employment by Sector	Direct	% of
Northern BC (Jobs) 2019	Jobs	Total
Retail	745	11%
Transportation & Related	632	10%
Accommodation & Food Services	3,609	54%
Recreation & Related	260	4%
Other	1,395	21%
Total	6,641	100%

#### **Conclusions**

In 2019, tourism was responsible for an estimated 6,641 jobs (part-time and full-time) and 4,973 full time equivalent (FTE) jobs in Northern BC.

When factoring in the indirect and induced employment, total estimated employment resulting from tourism in Northern BC is much larger. The estimated total (direct, indirect and induced) FTEs resulting from tourism in 2019 was 7,800. The total number of jobs (part-time and full-time) was estimated at 10,200. Accommodation and Food Services accounted for the largest number of direct jobs (3,609 or 54% in 2019).

<sup>&</sup>lt;sup>9</sup> While 100% of direct employment occurs in Northern BC, approximately 50% of indirect and induced employment occurs elsewhere in BC.



## 7. Detailed economic impacts

#### Introduction

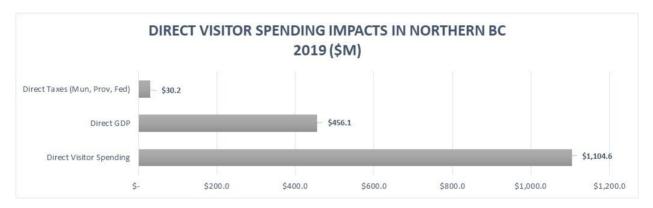
Estimated economic impacts related to travel and tourism in Northern BC are presented in this section. The year 2019 has been selected as a baseline for this analysis, as this is the most recent stabilized year prior to the advent of the Covid Pandemic in 2020. Direct, indirect and induced impacts are presented. 10

#### **Economic Impacts**

Estimates for direct visitor spending and the resulting direct GDP and direct tax revenue in Northern BC for 2019 are as follows.

- Visitors generated an estimated \$1.105 billion in direct spending.
- This resulted in direct GDP of \$456.1 million.
- Direct taxation (federal, provincial and municipal combined) resulting from this spending is estimated to be \$30.2 million.

These direct spending impacts are summarized in the following graph.



#### **Combined Impacts (Direct, Indirect and Induced)**

As noted earlier, direct spending also results in indirect impacts (spending related to supplier businesses) and induced impacts (spending of wages in the community). This means that the initial spending is not the only impact resulting from visitor spending in the region. Estimates for **combined impacts** and the resulting GDP and tax revenue in Northern BC for 2019 are as follows. Note that some of the impacts are experienced in other areas of BC (e.g., if certain goods and services are produced outside of Northern BC, some of the indirect and induced impacts will be experienced in those locations). While 100%

Induced effect – is the overall impact of more income (wages and salaries) accruing to the household sector.



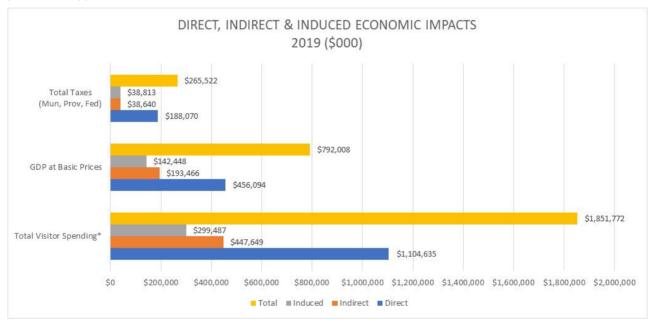
<sup>• 10</sup> Direct effect – is the change in domestic output required to satisfy an initial change in demand. This would include the actual expenditures and the employment directly generated (each person-year of employment is the equivalent of one full-time job).

Indirect effect - is the change in domestic output generated by the activity in sectors that supply goods and services used in the project.

of direct visitor spending occurs in Northern BC, approximately 50% of the indirect and induced impacts occurs elsewhere in BC.

- Visitors generated an estimated \$1.85 billion in direct, indirect and induced spending. This resulted in an estimated:
  - Total GDP of \$792 million; and,
  - Total taxation (federal, provincial and municipal combined) of \$265.5 million.
- Total municipal tax revenue generated in Northern BC as a result of tourism spending is estimated to be \$25.2 million.

These direct, indirect and induced spending impacts are summarized in the graph and table below. More detailed impacts are provided in Appendix B.



<sup>\*</sup>Visitor Spending includes Forward Consumer Taxes (e.g., accommodation taxes on hotel visits are included in spending).

TOTAL IMPACT				
Impact Category	Direct	Indirect	Induced	TOTAL
Total Visitor Spending*	\$1,104,635	\$447,649	\$299,487	\$1,851,772
GDP at Basic Prices	\$456,094	\$193,466	\$142,448	\$792,008
Employment (Jobs) (000s)	6.6	2.2	1.4	10.2
Employment (FTEs) (000s)	5.0	1.8	1.0	7.8
Total Taxes	\$188,070	\$38,640	\$38,813	\$265,522
Total Federal Taxes	\$90,618	\$19,435	\$17,121	\$127,175
Total Provincial Taxes	\$82,870	\$14,711	\$15,530	\$113,112
Total Municipal/RD Taxes	\$14,581	\$4,494	\$6,161	\$25,236

<sup>\*</sup>Visitor Spending includes Forward Consumer Taxes (e.g., accommodation taxes on hotel visits are included in spending).



#### **Conclusions**

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<sup>11</sup> While 100% of direct visitor spending occurs in Northern BC, approximately 50% of the indirect and induced impacts occurs elsewhere in BC.



# Appendices



### Appendix A – Input-Output Primer

National Accounting (also termed Economic Accounting) assumes a company undertakes two steps in its production process. First, it purchases material inputs from other industries; and second, it transforms those material inputs into finished goods (or services) ready for resale. Take as an example a Restaurant. The Restaurant buys raw food items from the Food Wholesaling sector. Using other material inputs (e.g., electricity, gas, rent, utensils, etc.), it transforms the raw food into a completed restaurant meal, which, in turn, is sold to the restaurant patron at a selling price higher than the cost of its material inputs. The difference between the selling price of the meal and the material input cost is the "mark-up" or "value-added". This value-added is used to pay for the labour, any taxes levied by governments, the depreciation of equipment, any interest costs the Restaurant may have, and will also generate, the owner hopes, a profit.

National Accounting asserts that the value which the Restaurant sector adds to the economy (hence, the term "value added") is equal <u>not</u> to the total revenues of the Restaurant, but only to this "mark-up" value. That is, the value of an industry to an economy is the difference between the value of its output (effectively, total operating revenues) and the cost of its material inputs. In this way, the Restaurant industry does not claim the value of the raw food inputs it uses, which should rightly be accounted for by the Agriculture and Food Manufacturing industries. Using "Value-Added", there is no double counting when measuring the value of an industry.

In terms of a Restaurant, the value-added of the Restaurant will be equal to the revenue received minus all of its material costs for goods or services uses in preparing the meals (material inputs), or:

#### Value Added = Revenue - Material Inputs

Another way of defining value added is that it is the sum of an industry's payments for labour, for indirect taxes, for depreciation and interest costs, and for profit:

#### Value Added = Labour + Indirect taxes + Depreciation + Interest Costs + Profit

In other words, the resulting value-added of any firm (or industry) is available to be shared among labour (wages, salaries and benefits), indirect taxes and "operating surplus." The operating surplus itself is shared between payments for the use of physical capital (depreciation), payments for the use of monetary capital (interest costs), and payments (profits) to the owner(s) of the enterprise. Value-added is an industry's contribution to, or *direct impact* on, the economy. And the sum of value-added of all industries is termed the country's Gross Domestic Product (GDP).

An important distinction needs to be made between Financial Accounting and National Accounting. Under financial accounting, an industry which has a high value added (i.e., contributes a lot to the economy), can be unprofitable if, for example, its payments to labour or for interest costs are too high. Alternatively, low value-adding industries can be very profitable to their owners, depending on their usage of labour and their capital structure.

Economists have standardised the measure of the flows of commodities between industries and the inter-relationships of inputs and outputs among industries through the concept of Input-Output (I/O) analysis. The **SUPPLY** matrix identifies the various types of output the sector produces (the Restaurant industry produces "restaurant" services). The **USE** matrix highlights all of the various types of inputs used to produce that output (the Restaurant industry uses a variety of inputs including raw foods, electricity,



natural gas, rent, etc.).<sup>12</sup> By mathematically manipulating these matrices, it is possible to determine by how much the supply of each commodity will increase when the output of an industry increases by one dollar.

The GDP-to-Output ratio is a measure of the direct contribution to the economy *per dollar of output*. Clearly, an industry that requires a lower dollar value of inputs to produce a given dollar of output is a higher value-adding industry. One must note, however, that a higher GDP-to-Output ratio does *not* imply that the industry is more important to the economy. It merely states that for every dollar of output the impact on the economy is greater. Obviously, when examining an industry's importance to an economy one must also take into account the total output of the industry. There is, however, another important characteristic of an industry that must be examined if one is to determine the importance of a sector to the local economy: its *linkages* to other industries.

When inputs such as raw foods are purchased by the Restaurant sector, the industries supplying those goods and services (in this case, the Agricultural and Food Manufacturing industries) increase their own economic activity. This increased activity itself creates demand for other products. The Agricultural industry, for example, may need more fertilizer. Fertilizer producers themselves may need more chemicals and fuel oil. The demand for extra chemicals and fuel oil will, in turn, stimulate activity in the chemical and petroleum industries. The increased activity in the chemical industry will create greater demand for its own inputs, perhaps some other primary chemicals. And so, it continues down the chain of industries. The sum effects of all this additional economic activity are known as *indirect impacts*.

Such indirect impacts (also known as "multiplier effects" or "spin-offs") on the economy clearly are important. They should not be ignored (as they usually are with financial accounting) if we are to measure the true benefits of an industry to an economy. An interesting observation is that, while it is true that high value-adding industries generally have low indirect impacts, those industries with relatively lower direct impacts have relatively higher indirect impacts. This is because, by definition, low value-adding industries consume more inputs per dollar of output and thus have a greater impact on their supplying industries. It should be noted, however, that the level of indirect impacts is highly influenced by the type of goods and services demanded and by the propensity of the companies (or the economy) to import those particular goods and services. The higher the propensity to import the required goods and services, the lower will be the effects on the local economy. Indeed, an industry that imports all its inputs will have virtually no indirect impact on the economy, save the small level of distributive activity (wholesale, retail and transportation margins) the imports may generate.

Increased industrial activity has a third effect on the economy. When additional wages and salaries are paid out, those dollars (appropriately adjusted for taxes and savings) are available to be re-spent on consumer goods and services. Take, for example, an additional \$1 million in wages resulting in say, an increase of \$750,000 in disposable income. Depending on the spending patterns, this may result in extra consumer spending of say, \$500,000 in the retail sector (the remaining being spent in the entertainment sector, restaurant sector, etc.). This will increase the economic activity of the manufacturers and other suppliers of consumer goods to the retail sector who, in turn, will increase their own employment and their own wage payments. The sum effects of this additional activity due to increased wages are known as *induced impacts*. Again, it should be clear that, like indirect impacts, induced impacts are highly influenced by the economy's propensity to import as well as by the economy's taxation and savings rates, the level of wages paid to employees and the level of capacity at which the economy is operating.



<sup>&</sup>lt;sup>12</sup> Output is closely associated with industry revenues but there are important differences. Likewise, inputs are highly related to industry expenses. But, again, the differences are important. For a summary of these differences, see the next sub-section: Technical Differences.

The question arises: given that there are many levels of indirect and induced spending which affect many, many different firms and industrial sectors, how can we estimate these impacts on the economy? Fortunately, economists have developed a method to estimate these impacts, by using the same input-output tables to which we already have been introduced. <sup>13</sup> However, since the base information is coming from financial statement data directly provided by operators, it is critical to understand how financial statement data are re-structured to meet National Accounting standards. These differences are discussed below.

#### **Technical Differences**

Although the National Accounting (Input-Output) measurement of the value and impacts of an industry begins with the same set of data as the financial results of the industry, a number of adjustments are required in order to conform to strict National Accounting standards. To avoid possible confusion, these technical differences between Financial Accounting and National Accounting should be understood, although not all the differences relate to the Restaurant example we are using in this primer. The intent here is not to provide a comprehensive or definitive discussion of these differences, however, but rather to provide a cursory overview. For a more in-depth discussion of the differences and of the methodology underlying National Accounting, the interested reader is referred to the National Accounting compendium published by the UN. 14

The following outlines the major differences:

1. The first and perhaps most important difference is that National Accounting measures <u>all</u> non-tax related revenues and expenses related to production, even those not itemized on the corporate income statement. Hence, gratuities paid to staff are included as output. This increases output but not material inputs, and therefore it increases the estimate of GDP (Output – Inputs) by precisely the amount of gratuities. Using our other definition of GDP (GDP = indirect taxes + wages, salaries and benefits + operating surplus), we see that the increase in GDP is reflected in an increase in wages and salaries equal to the reported gratuities.

Another (usually) off-budget item is an estimate of the value of imputed room and board provided to employees. On the Output side there is an increase in lodging revenues and, since the provision of room and board is a value to the employee, it is considered equivalent to a wage, and thus contributes to overall GDP equal to the value of the imputed room and board. Statistics Canada has standard values that it uses to assess the value of this room and board.

- At the same time, National Accounting omits revenues not directly related to the production process. Generally, these incomes are limited to interest and dividend earnings, but include non-operating revenues related to rental incomes, commissions and the like.
- 3. A third difference is that, under National Accounting, the value of each input in the USE matrix is stated in "producer" or "basic" prices. That is, all wholesale, retail, and transportation costs included in the "purchaser" price of a commodity are removed, as are all commodity taxes, indirect taxes and import duties. These "distributive and tax margins," as they are called, are explicitly recognized in the USE matrix as separate line items. For the Restaurant industry, the purchase cost of food will be equal to the "producer" cost of food (the cost at the manufacturer's plant gate) plus the cost of transporting the food (the "transportation" margin) plus any retail/wholesale mark-ups plus any indirect taxes. The reader should understand that this does not in any way reduce the total cost of inputs to the industry; it simply re-assigns the costs to different input categories.



<sup>13</sup> For a detailed discussion of the underlying mathematics of Input-Output analysis, see <u>Input-Output Analysis</u>: <u>Foundations and Extension</u>, Ronald E. Miller and Peter D. Blair, Prentice Hall, 1985

<sup>14</sup> System of National Accounts, Statistical Papers Series F No 2 Rev. 4, New York, 1993

4. A fourth difference lies in the treatment of merchandise sales. National Accounting treats the purchase of merchandise as partly a purchase from the manufacturer of the good (equal to the cost price of the good less distributive and tax margins) and partly a purchase from the retailer (equal to the mark-up for the good). Consequently, in an input-output table for a sector selling retail goods, there is no recognition of the cost of the merchandise on the input (USE) side, and only the mark-up value is recognized on the output (SUPPY) side. The cost of the merchandise is captured in the Manufacturing sector as output.



## Appendix B – Detailed Economic and Employment Impacts

Note that additional detailed analysis tables are available upon request.

TOURISM SPENDING IMPACTS TOT	TAL NORTHE	RN BC 2019		
\$ Millions	REGION:	Northern BC		
	Direct	Indirect	Induced	REGIONAL TOTAL
Consumer Spending*	\$1,104,635	\$447,649	\$299,487	\$1,851,772
Direct International Imports	\$34,265	\$34,856	\$46,172	\$115,294
Direct Interprovincial Imports	\$40,436	\$51,315	<i>\$27,735</i>	\$119,485
Direct Forward Taxes	\$99,880	\$0	\$9,636	\$109,516
Domestic Output**	\$929,971	\$361,478	\$215,944	\$1,507,393
GDP at Basic Prices	\$456,094	\$193,466	\$142,448	\$792,008
Material Inputs	\$473,877	\$168,013	\$73,495	\$715,385
Labour Income	\$292,543	\$124,050	\$74,324	\$490,917
Wages and Salaries	\$235,291	\$92,997	\$45,177	\$373,465
Mixed Income	\$28,889	\$18,875	\$23,473	\$71,237
Employers' social contributions	\$28,363	\$12,178	\$5,674	\$46,215
Employment (jobs) (000s)	6.6	2.2	1.4	10.2
Employment (FTEs) (000s)	5.0	1.8	1.0	7.8
Total Taxes	\$188,070	\$38,640	\$38,813	\$265,522
Total Federal Taxes	\$90,618	\$19,435	\$17,121	\$127,175
Total Indirect Taxes	<i>\$50,673</i>	\$1,554	\$5,920	\$58,147
Fed Trading Profits Tax	\$54	\$0	\$11	\$65
Fed Gasoline Tax	\$4,805	\$279	\$168	\$5,252
Fed Excise Tax	\$14	\$2	\$1	\$17
Fed Excise Duties	\$2,657	\$93	\$158	\$2,908
Fed Air Transport Tax	\$7,305	\$34	\$109	\$7,448
Fed Import Duties	\$1,411	\$111	\$129	\$1,652
GST	\$33,765	\$689	\$4,879	\$39,333
Indirect Taxes on Production	\$660	\$346	\$466	\$1,472
Personal Income Taxes	\$29,143	\$13,474	\$5,890	\$48,508
Corp. Income Taxes	\$10,803	\$4,407	\$5,310	\$20,520
Total Provincial Taxes	\$82,870	\$14,711	\$15,530	\$113,112
Total Indirect Taxes	\$64,840	\$6,408	\$9,415	\$80,663
Prov Environmental Tax	\$4,672	\$662	\$348	\$5,682
Prov Trading Profits Tax	\$14,145	\$329	\$1,608	\$16,082
Prov Gas Tax	\$12,237	\$830	\$493	\$13,559
Prov. Land Transfer Tax	\$0	\$0	\$0	\$0
Prov Other Tax	\$389	\$0	\$16	\$405
PST	\$29,129	\$2,355	\$3,942	\$35,426
Aboriginal Trading Profits	\$10	\$0	\$2	\$12
Prov. Indirect Taxes on Production	\$4,257	\$2,233	\$3,006	\$9,495
Royalties/Prov. Resource Taxes	\$0	\$0	\$0	\$0
Personal Income Taxes	\$10,966	\$5,071	\$2,221	\$18,259
Corp. Income Taxes	\$7,064	\$3,232	\$3,894	\$14,190
Total Municipal/RD Taxes	\$14,581	\$4,494	\$6,161	\$25,236
Municipal Land Transfer Tax	\$0	\$0	\$0	\$0
Municipal Sales Tax****	\$6,190	\$94	\$238	\$6,522

<sup>\*</sup>Consumer Spending includes Forward Consumer Taxes (e.g., accommodation taxes on hotel visits is included in spending).



 $<sup>\</sup>hbox{**Domestic Output is equal to Spending minus Imports minus Consumer Taxes.}\\$ 

<sup>\*\*\*</sup>Rest of British Columbia Direct: The producer cost of goods (i.e., the cost excluding wholesale, retail and transportation margins, taxes, etc.) is measured at the factory gate. For some consumer spending (think the purchase of clothing) those factories may be located in other regions. Consumer taxes are assigned to British Columbia

<sup>\*\*\*\*</sup>Municipal Sales Taxes includes Accommodation MRDT taxes, municpal parking taxes and MST on Electicity.

