



The Value of Snowmobiling in Golden, British Columbia 2017/2018 Economic Impact Results

Submitted to:

Magi Scallion, Golden Snowmobile Club
snowmobile@snowmobilegolden.com



Submitted by:

Krista Morten and Jaime Der
Align Consulting
Krista.morten@alignresearch.ca
and
Jim Johnson, Pacific Analytics
jimj_pa@shaw.ca



EXECUTIVE SUMMARY

This study was commissioned by the Golden Snowmobile Club and estimates the economic impacts of snowmobiling in the Golden, British Columbia area in 2017/18. The project objectives were:

1. To estimate the total economic impact of snowmobiling in the Golden area in 2017/2018.
2. To include economic impact(s) of snowmobiling by both Golden locals and visitors.
3. To ensure economic impacts include the activities of snowmobile-dependant businesses in Golden.

Estimates of Golden snowmobiling-related business spending and employment together with incremental visitor spending were used as inputs to the Tourism Regional Input-Output Model.¹ The economic impact estimates include:

- Local resident annual spending on snowmobile equipment and day to day snowmobiling costs (e.g. gas, food and other),
- Visitor spending on snowmobiling equipment and day to day snowmobiling costs (e.g. gas and other travel expenses, food and other items) while in Golden,
- Spending from operations of the Golden snowmobile club, and
- Spending from operations of Golden snowmobile-dependant businesses.

This research DOES NOT include economic impacts from:

- Spending by locals or visitors who did not use ticketed trail sites or a snowmobile guiding businesses,
- Local spending on snowmobiling outside of the Golden area, and
- Visitor trip spending outside of the Golden area.

Economic impacts were calculated for the Columbia Shuswap Regional District (CSRD) and for the rest of British Columbia. The total economic

¹ The Tourism Regional Input-Output Model (TRIOM) is an economic impact model developed by Pacific Analytics for Destination BC that uses Statistics Canada's detailed Input-Output tables for British Columbia.

impact is the sum of the impacts in the CSRD and other areas in British Columbia. In 2017/18, an estimated 4,380 people snowmobiled for 16,128 trail days² in the Golden area. This included:

- 319 locals who sledded for 3,634 trail days,
- 4,061 non-guided visitors who sledded for 12,544 trail days, and
- 3,060 guided visitors who sledded for 3,077 days.

Of the 16,128 total trail days, 75% were at ticketed trails, another 4,067 trail days (25%) were estimated at non-ticketed trails in the Golden area.

Golden area snowmobile businesses, the Golden Snowmobile Club, and local and visitor snowmobilers spent a total of \$10.5 million in 2017/18. In total, snowmobiling in the Golden area accounted for \$5.5 million in GDP, \$3.0 million in labour income and \$2.2 million in tax paid. Just over half of taxes paid were provincial (53%) while the remaining 47% was paid to the federal government. In all British Columbia, Golden area snowmobiling created 75 jobs which paid \$2.6 million in wages and salaries.

2017/18 Snowmobiling Impacts	Columbia Shuswap Regional District ²	Other British Columbia	TOTAL ¹
Direct Expenditures (\$)	\$10,513,207		
Domestic Output (\$)	\$6,745,351	\$3,540,632	\$10,285,983
GDP (\$)	\$3,454,847	\$2,008,901	\$5,463,748
Employment (jobs)	55.5	19.7	75.1
Labour Income (\$)	\$2,050,925	\$994,391	\$3,045,316
<i>Wages and Salaries³</i>	<i>\$1,758,902</i>	<i>\$812,154</i>	<i>\$2,571,056</i>
Taxes Paid (\$)	\$1,723,715	\$427,716	\$2,151,431

1. Includes direct, indirect and induced economic impacts in current dollars.
2. Visitor expenditures were collected for the *Golden area* including the Town of Golden, Kicking Horse Mountain Resort and the surrounding areas on Highway 1 and 95 (to the south).
3. Wages and salaries paid is a portion of the total labour income.

² A trail day is day or partial day that a person spends snowmobiling in the Golden area.

TABLE OF CONTENTS

- Executive Summary 2
- Table of Contents..... 3
- 1. Background and Objectives 4
- 2. Approach..... 5
- 3.0 Results..... 8
 - 3.1 Snowmobiler Volume 8
 - 3.2 Snowmbiler Characteristics 8
 - 3.2.1. Visitor Origin 8
 - 3.2.2. Visitor Trip Characteristics..... 9
 - 3.3 Direct Expenditures 10
 - 3.4 Economic Impacts..... 12
- 4.0. Key Findings 13
- Appendices 14
 - Appendix A: Details of Economic Impacts 15
 - Appendix B: Detailed Economic Impact Tables 19

1. BACKGROUND AND OBJECTIVES

Snowmobiling has been a popular winter activity in Canada since small gasoline engines were developed in the 1950s. The International Snowmobile Manufacturers Association (ISMA) estimates that in Canada, there are 600,000 registered snowmobiles, 19% are registered in Alberta (74,000) or BC (42,000) while Ontario has 26% of the registered snowmobiles in Canada.³ The ISMA also estimates the snowmobiling industry is worth \$8 billion annually to the Canadian economy.

This report summarizes 2017/18 economic impacts of snowmobiling in the Golden area of British Columbia. The town of Golden is located between the Canadian Rocky Mountains and Columbia Mountain ranges and is close in proximity to six of the most stunning national parks that Canada has to offer; Banff, Glacier, Jasper, Kootenay, Mount Revelstoke and Yoho. Winter enthusiasts visit Golden to enjoy its abundant snowfall and participate in a variety of outdoor activities including snowmobiling, and downhill, cross-country and backcountry skiing.

The Golden area features a wide range of award winning⁴ snowmobiling terrain in areas such as Quartz Creek, Gorman, Silent Pass, Hope Creek, Chatter Creek, the Blaeberry river trail, the West Bench trail, and many others. Also, Golden has an active snowmobile community, being home to several snowmobile retail, guiding and avalanche safety businesses and the Golden Snowmobile Club.

The Golden Snowmobile Club's mandate is trail maintenance and grooming, safety programs and initiatives, marketing activities, warming hut maintenance and event promotion.⁵ The club has a trail management agreement with the Provincial Government for Quartz Creek, Gorman Lake, Silent Pass and the Westbench Trail. To access these maintained trails, seasonal memberships and daily trail pass fees are collected from snowmobilers.

In 2017/18, the Golden Snowmobile Club commissioned an updated study of the economic impacts of snowmobiling in the Golden area. The study scope was expanded to include spending by both Golden visitors and locals and local snowmobile retail businesses. This report summarizes the results of the economic impact study.



Source: Golden Snowmobile Club. Hope Trees.
Photo credit: Dave Best

³ <http://www.snowmobile.org/docs/isma-snowmobiling-fact-book.pdf>

⁴ Over the past several years, the Golden area has won several awards from the Snoriders Choice Awards. <http://snoriderswest.com/riderschoice/archive>

⁵ <http://sledgolden.com/about-us/>

Project Objective(s)

1. To estimate the total economic impact of snowmobiling in the Golden area in 2017/2018.
2. To estimate the economic impact(s) of snowmobiling by Golden locals and visitors.
3. To ensure economic impacts include the activities of snowmobile-dependant businesses in Golden.

2. APPROACH

A four-step process was used to estimate economic impacts of snowmobiling in Golden in 2017/18.

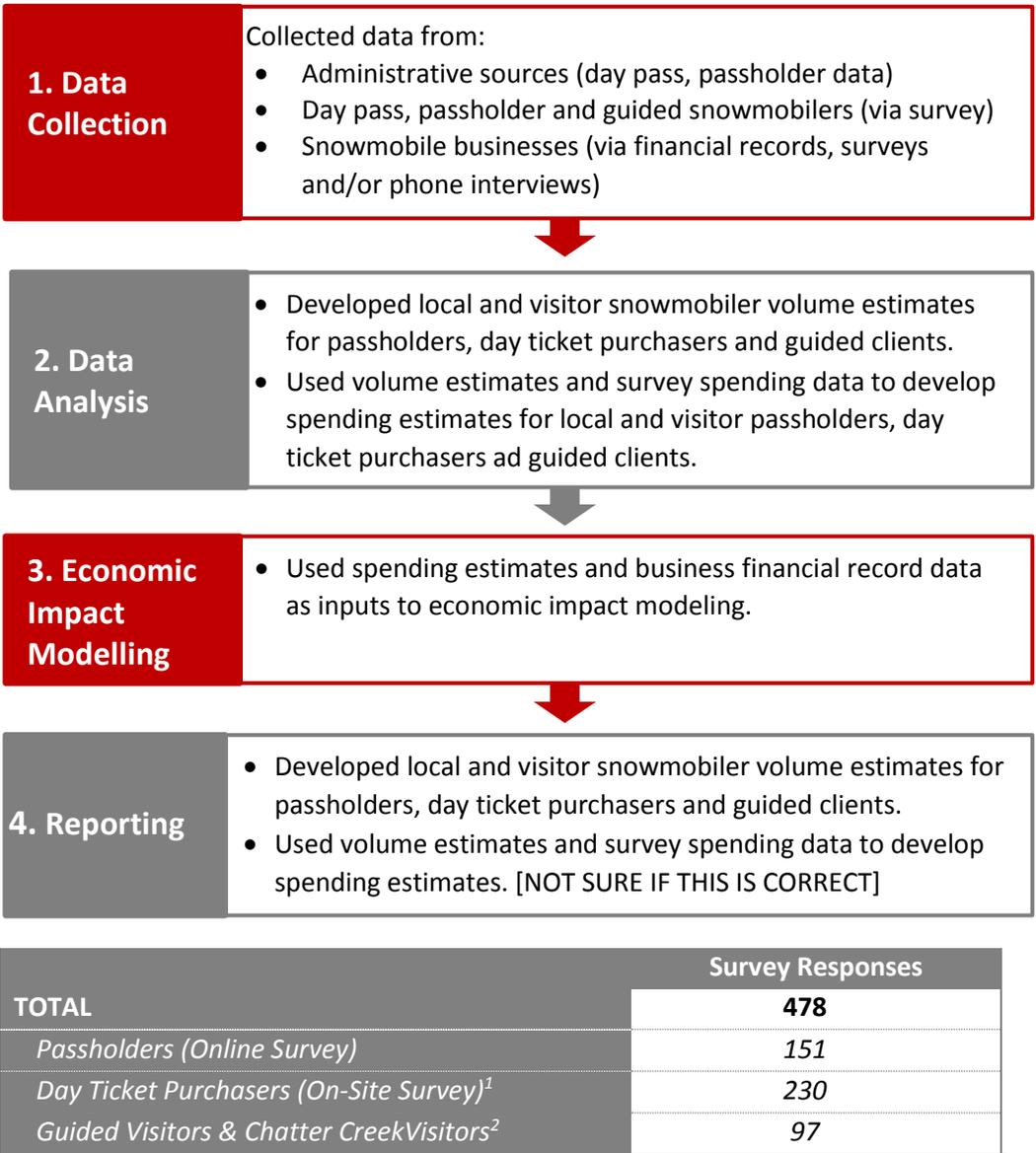
1. Data Collection

A mix of administrative data, surveys and snowmobiling business financial records were collected.

- Passholder (membership), non-local member (NLM)⁶ and day ticket purchase data were used to develop volume estimates of local and visitor snowmobilers.
- Data from an online business survey were used to develop volume and spending estimates of guided clients. Snowmobile guiding businesses included:
 - Traditional snowmobile guiding and rental services (Golden Snowmobile Rentals, White-N-Wild and Rocky Mtn. Riders),
 - Those offering snowmobile avalanche training (Hangfire Training, Trigger Point Snow Services and Stay Wild Backcountry Skills), and
 - Chatter Creek Lodge who offer a backcountry lodge experience to snowmobilers in April (although no actual snowmobile guiding is included in stay).

⁶ NLMs are snowmobilers that belong to another BC snowmobile club.

Approach



1. There were 230 fully completed surveys, on-site researchers approached 496 people in total. Some people were screened out because they were passholders or had already been interviewed.
2. Guided client surveys were collected from Golden Snowmobile Rentals, Trigger Point Snow Services and Hangfire Training

- Length of stay in the Golden area, days snowmobiling, non-ticketed trail use, travel party size and snowmobile/travel-related expenditure data were collected via on-site day ticket purchaser survey, online passholders survey and online guided clients survey. Detailed surveys are available from the Golden Snowmobile Club.
- To understand economic impacts of snowmobile-related businesses financial records were collected from snowmobile related businesses. Businesses that shared full or partial financial records include: Golden Snowmobile Club, Golden Snowmobile Rentals, Snowpeaks (now part of Golden Snowmobile Rentals), Mountain Sports Distributors, Mountain Sledder Magazine and Chatter Creek.

2. Data Analysis

To estimate local and visitor snowmobiler volume and spending:

1. Snowmobilers were segmented into groups by ticketed trail type, including passholders (member of the Golden Snowmobile Club), day pass purchasers (those who purchased a day pass from the Golden Snowmobile Club), Non-Local Members (those who are members of another snowmobile club) and guided clients.
2. For each ticketed trail type group, local and visitor volume was estimated along with the number of visitor day and overnight trips. Non-ticketed trail volume was estimated using survey data. Volume estimates were made for guiding businesses that did not share their client volume data.
3. Volume estimates were multiplied by average snowmobile and travel expenditures data to estimate direct spending. Expenditures were collected via survey data. Please note, to take a conservative approach, local snowmobiling expenditures (from survey data) were reduce by 20%.
4. Group spending and volume estimates were summed to equal total direct spending estimates.

To estimate revenue and spending from snowmobiling business:

1. Direct spending estimates were summarized for businesses sharing financial records. A profile of revenue and spending per client was computed for guiding businesses.
2. This profile was used to calculate revenues and expenditures for businesses that did not share financial records. These estimates were combined with known financials to equal totals.

Please note, since some local and visitor snowmobiler spending is included in the revenue of guide operators. Therefore, to avoid double counting between local and visitor snowmobiler direct spending and business financial record estimates, some snowmobiler spending categories were eliminated from further analysis (although included in the results section for descriptive purposes). For locals, eliminated spending categories include: snowmobile & tow vehicle maintenance & repair, snowmobile equipment modifications and upgrades and snowmobile rental and guiding. For visitors, eliminated spending categories include: snowmobile rental or guiding services, snowmobile & tow vehicle parts, snowmobile & vehicle maintenance/repair and snowmobile or related equipment.

Visitor market origin and trip characteristics were summarized for passholders, day pass purchasers (including NLMs) and where possible Guided clients.

3. Economic Impact Modeling

Incremental snowmobiler spending estimates along with total revenue and expenditures from snowmobile businesses were used as inputs into the Tourism Regional Input-Output Model. The Tourism Regional Input-Output Model (TRIOM) is an economic impact model developed by Pacific Analytics for Destination BC that uses Statistics Canada's detailed Input-Output tables for BC.⁷ Outputs to the TRIOM include estimates of direct, indirect and induced economic impacts on the Columbia Shuswap Regional District (CSRD) and in other areas of British Columbia.

Definitions of those impacts include:

1. **Direct Impacts:** measures the contribution of a business or industry to the economy in terms of Gross Domestic Product (GDP), labour income paid, employment, and taxes paid to various governments.
2. **Indirect Impacts:** measures the impacts resulting from the expenses (goods and services) of 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. **Induced Impacts:** measures the impacts resulting from the wages and salaries paid by a firm or industry. When the 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. A comprehensive explanation of direct, indirect and induced impacts and how precisely they are calculated can be found in Appendix A.

SCOPE

This research includes economic impacts from:

- The economic impact estimates include:
- Local resident annual spending on snowmobile equipment and day to day snowmobiling costs (e.g. gas, food and other),
- Visitor spending on snowmobiling equipment and day to day snowmobiling costs (e.g. gas and other travel expenses, food and other items) while in Golden,
- Spending from operations of the Golden snowmobile club, and
- Spending from operations of Golden snowmobile-dependant businesses.

This research DOES NOT include economic impacts from:

- Spending by locals or visitors who did not use ticketed trail sites or a snowmobile guiding businesses,
- Local resident spending on snowmobiling outside of the Golden area, and
- Visitor trip spending outside of the Golden area.

⁷ The full Regional I/O model was developed for the Ministry of Transportation for their own internal project analysis; the tourism version was commissioned by Destination BC to focus on tourism-related projects and analysis.

3.0 RESULTS

3.1 SNOWMOBILER VOLUME

In 2017/18, an estimated 4,380 people snowmobiled for 16,128 trail days⁸ in the Golden area. This includes:

- 319 locals⁹ who sledged for 3,634 trail days.
- 4,061 non-guided visitors who sledged for 12,544 trail days.
- 3,060 guided visitors who sledged for 3,077 days.

Of the 16,128 total trail days, 75% were at ticketed trails, another 4,067 trail days (25%) were estimated at non-ticketed trails in the Golden area.

More than one-thousand (1,120) non-guided visitors took 5,842 snowmobiling trips to Golden in 2017/18. Of those, 3,496 were overnight trips (60%) while 2,688 were day trips (40%).

3.2 SNOWMBILER CHARACTERISTICS

3.2.1. Visitor Origin

About half of passholders were visitors (52%), while the remaining 48% were locals. Almost all (87%) day pass purchasers were visitors while 13% were locals. All guided snowmobilers were visitors. In total, 7% of 2017/18 Golden Snowmobilers were locals while 93% were visitors.

Most visitors were from Alberta (91% of passholders and 85% of day pass purchasers). Fewer were from other Canadian provinces (5% - passholders, 11% - day pass purchasers), BC (3% - passholders, 3% - day pass purchasers), the United States (1% of day pass purchasers) or overseas (1% - day pass purchasers).

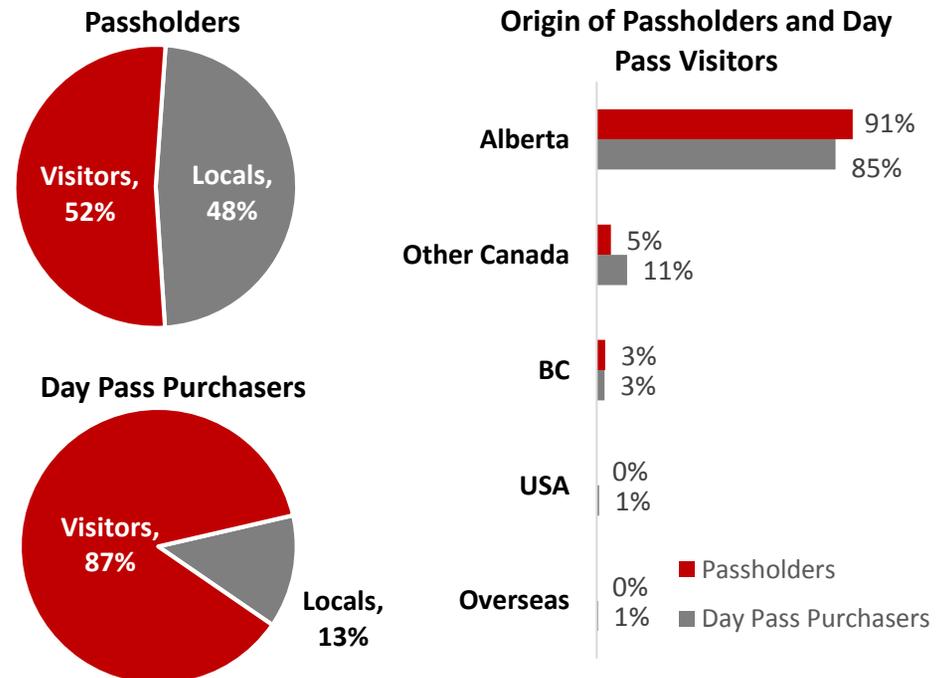
- Alberta passholder and day pass purchasers were most likely from Calgary or other central Alberta locations.

⁸ A trail day is day or partial day that a person spends snowmobiling in the Golden area.

⁹ Local = A permanent resident of Golden or the Columbia Shuswap Regional District Area A.

2017/18 Estimates		Day Passes			
		Passholders	& NLM ¹	Guided	TOTAL
Locals	Trail Days	3,038	596	-	3,634
	<i>Ticketed Trail Days</i>	2,250	585	-	2,835
	<i>Non-Ticketed Trail Days</i>	788	11	-	799
Individual Snowmobilers		200	119	-	319
Visitors	Trail Days	1,871	7,595	3,077	12,544
	<i>Ticketed Trail Days</i>	1,346	7,480	450	9,276
	<i>Non-Ticketed Trail Days</i>	525	116	2,627	3,268
Individual Snowmobilers		218	783	3,060	4,061
TOTAL	Trail Days	4,909	8,191	3,077	16,178
	<i>Ticketed Trail Days</i>	3,596	8,065	450	12,111
	<i>Non-Ticketed Trail Days</i>	1,313	127	2,627	4,067
Individual Snowmobilers		418	902	3,060	4,380

1. NLM = Non-local members. These people are snowmobilers that are members of another snowmobile club (outside of Golden).



- Other Canada day pass purchasers were from Saskatchewan (74%), Manitoba (9%), Ontario (9%) and Quebec (5%). Other Canadian passholders were from Saskatchewan (92%) and Ontario (8%).

3.2.2. Visitor Trip Characteristics

Altogether, visitor passholders and day pass purchasers took 5,842 snowmobile trips to Golden in 2017/18.

A total of 218 visitor passholders took 17% or 1,025 snowmobiling trips to Golden in 2017/18.

- Most visitor passholder trips (79%) were overnight while the remaining 21% were day trips.
- Overnight visitors stayed for on average of 2.6 nights and travelled with an average of 3.8 people, almost all snowmobiled (3.7, on average).
- On average, day visitors had a slightly smaller travel party size (3.3 people) compared to overnight visitors (3.8 people). All passholders in day visitor travel parties snowmobiled (3.3 people).

There were 786 visitor day pass purchasers that took 4,818 trips in Golden in 2017/18.

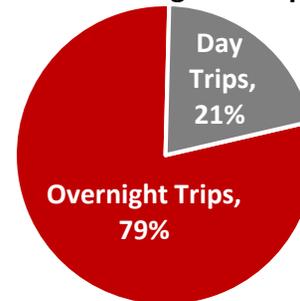
- Like passholders, three-quarters (73%) of visitor day pass purchasers were on overnight trips while 27% were on day trips.
- Also, like passholders, overnight day pass purchasers stayed an average of 2.6 nights with 3.7 people in their travel party while 3.5 of those people snowmobiled.
- Day visitors that purchased a day pass had on average 3.2 people in their travel party and all people were snowmobiling (3.2 people average).

About 72% of guided visitors were in Golden only to snowmobile and did not spend any additional time in the Golden area outside of the guided snowmobiling experience. Of those that spent time in the Golden area, 25% were overnight visitors and 3% were day visitors. Overnight guided visitors stayed for an average of 4.2 nights and had an average travel party size of 4.3 people.

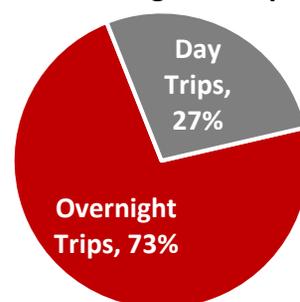
Passholders Top 10 Alberta Communities ¹		Day Pass Purchasers Top 10 Alberta Communities ²	
	%		%
Calgary	19%	Calgary	31%
Edmonton	6%	Banff	7%
Airdrie	6%	Canmore	6%
Rocky Mtn. House	5%	Cochrane	6%
Red Deer Area	4%	Sundre	5%
Banff	3%	Olds	4%
Cochrane	3%	Okotoks	3%
Didsbury	3%	Didsbury	2%
Olds	3%	Edmonton	2%
Strathmore	3%	Rocky Mtn. House	2%

1. The top 10 totals 54% of Alberta passholders.

Passholders Visitor - Length of Trip



Day Pass Purchasers Visitor - Length of Trip



Passholders	
Overnight Visitors	
Average Nights in Golden (per trip)	2.6
Average Travel Party Size	3.8
Average People Snowmobiling	3.7
Day Visitors	
Average Travel Party Size	3.3
Average People Snowmobiling	3.3

Day Pass Purchasers/NLM	
Overnight Visitors	
Average Nights in Golden (per trip)	2.6
Average Travel Party Size	3.7
Average People Snowmobiling	3.5
Day Visitors	
Average Travel Party Size	3.2
Average People Snowmobiling	3.2

NLM=Non-Local Members

3.3 DIRECT EXPENDITURES

In 2017/18 it was estimated that locals and visitors spent a total of \$7.5 million dollars in the Golden area on snowmobile-related expenditures.

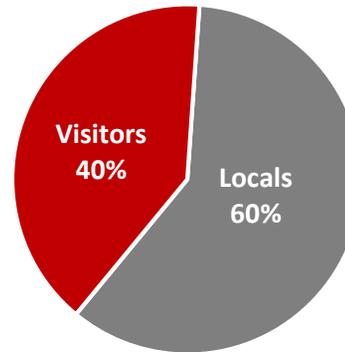
Locals

- Locals spent a total of \$4.5 million in snowmobile related items.
- Most spending (92% - \$4.2 million) was on annual items like snowmobiles and tow vehicle, other equipment, maintenance, registration, insurance and storage dues.
 - This equals \$13,026 per person in 2017/18.
- Locals spent almost \$346,000 on daily items related to snowmobiling, including fuel, groceries/food/drinks or other snowmobile related retail/shopping.
 - This equals about \$1,082 per person in the 2017/18 snowmobiling season, or about \$121 per person, per day.

Visitors

- Visitors spent \$2.98 million (or \$743/visitor) in Golden in 2017/18.
- More than half (54%) of spending was on items directly related to snowmobiling like fuel, parts and/or maintenance. This totalled \$402 per visitor in 2017/18.
- The remaining 46% of total spending was on travel expenses like accommodations, food and beverage, shopping or attractions.
 - On average travel spending was \$341 per visitor in 2017/18.¹⁰ Passholders spent substantially more (\$1,660) than the average.

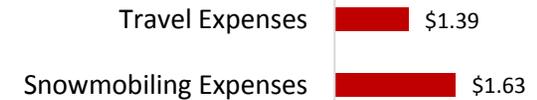
Total Direct Expenditures
(\$7.52 million)



Local Snowmobile-Related Spending
(\$4.5 million)



Visitor Snowmobile-Related Spending
(\$3.0 million)



2017/18 Local Expenditures (Passholders & Day Pass Purchasers)		Per Person	Annual Total
Average ANNUAL Expenditures Total		\$13,026¹	\$4,158,505
New or Used Snowmobiles		\$6,029	\$1,924,641
New or Used Tow Vehicles		\$4,276	\$1,365,174
Other Snowmobile Equipment-Related		\$980	\$312,790
Snowmobile & Tow Vehicle Maintenance & Repair		\$777	\$247,929
Snowmobile Equipment Modifications & Upgrades		\$468	\$149,384
Snowmobile Registration		\$87	\$27,675
Snowmobile Insurance		\$301	\$95,977
Snowmobile Storage Dues		\$26	\$8,433
Other Annual Snowmobile Expenditures		\$83	\$26,504
Average DAILY Expenditures Total		\$121	\$345,721
Snowmobile and Vehicle Fuel		\$66	\$187,994
Snowmobile Rental and Guiding		\$3	\$8,484
Groceries/Food/Drinks Related to Snowmobiling		\$28	\$80,815
Other Shopping/Retail Related to Snowmobiling		\$24	\$67,085
Other Items Related to Snowmobiling		\$0.5	\$1,342

1. To take a conservative approach, the \$13,026 was a result of a 20% discount from survey results.

¹⁰ This includes day visitors and guided snowmobilers that do not spend much time in Golden.

2017/18 Visitor Expenditures (Snowmobiling and Travel Expenditures)	Average Per Person/Trip Expenditures						Total Visitor Expenditures ²
	Passholders		Day Pass Purchasers		Guided		
	Overnight Trips	Day Trips	Overnight Trips	Day Trips	Overnight Trips	Day Trips	
Average Snowmobile Expenditures Total	\$732	\$609	\$148	\$116	\$347	\$288	\$1,631,130
Snowmobile & Tow Vehicle Fuel	\$254	\$391	\$103	\$47	\$107	\$70	\$762,008
Snowmobile Rental or Guiding Services	\$38	\$0	\$11	\$22	\$63	\$89	\$199,971
Snowmobile & Tow Vehicle Parts	\$87	\$35	\$13	\$15	\$26	\$0	\$153,708
Snowmobile & Vehicle Maintenance/Repair	\$56	\$79	\$6	\$3	\$12	\$4	\$90,195
Snowmobile or Related Equipment	\$169	\$75	\$7	\$17	\$99	\$62	\$245,555
Shopping/Retail Related to Snowmobiling	\$92	\$29	\$6	\$10	\$24	\$39	\$135,964
Other Items Related to Snowmobiling	\$37	\$0	\$0	\$3	\$17	\$25	\$43,728
Average Trip Expenditures Total	\$448⁴	\$269	\$238	\$24	\$286	\$42	\$1,387,444
Accommodations (if overnight)	\$182	\$0	\$127	\$0	\$150	\$0	\$635,135 ³
Local Transportation	\$4	\$4	\$0	\$0	\$4	\$0	\$7,183
Food and Beverages	\$187	\$189	\$95	\$20	\$97	\$24	\$603,982
Shopping	\$39	\$39	\$1	\$1	\$13	\$5	\$49,925
Attractions	\$5	\$5	\$3	\$0	\$3	\$7	\$13,125
Other Outdoor Recreation	\$12	\$12	\$10	\$3	\$3	\$0	\$47,561
Entertainment	\$18	\$19	\$1	\$0	\$5	\$2	\$21,912
Other Travel Related Expenses	\$2	\$2	\$0	\$0	\$10	\$4	\$8,620

1. Average of day and overnight visitor data collected from Tigger Point, Hangfire and Golden Snowmobile Rentals clients.
2. The values were the expenditures multiplied by visitor volume estimates and includes Chatter Creek visitors (who are not included in the passholders, day pass purchasers or guided data summary).
3. BC Stats estimates room revenues were \$10.7 million for the Columbia Shuswap regional district from November 2017 – April 2018. Downloaded on July 19, 2018. This means snowmobilers equal about 6% of accommodation revenues which is consistent with past research. This is consistent with other research when in 2016, Tourism Golden's winter visitor survey found that 8% of winter visitor's primary activity was snowmobiling, in 2017, 2% of winter visitors primary activity was snowmobiling (the decline is a result of change in location in where visitor surveys were conducted and not a decline in the actual number of snowmobilers). BC Stats accommodation data available here; <https://www2.gov.bc.ca/gov/content/data/statistics/business-industry-trade/industry/tourism> Tourism Golden winter visitor survey reports available here <https://www.tourismgolden.com/members/resources/tourism-indicators>.
4. This \$1,180/per overnight visitors per trip is more than the 2017 winter visitor expenditures of \$390 per person/trip found in Tourism Golden's winter visitor research because of the high average snowmobile expenditures of \$732/person/trip). When snowmobile expenditures are removed, the \$448/overnight visitor/trip is similar to \$456/overnight paid accommodation visitor/trip.

3.4 ECONOMIC IMPACTS

In total, in 2017/18 there was \$10.5 million in direct spending by Golden snowmobile-related businesses, the Golden Snowmobile Club and local and visitor snowmobilers.

When direct, indirect and induced spending are accounted for, the economic impacts of the snowmobiling industry in the Golden area totalled:

- \$10.3 million in domestic output,
- \$5.5 million in Gross Domestic Product (GDP),
- \$3.0 million in labour income including, \$2.6 million paid in wages and salaries, \$0.14 million in mixed income and \$0.34 in employers' social contribution,
- 75 jobs, and
- \$2.2 million paid in taxes, including \$1.0 million (47%) in federal taxes and \$1.1 million in provincial taxes (53%).

As expected, the majority (60%+) of domestic output, GDP, material inputs, labour income, and employment occur in the CSRD. An even higher proportion (78%) of total taxes paid occurred in the CSRD than other measures.

A more detailed table of economic impacts is available in Appendix B.

Current Dollar 2017/18 Economic Impacts (Direct, Indirect and Induced Impacts)	TOTAL (CSRD + Other BC)	
	CSRD	Other BC
Direct Spending	\$10,513,207	
Domestic Output ¹	\$6,745,351	\$3,540,632
GDP at Basic Prices	\$3,454,847	\$2,008,901
Material Inputs	\$3,290,504	\$1,531,731
Labour Income	\$2,050,925	\$994,391
<i>Wages and Salaries</i>	<i>\$1,758,902</i>	<i>\$812,154</i>
<i>Mixed Income</i>	<i>\$65,398</i>	<i>\$71,570</i>
<i>Employers' Social Contributions</i>	<i>\$226,626</i>	<i>\$110,667</i>
Employment (jobs)	55.5	19.7
Total Taxes	\$1,723,715	\$427,716
<i>Total Federal Taxes</i>	<i>\$801,333</i>	<i>\$205,148</i>
<i>Total Provincial Taxes</i>	<i>\$922,382</i>	<i>\$222,568</i>

1. Domestic output is equal to spending minus imports minus indirect taxes.
2. Business and Club Operations includes impacts for the Golden Snowmobile Club, private sector Guide Operators, operators providing avalanche training, as well as retail operations in Golden selling snowmobiles, towing trailers, snowmobile-related clothing and accessories, and the like.

4.0. KEY FINDINGS

In 2017/18, it was estimated that 4,380 people snowmobiled for 16,128 trail days in the Golden area. This included 319 locals, 4,061 non-guided visitors and 3,060 guided visitors.

- Non-guided visitors took 5,842 trips to Golden which was up substantially from visitor trips in 2008/09.¹¹
- Non-guided visitors were most likely from Alberta or other Canadian provinces outside of British Columbia and Alberta and had an average travel party size of 3.3 people and stayed for an average of 2.6 nights. Market origin and travel party size were similar to results from 2008/09
- Compared to all Golden winter visitors studied in 2017, snowmobilers spent slightly less time in Golden (2.6 nights vs. 3.2 nights) and had smaller travel parties (3.3 people compared to 4.1 people).

Altogether, 2017/18 direct spending by Golden snowmobile-related businesses, the Golden Snowmobile Club and local and visitor snowmobilers was \$10.5 million.

- Direct spending on snowmobiling by locals and visitors totalled \$7.5 million.
- Locals spent an estimated total \$4.5 million on snowmobiling in Golden, including \$4.2 million on annual snowmobiling expenditures and \$.35 million on daily snowmobiling expenditures. Local snowmobile expenditures were not measured in past studies.
- Visitors spent an estimated total of \$3.0 million while in the Golden area. Visitor spending doubled from 2008/09 (\$1.4 million).¹²

Economic impact calculations that included direct, indirect and induced spending estimated that there was \$10.3 million in domestic output. This totaled \$5.5 million in GDP, 75 jobs and \$2.2 million contributed to tax revenues. All economic impact measures indicate the snowmobile industry has demonstrated considerable growth from 2008/09.¹³

¹¹ In 2008/09, Paradigm Consulting estimated the economic impacts of snowmobiling visitors to the Golden area. This comparison is directional, please use caution when interpreting as research methods were slightly different. <https://www.tourismgolden.com/sites/default/files/2009-Golden%20-%20Snowmobile%20EIA%20-%20Final%20Oct%203.pdf>

¹² This comparison is directional, please use caution when interpreting as there were more snowmobile expenditure categories were used in 2017/18 compared to 2008/09.

¹³ Please use caution when interpreting as research methodology, modelling and scope of the two studies were different.

APPENDICES

APPENDIX A: DETAILS OF ECONOMIC IMPACTS

An 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 **not** 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:

$$\text{Value Added} = \text{Revenue} - \text{Material Inputs}$$

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:

$$\text{Value Added} = \text{Labour} + \text{Indirect taxes} + \text{Depreciation} + \text{Interest Costs} + \text{Profit}$$

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.).¹⁴ 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

¹⁴ 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*.

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.

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.¹⁵ 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.¹⁶

The following outlines the major differences:

1. The first and perhaps most important difference is that National Accounting measures all 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.
2. 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.

¹⁵ For a detailed discussion of the underlying mathematics of Input-Output analysis, see *Input-Output Analysis: Foundations and Extension*, Ronald E. Miller and Peter D. Blair, Prentice Hall, 1985

¹⁶ *System of National Accounts*, Statistical Papers Series F No 2 Rev. 4, New York, 1993

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.

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 (**SUPPLY**) side. The cost of the merchandise is captured in the Manufacturing sector as output.

APPENDIX B: DETAILED ECONOMIC IMPACT TABLES

CONSUMER SPENDING IMPACTS (All Spending Impacts)									
	REGION: Columbia-Shuswap			19	REST OF BRITISH COLUMBIA			REST OF BC TOTAL	TOTAL IMPACTS, BC
	Direct	Indirect	Induced	REGIONAL TOTAL	Direct**	Indirect	Induced		
Spending	\$10,513,207								
Domestic Output*	\$5,765,943	\$814,666	\$164,741	\$6,745,351	\$456,797	\$1,918,061	\$1,165,774	\$3,540,632	\$10,285,983
GDP at Basic Prices	\$2,907,216	\$458,270	\$89,360	\$3,454,847	\$202,729	\$1,059,300	\$746,873	\$2,008,901	\$5,463,748
Material Inputs	\$2,858,727	\$356,396	\$75,381	\$3,290,504	\$254,068	\$858,761	\$418,902	\$1,531,731	\$4,822,235
Labour Income	\$1,726,474	\$274,800	\$49,652	\$2,050,925	\$109,406	\$635,282	\$249,704	\$994,391	\$3,045,316
<i>Wages and Salaries</i>	\$1,495,044	\$222,672	\$41,186	\$1,758,902	\$89,792	\$514,906	\$207,457	\$812,154	\$2,571,056
<i>Mixed Income</i>	\$38,374	\$24,538	\$2,485	\$65,398	\$928	\$58,318	\$12,323	\$71,570	\$136,967
<i>Employers' social contributions</i>	\$193,055	\$27,589	\$5,981	\$226,626	\$18,686	\$62,057	\$29,924	\$110,667	\$337,293
Employment (jobs)	48.7	5.6	1.2	55.5	1.7	12.1	5.9	19.7	75.1
Total Taxes	\$1,583,372	\$97,151	\$43,191	\$1,723,715	\$35,832	\$214,921	\$176,963	\$427,716	\$2,151,431
<i>Total Federal Taxes</i>	\$740,008	\$47,164	\$14,161	\$801,333	\$21,223	\$108,460	\$75,465	\$205,148	\$1,006,481
<i>Total Indirect Taxes</i>	\$469,558	\$3,807	\$3,742	\$477,108	\$688	\$8,929	\$24,051	\$33,668	\$510,776
Fed Trading Profits Tax	\$0	\$0	\$13	\$13	\$0	\$0	\$91	\$91	\$104
Fed Gasoline Tax	\$53,608	\$715	\$186	\$54,510	\$110	\$1,653	\$1,140	\$2,903	\$57,413
Fed Excise Tax	\$99	\$5	\$1	\$105	\$10	\$12	\$8	\$31	\$136
Fed Excise Duties	\$5,668	\$89	\$224	\$5,981	\$5	\$221	\$1,591	\$1,818	\$7,799
Fed Air Transport Tax	\$372	\$118	\$115	\$604	\$13	\$263	\$780	\$1,055	\$1,659
Fed Import Duties	\$21,311	\$174	\$65	\$21,550	\$405	\$398	\$1,170	\$1,973	\$23,523
GST	\$382,562	\$1,399	\$2,549	\$386,509	\$3	\$3,989	\$16,384	\$20,375	\$406,884
Fed Proportion of HST	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Indirect Taxes on Production	\$5,939	\$1,307	\$589	\$7,835	\$143	\$2,393	\$2,887	\$5,424	\$13,259
<i>Personal Income Taxes</i>	\$152,588	\$30,114	\$4,736	\$187,438	\$11,508	\$70,363	\$24,412	\$106,284	\$293,721
<i>Corp. Income Taxes</i>	\$117,862	\$13,243	\$5,683	\$136,788	\$9,027	\$29,169	\$27,001	\$65,196	\$201,984
Total Provincial Taxes	\$843,365	\$49,988	\$29,030	\$922,382	\$14,609	\$106,461	\$101,498	\$222,568	\$1,144,950
<i>Total Indirect Taxes</i>	\$699,320	\$28,652	\$23,042	\$751,014	\$3,548	\$57,902	\$72,357	\$133,806	\$884,820
Prov Environmental Tax	\$77,977	\$1,567	\$800	\$80,344	\$344	\$3,678	\$2,820	\$6,842	\$87,186

CONSUMER SPENDING IMPACTS (All Spending Impacts)									
	REGION: Columbia-Shuswap			19	REST OF BRITISH COLUMBIA			REST OF BC TOTAL	TOTAL IMPACTS, BC
	Direct	Indirect	Induced	REGIONAL TOTAL	Direct**	Indirect	Induced		
Prov Trading Profits Tax	\$24,304	\$387	\$5,887	\$30,579	\$27	\$958	\$9,094	\$10,079	\$40,658
Prov Gas Tax	\$116,289	\$1,686	\$813	\$118,788	\$224	\$3,818	\$2,102	\$6,144	\$124,932
Prov Other Tax	\$0	\$0	\$487	\$487	\$0	\$0	\$613	\$613	\$1,100
Land Transfer Tax	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Municipal Sales Tax	\$12,977	\$240	\$319	\$13,536	\$48	\$540	\$609	\$1,197	\$14,733
PST	\$349,051	\$4,293	\$5,514	\$358,858	\$656	\$11,416	\$11,890	\$23,962	\$382,820
Provincial Proportion of HST	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Aboriginal Trading Profits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Indirect Taxes on Production	\$118,721	\$20,480	\$9,222	\$148,423	\$2,248	\$37,492	\$45,229	\$84,969	\$233,391
<i>Personal Income Taxes</i>	\$57,613	\$11,624	\$1,820	\$71,057	\$4,442	\$27,169	\$9,341	\$40,951	\$112,009
<i>Corp. Income Taxes</i>	\$86,432	\$9,711	\$4,168	\$100,311	\$6,619	\$21,390	\$19,801	\$47,811	\$148,122

*Domestic Output is equal to Spending minus imports minus indirect taxes.

**Other BC 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 Columbia-Shuswap