2014

Economic Impact Assessment of Sylvan Lake Tourism

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Executive Summary

The Town of Sylvan Lake asked CMBAC Trusted Advisors Inc. to perform an economic impact assessment of the tourism season, including both direct annual Town spending and indirect summer tourist spending. The purpose of this report is to provide an estimate of the overall provincial economic impact of the summer tourism within the Town of Sylvan for the 2014 operating year.

All values in this report are in 2014 dollars, unless otherwise stated. The economic impact of Sylvan Lake ongoing tourism includes three key components: direct spending, indirect spending, and induced spending.

In order to calculate the indirect spending that occurs during the summer tourist season, an intercept survey was utilized to calculate tourist spending and traffic counts were utilized to calculate total summer tourists. The average tourist to Sylvan Lake spent $35.17 per day and there were an estimated 761,223 tourists to Sylvan Lake in the summer of 2014.

The table below summarizes the total economic impact of Sylvan Lake tourism by adding the three types of spending impact for the 2014 calendar year.

Economic Measure	Total Economic Impact
Employment (Person Years)	600
Gross Domestic Product at Factor Cost	$40,285,550
Labour Income	$25,743,081
Economic Impact	**$74,967,391**

The total economic impact (direct, indirect, and induced) of Sylvan Lake tourism in the year 2014 was about $75 million.

Background

The Town of Sylvan Lake asked CMBAC Trusted Advisors Inc. (CMBAC) to perform an economic impact assessment of Sylvan Lake tourism for the 2014 fiscal year. The purpose of this report is to provide an estimate of the overall economic impact of ongoing tourism at Sylvan Lake, with respect to the province of Alberta. A previous study examined the economic impact of tourism in 2006.[1] Using information provided by Sylvan Lake, tourist intercept surveys conducted during the summer season, traffic counts conducted during the summer and fall seasons, and other external research, CMBAC developed an economic impact assessment model for the Town of Sylvan Lake.

This report represents a 'snap-shot' of economic activity in time. The data displayed is shown in 2014 dollars, and represents the economic activity for the 2014 year. The direct spending is based on a calendar year, while the indirect spending is based on only the summer tourist season. This year was selected as it represents the most recent year of complete financial and tourism information. The totals in this report may not add due to rounding errors.

This report has adopted a conservative approach to modeling economic impact. The economic impact is considered conservative because it does not factor all impacts that may be attributable to Sylvan Lake. For example, the economic impact of direct spending from Lakeshore Drive redevelopment and provincial park washroom development have not been included in the overall calculation of economic impact, even though these projects are reasonably attributable to Sylvan Lake tourism activities. Furthermore, only a minimal amount of spending occurred during the study year for Lakeshore Drive redevelopment (Phase 5), 50th Street redevelopment, and the multiplex recreation centre project. The majority of the spending for these major capital projects has not been included in the overall calculation of economic impact.

[1] Economic Impact of Tourism Study, Final Report. November 3, 2006. Prepared by Schollie Research and Consulting.

Methodology

CMBAC developed a customized economic model for evaluating the economic impact of Sylvan Lake. The model is described in detail in this section.

Sylvan Lake Economic Impact Assessment Model

The Sylvan Lake economic impact assessment model uses economic multipliers provided by Alberta Treasury Board and Finance[2] to provide estimates of direct, indirect, and induced economic impacts.

The economic impact of the Town of Sylvan Lake ongoing tourism includes three key components:

1. **Direct Spending** – Capital and operational spending on tourism related projects or facilities by the Town of Sylvan Lake or developers in the Sylvan Lake area.
2. **Indirect Spending** – The benefits to the economy that result from spending by tourists that come to visit Sylvan Lake or by people attending events staged by other organizations held in Sylvan Lake facilities. The spending benefits include transportation to the event, accommodation, food and beverage, retail spending, entertainment, recreation, and other revenue for the Sylvan Lake area. These events and spending would not take place if Sylvan Lake did not attract large volumes of tourists during the summer months, or if Sylvan Lake did not have the appropriate facilities to accommodate the tourists.
3. **Induced Spending** – The business-to-business (B2B) spending that takes place during events held in local facilities, including events organized by the Town of Sylvan Lake and events staged by other organizations. Induced spending is very difficult to measure directly and is usually estimated using economic multipliers. For the purposes of this report, no direct measurement of induced spending was included in the economic impact model.

Economic multipliers utilized in the Sylvan Lake economic impact assessment model are extracted from the Alberta Treasury Board and Finance model of economic multipliers for the province of Alberta.

[2] Alberta Economic Multipliers. http://www.finance.alberta.ca/aboutalberta/archive-economic-multipliers.html Accessed November 2014.

Economic Impact Assessment

Economic impact assessment is based on the premise that spending within various industries in an economy are closely related or linked to each other. An increase in the activity levels in one industry will produce a positive 'domino' or rippling effect on other industries. Economists discuss the impact that one sector has on another in terms of indirect and induced effects. The total economic impact is the sum of the direct, indirect, and induced effects.

Total Economic Impact =

Direct effect

+

Indirect effect

+

Induced effect

This report examines the direct, indirect, and induced economic effects related to the summer tourism spending by visitors and the yearly operational spending on tourism related projects by the Town of Sylvan Lake. Direct effects are produced when the Town of Sylvan Lake purchases goods or services related to tourism activities. Indirect and induced economic effects are those activities that support Sylvan Lake businesses and increase the goods and services produced within an economy, arising from the spending power of direct and indirect employees.

The overall economic activity is accounted for by multipliers that attempt to quantify the interactive linkages within the local economy. The following four types of impact are estimated using multipliers:

- Economic impact or gross production – measured in dollars
- GDP impact – measured in dollars
- Labour impact – measured in dollars
- Employment impact – measured in person years of employment

The multipliers are then applied to direct spending estimates to estimate the economic impacts on each of the four categories above. The impact is measured with respect to the effect of the local expenditure on gross production (commonly referred to as economic impact), provincial gross domestic product at factor prices, labour income, and person years of employment.

Sylvan Lake Model

In order to calculate the economic impact of Sylvan Lake tourism, three types of spending were examined: direct, indirect, and induced. The Town of Sylvan Lake annual budget, traffic counts, and survey based data were all used to determine the total spending relating to Sylvan Lake and its tourism activities.

Direct Spending

The first type of spending, direct spending, is the total annual spending associated with the tourism activities in the Town of Sylvan Lake. Direct spending includes both operational and capital spending.

Operational Spending

In order to utilize the most applicable multiplier to each area of operational spending, direct operational spending has been divided into the following ten subcategories:

1. Tourism staff
2. Tourism related event spending
3. Tourism facilities – utilities, taxes, and permits
4. Tourism facilities - services
5. Advertising and promotion
6. Operating projects - trail development, property improvements, maintenance
7. Tourism support - economic impact
8. Public Works - Summer streets
9. Public Works - Sanitary sewer
10. Public Works – Water

Table 1 shows the total operational spending related to tourism for the Sylvan Lake area in 2014.

Table 1: Direct Spending on Tourism Related Activities for 2014

Direct Spending	Town Spending	Developer Spending	Provincial Spending
Tourism staff (*)	$ 503,938	$ 323,337	$ 145,000
Tourism related event spending	$ 173,000	$ 22,150	
Tourism facilities - utilities, taxes, permits	$ 450,000	$ 213,885	
Tourism facilities - services	$ 153,453	$ 29,250	
Advertising and promotion	$ 157,200	$ 155,790	
Operating Projects – trail development, etc.	$ 1,978,500	$ 410,920	
Tourism support - economic impact	$ 130,000		
Public Works - Summer streets	$ 70,623		
Public Works - Sanitary sewer	$ 146,891		
Public Works - Water	$ 192,406		
Total	$ 3,956,010	$ 1,155,332	$ 145,000

*The amount of direct spending on tourism staff by the Town of Sylvan Lake is comprised of a portion of several tourism and summer event related jobs, including positions from law enforcement, economic development, recreation, parks, and culture, and the visitor information centre. These seasonal positions include: summer peace officers, bylaw enforcement, special events coordinator, maintenance staff, and beach ambassadors. These seasonal positions would not be required if the Town of Sylvan Lake did not attract large volumes of tourists during the summer months, or if Sylvan Lake did not have the appropriate facilities to accommodate the tourists.

Capital Spending

Capital spending that occurred in the Sylvan Lake area was categorized into six major projects. Each of these projects is in some way related to tourism, but for the purposes of this report, the majority of the capital spending has been excluded from the economic impact model. In general, if the capital spending occurred during the study year, then it would be included within the direct spending category. As all six of these projects incurred the majority of their spending outside the study year (i.e., 2014), only the small amount of spending that occurred in 2014 has been included within the direct capital spending category.

- Sylvan Lake Lakeshore Drive redevelopment (end of Phase 4 – 2013). The total cost of the project to date was $23.63 million. The redevelopment was funded mostly by the Town of Sylvan Lake.
- Lakeshore Drive Redevelopment. The final phases of the Lakeshore Drive redevelopment project are expected to cost $1.4 million for Phase 5 and $3.0 million for Phase 6. The project is expected to be completed over the next 2 years.
- 50th Street Redevelopment. The preliminary design for the $5.5 million project was completed in the 2012/13 budget year. The redevelopment plan calls for a four year construction period, starting in 2015.
- Multiplex recreational centre development. The preliminary design for the $30 million recreational centre project was completed in 2014. The project is expected to start in 2015, with a two year construction period.
- Provincial Park Washrooms. New public washrooms were built to support tourist traffic within the provincial par. The total cost of the project was $2.27 million, with the Province of Alberta funding $2.1 million of this total. The project was completed in 2013.
- Waterfront development. A private developer has started a waterfront development project with an estimated cost of $30 million. The four year project is expected to be completed in 2016.

Table 2 on the following page shows the total completed and projected capital spending within the Town of Sylvan Lake. However, only a small portion of the capital spending was included in the economic impact model, due to the fact that most of the spending occurred outside the study period.

Table 2: Completed and Projected Capital Spending

Capital Project	Out of Study Year	Within Study Year
Lakeshore Drive redevelopment (Phase 4 – 2013)	23,630,000	0
Lakeshore Drive Phase 5 (2015-2017)	1,400,000	49,178
Lakeshore Drive Phase 6 (2015-2017)	3,000,000	0
50th Street Redevelopment (2015-2017)	5,500,000	10,626
Multiplex Development (2015-2017)	30,600,000	292,073
Provincial Park Washrooms (completed 2013)	2,270,000	0
Waterfront Development Permits (2012-2016)*	20,581,000	9,419,696
Total	**$86,981,000**	**$9,771,573**

*Private sector investment

Indirect Spending

Sylvan Lake generates indirect spending through tourism for the Town of Sylvan Lake area and for the province of Alberta. People attending events, and tourists spending time, in the Town of Sylvan Lake spend money in the region and elsewhere in Alberta in connection with their visit to the community and their attendance at the event. Non-local residents attending events at Sylvan Lake purchase accommodation, local transportation, food and beverage, entertainment, and attractions. Additional spending includes business-related purchases made during the visit.

The event the tourists attend contributes to the reason they visit the community. For some, the event is the single or primary motivation to visit the community. For example, a family may travel from a rural location primarily to attend an event at Sylvan Lake, and then return home. For others, the event is a contributing factor to their selection of a destination or to planning a trip at all.

Sylvan Lake is one of the largest tourist draws in the central Alberta region. The Town of Sylvan Lake hosts large events and attracts a significant number of tourists to the region. Several of these events and activities staged at Sylvan Lake could not take place without the Town's support or facilities.

As the purpose of this report is to examine the economic impact of the Town of Sylvan Lake tourism, only the impact of tourists have been included in the economic impact analysis. Local residents (and their spending) have been excluded from the analysis. Furthermore, only direct spending by the town that is related to tourism has been included in the analysis.

Indirect spending can be estimated from the spending of tourists and other visitors in the community in connection with their visit. In order to determine the spending profile of tourists, an intercept survey was developed and distributed during the summer of 2014.[3] For the purposes of this report, economic impacts from indirect spending at Sylvan Lake are limited to:

- Alberta tourists,
- Canada tourists, and
- International tourists.

The economic impact of the indirect spending was then factored using multipliers provided by Alberta Treasury Board and Finance.

Tourist Spending

During the 2014 summer tourist season, a visitor survey was conducted by Banister Research to determine respondent demographics, reasons for visiting Sylvan Lake, and visitor expenditures. A total of 766 surveys were completed in-person between the months of July and August, 2014. As a result of this survey, the spending habits of Sylvan Lake tourists is well known and supported by intercept survey data.

The survey categorized the tourists to the Town of Sylvan Lake into one of three visitor origins: tourists from Alberta, Canada, or International. In order to obtain a conservative estimate, only visitors that indicated that they lived outside the Town of Sylvan Lake were included in the expenditure portion of the survey. Alberta tourists are defined as visitors to the Town of Sylvan Lake that indicated that they lived outside of the town, but within Alberta. Canadian tourists are defined as visitors to the Town of Sylvan Lake that indicated that they lived outside of Alberta, but within Canada. And finally, international tourists are defined as visitors to the Town of Sylvan Lake that indicated that they lived outside of Canada.

[3] For more information, please see the detailed survey report. 2014 Visitor Onsite Survey. September 2014. Banister Research and Consulting Inc.

Table 3 shows the average number of nights, average party size, and overall percentage of visitors by origin.

Table 3: Survey Data for Sylvan Lake Visitors

Visitor Information			
Visitor Origin	Ave. # of Nights	Ave. Party size	% of Visitors
Alberta	1.3	4.3	92.8%
Canada	4.8	3.7	4.0%
International	3.7	4.3	3.2%
All Visitors	1.5	4.2	100.0%

As Alberta visitors make up the majority of the tourist visitors to the Town of Sylvan Lake, a further breakdown of the spending habits of Alberta visitors is shown below. Table 4 shows the average spending by Alberta visitor parties, broken into spending categories and visitor location. An Albertan visitor party has 4.3 people and stays an average of 1.3 nights, as described in Table 3.

Table 4: Alberta Visitors Average Spending per Travel Party

Spending Categories	Calgary	Calgary Region	Edmonton	Edmonton Region	Lacombe	Other	Red Deer	Total
Transportation	$ 40.84	$ 32.68	$ 47.58	$ 40.24	$ 21.11	$ 59.83	$ 7.34	$ 41.17
Food	$ 117.46	$ 71.43	$ 203.49	$ 123.61	$ 23.22	$ 128.17	$ 30.34	$ 131.47
Entertainment	$ 4.05	$ 3.21	$ 6.66	$ 0.91	$ -	$ 11.71	$ 0.32	$ 5.32
Shopping	$ 32.45	$ 15.71	$ 15.58	$ 33.48	$ 20.89	$ 44.95	$ 8.71	$ 25.45
Recreation	$ 36.55	$ 17.86	$ 32.81	$ 55.15	$ -	$ 61.01	$ 1.61	$ 34.74
Accomodation	$ 83.10	$ 77.14	$ 104.47	$ 92.76	$ -	$ 145.40	$ 2.10	$ 88.90
Other	$ 1.18	$ -	$ 1.33	$ -	$ -	$ 0.71	$ 1.61	$ 1.05

The actual per person per day spending amount was calculated from the 2014 survey. Table 5 shows the results of the expenditure survey.

Table 5: 2014 Spending by Tourists

Activity	Visitor Spending by Origin ($ per person per day)			
	Alberta	Canada	International	All Visitors
Transportation	$6.52	$5.16	$4.57	$6.39
Food and beverage	$15.00	$16.55	$9.37	$14.89
Entertainment	$0.62	$0.12	$0.14	$0.58
Shopping	$3.61	$4.51	$4.06	$3.67
Recreation	$4.28	$0.57	$4.49	$4.10
Accommodation	$5.33	$5.90	$7.69	$5.43
Other	$0.11	$0.12	$0.00	$0.11
Total	**$35.47**	**$32.93**	**$30.32**	**$35.17**

Induced Spending

Induced spending is the business-to-business spending that takes place during events held in the Town of Sylvan Lake exhibition facilities, including events organized by the Town of Sylvan Lake and events staged by other organizations. Induced spending is the most difficult type of spending to calculate and is almost always estimated by using economic multipliers. For the purposes of this report, no attempt was made to directly quantify the volume of spending that occurs between tourism businesses. However, induced spending was estimated using economic multipliers supplied by Alberta Treasury Board and Finance and is included in the overall economic impact.

Since total economic impact is the sum of the three types of spending (Total Economic Impact = Direct effect + Indirect effect + Induced effect), a simple method of calculating the induced effect is to subtract the direct and indirect effects from the total economic impact. Thus, the induced effect for Sylvan Lake tourism is calculated as$33 million ($75 million – $42 million).

Traffic Analysis

In order to determine the overall indirect spending of tourists, it was necessary to estimate the overall number of tourists that visit the Town of Sylvan Lake during the summer tourist season. For the purposes of this report, traffic counts were used to estimate the number of tourists that visit the town during the summer.

Traffic counters were used in three key locations within the town to determine daily traffic numbers. The locations were identified by town staff as the best roads in which to estimate total tourist traffic. The three locations were:

- 50th Street at Railroad tracks
- Lakeshore Drive East at CN crossing
- Lakeshore Drive West at Marina Bay

In order to estimate total visitor traffic, the counters were used during two different time periods. The traffic counters were in place for the following time periods:

- Summer time period:
  - Thursday, June 26, 2014 => Thursday, July 31, 2014
- Fall time period:
  - Monday, October 06, 2014 => Friday, October 24, 2014

During the summer time period, the traffic counters were able to count both visitor and local traffic volumes. During the fall time period, the traffic counters were able to count local traffic volumes. Thus, the difference between the summer and fall traffic volumes is the estimate of total visitor traffic volume. Table 6 below shows the average number of vehicles per day for each of the two periods, as well as the estimated number of visitor vehicles.

Table 6: 2014 Daily Traffic Counts – Summer vs. Fall

Average Number of Vehicles per Day					
Season	**Motorcycle**	**Car**	**Truck**	**RV**	**Other**
Summer	143.2	4592.8	1905.2	405.0	64.8
Fall	42.4	2865.4	1303.0	235.7	41.2
# of visitor vehicles	100.8	1727.4	602.2	169.3	23.6

After calculating the number of visitor vehicles per day using traffic counts, the next step is to categorize each of the visitor vehicles into vehicles types and visitor types. Using the percentage of visitors by origin from Table 1, and multiplying by the number of visitor vehicles, the visitor vehicle estimates by origin by type can be calculated and are shown in Table 7.

Table 7: 2014 Visitor Vehicle Estimates to Sylvan Lake

	Visitor Vehicle Estimates by Origin (vehicles per day during summer)			
Vehicle Type	**Alberta**	**Canada**	**International**	**All Visitors**
Motorcycles	93.6	4.1	3.2	100.8
Cars	1,603.1	69.6	54.7	1,727.4
Trucks	558.9	24.2	19.1	602.2
RV	157.1	6.8	5.4	169.3
Other	21.9	0.7	0.7	23.4

The next step in determining the total number of visitors to the Town of Sylvan Lake is to calculate the number of people per vehicle type. Using data collected from the intercept surveys, the number of people per vehicle by visitor origin is shown in Table 8.

Table 8: 2014 Visitors per Vehicle

Vehicle	Persons per vehicle - Alberta	Persons per vehicle - Canada	Persons per vehicle - International
Motorcycles	1.0	1.0	1.0
Cars	4.3	3.7	4.5
Trucks	4.0	3.8	4.0
RV	4.1	2.0	3.9
Other	2.5	2.5	2.5

The final step to calculate the total number of visitors to the Town of Sylvan Lake is to multiply the number of vehicles per day by the number of people per vehicle by the number of summer days in the tourist season. The number of summer days in the tourist season is shown in Table 9. These estimates are based on discussions with the Town of Sylvan Lake and the start and end dates of major tourism events held within the town. For example, motorcycles have the shortest number of summer days in which to be active, and are estimated to have two full months (i.e., 30 days) of summer days, while RVs have the longest number of summer days (i.e., 90 days) due to their ability to withstand a wider variety of temperatures during the summer months.

Table 9: Number of Summer Day by Vehicle Type

Vehicle Type	Number of summer days
Motorcycles	60.0
Cars	70.0
Trucks	70.0
RV	90.0
Other	60.0

Table 10 shows the final results of the visitor estimate calculations. The total number of visitors to the Town of Sylvan Lake is estimated at 761,223. The total visitor estimate is broken down by vehicle type and by visitor origin.

Table 10: 2014 Visitor Estimates to Sylvan Lake

Vehicle Type	Visitor Estimates by Origin (visitors during summer)			
	Alberta	Canada	International	Total Visitor-by vehicle
Motorcycles	5,614	244	192	6,049
Cars	486,522	18,205	17,342	522,070
Trucks	156,479	6,365	5,321	168,164
RV	58,327	1,227	1,876	61,430
Other	3,286	112	112	3,510
Total Visitor-by origin	710,227	26,152	24,843	761,223

Overall Results of the Sylvan Lake Model

The following table summarizes the economic activity supported by Sylvan Lake tourism, drawing on the data presented in the previous sections. Table 11 shows that in 2014, Sylvan Lake tourism supported economic benefits of $75 million.

Table 11: Summary of Sylvan Lake Model

	Dollars	Gross Impact	GDP	Labour Income	Employment (PY)
Direct Spending	$ 15,027,914	$ 26,538,040	$ 13,808,713	$ 8,910,750	149
Indirect Spending	$ 26,806,194	$ 48,429,351	$ 26,476,837	$ 16,832,331	452

Economic Measures	Impact
GDP at Factor Cost	$ 40,285,550
Labour Income	$ 25,743,081
Employment in person years	600
Economic Impact	$ 74,967,391

Appendix A – Qualifiers

Qualifiers about the rounding used in this report:

The totals in this report may not add due to rounding errors.

Qualifiers about the estimates used in this report:

A conservative approach has been intentionally undertaken in assessing the total economic impact. It should be noted that the estimated value associated with Sylvan Lake tourism does not include the very significant impact of direct capital spending from Lakeshore Drive redevelopment, provincial park washroom development, and 50th Street redevelopment, even though these projects are reasonably attributable to Sylvan Lake tourism activities.

Using this approach, the analyses contained in this report should be viewed as the minimum economic impact related to Sylvan Lake tourism.

Qualifiers about the multipliers used in this report:

Multipliers are used to infer indirect and induced economic activity from a measure of direct economic activity. They are a commonly used and accepted tool in a report of this nature. Multipliers are not directly observed; they are inferred from an economic model. By far, the direct measure is the most accurate. Readers are advised that multiplier analysis remains an imprecise econometric technique and that caution be used in interpreting the indirect and induced impacts and 'one time' capital spending benefits (i.e. the Total Impact) contained in this report. However, multipliers are virtually the only cost-effective tool available to identify the overall impact of a sectoral activity within an economy.

The concept of a multiplier is a fairly simple one to understand. For example, an increase in demand for a commodity will produce three effects, which are described by economic multipliers. The first is the impact on industries (firms) that expand production to satisfy increased demand. These effects are termed the direct impacts. Secondly, there is a ripple effect as these firms purchase additional required inputs from other firms. These effects are termed the indirect impacts. Lastly, as firms expand production, they also hire more staff and pay out wages thereby increasing the income received by employees. Households, after withdrawing a certain portion for taxes and savings, spend this income, which in turn increases demand for other commodities. These impacts are termed induced effects.

Considerable care was exercised in choosing the most appropriate multipliers for this report. CMBAC chose an Alberta Treasury Board and Finance closed model multiplier set derived from the province's 2010 Input-Output Model. Thus, the impacts indicate the overall effect of the expenditure on the provincial economy. Economic multipliers are a trailing indicator, and the 2010 multipliers are the most recent set of multipliers available for use on a provincial level.

Appendix B – Glossary

Business to Business (B2B) – The transfer of goods or services between businesses. This includes the purchases of materials by one business from another.

Closed and Open Models – This report uses closed models for all models. Closing an input-output model increases the interdependence of the system and results in a higher impact on the variables of the model leading to multipliers of a larger magnitude than those based on the open version. The impacts of closing the system to households are referred to as induced effects. An open model considers only direct and indirect impacts, while a closed model considers direct, indirect, and induced impacts.

Direct Expenditure – This figure indicates the amount of initial expenditures used in the analysis. It indicates not only the total magnitude of this spending but also the type of activity in which it was spent. An example would be the Town of Sylvan Lake spending money on maintaining tourism facilities.

Direct Impact – The direct capital and operational spending on tourism related projects or facilities by the Town of Sylvan Lake or developers in the Sylvan Lake area.

Economic Impact – The sum of direct impact, indirect impact, and induced impact.

Employment – Employment multipliers are used to generate the associated indirect and induced impacts. Employment is expressed as total number of jobs created per $10,000 of output change and is measured in person years (PY) of employment.

Gross Domestic Product (GDP) – This figure represents the total value of production of goods and services in the economy resulting from the direct expenditure under analysis. Estimates of Alberta Gross Domestic Product (GDP) provide unduplicated measures of economic production. They are "unduplicated" because GDP measures the value of final transactions only, with all inter-business purchases and sales associated with intermediate production cancelled out. For example, the value of a good or service sold by industry A to industry B, and then used in industry B's production process for sale into final demand, is not directly recorded in GDP. Industry A's output is not counted directly because it is implicitly included in the value of output of industry B when it is sold into final demand.

Gross Production – This is the total amount of output generated from initial expenditure. It differs from GDP by counting all inter-business purchases and sales. Gross Production is often referred to as “economic impact”.

Indirect Impact – Refers to the impact resulting from all intermediate rounds of production in the supply of goods and services to industry sectors identified either in the direct impact phase. Relates to the impact on "front-line" businesses initially receiving the expenditures under analysis. From a tourism spending perspective, this can include all businesses such as hotels, restaurants, retail stores, transportation carriers, attraction facilities, etc. (e.g. a visitor spending $25 in a restaurant on Lakeshore Drive).

Induced Impact – These impacts are generated as a result of B2B spending and re-spending by employees (in the form of consumer spending) who benefited either directly or indirectly from the direct expenditures under analysis. An example of this would be the impacts generated by hotel employees on typical consumer items such as groceries, clothing, household items, etc.

Input-Output Model – For the closed version of the Alberta input-output model, the household sector is treated as a production sector. The input of the household sector is consumer expenditure on goods and services, while output is labour income (consisting of wages and salaries, supplementary labour income, and net income of unincorporated business). It is assumed that households, after withdrawing a portion of their income for savings and taxes, spend the rest of their income on consumer goods and services.