Tourism Saskatchewan's Regional Tourism Economic Impact Model

It is a generally accepted truism that new tourist spending is economically good for a community, creating jobs and bringing in money which is spent directly in the local market and indirectly through provincial taxes. But exactly how much of an impact will this have on any given locale? To this point, estimations have been essentially just that – estimates based on guesswork and anecdotal evidence.

The Regional Tourism Economic Impact Model (RTEIM) provides a measure of accuracy in this instance. It allows communities to assess the economic impact of new tourist spending on the local economy.

The model looks at specific areas of economic concern – how much money is involved and where it will go. It expresses impacts on the local economy in terms of gross output, gross domestic product, new employment, labour income, and government revenues. With the exception of employment, impacts are reported in millions of current dollars.

The RTEIM is based on a regional share of the latest provincial Statistics Canada input-output tables. Input-output tables are a matrix representation of the Saskatchewan economy. They record inter-industry transactions in an economy, depicting how the output of one industry goes to another industry where it serves as an input, and thereby makes one industry dependent on another: it is both a customer of output and a supplier of inputs.

An important consideration of the model is something called “impact multipliers”. These are the ratio of the total impact of tourist spending on the economy to the direct impacts of tourist spending on the economy. The RTEIM uses region-specific impact multipliers which are lower than provincial multipliers because they include imports from other areas of the province as well as other provinces and countries. Provincial multipliers only include imports from other provinces and countries.

2019 Western Canada Summer Games
Regional Tourism Economic Impact Model

Tourism Saskatchewan analysed the 2019 Western Canadian Summer Games data through two of the Regional Tourism Economic Impact Models – a Tourism Economic model and an Operational Impact model. The first examines the impact of tourism expenditures of the event on the local community. The second model examines the total operational impact of the event on the community.

The Operational Impact models reflects the broader economic impact stemming from the operation of the event while the Tourism Impact maintains a tighter focus on the expenditures from visitor spending behaviours within the communities.

The Total Gross Output for the tourism impact of the event was $1,040,000, and created 13.13 jobs.

The Total Gross Output for the operational expenses of the event was $4,730,000, and created 22.53 jobs.

More details follow.

Tourism Impact Summary

	Gross Output Impact	GDP at Basic Prices	Employment Impact (jobs)	Labour Income Impact
Total Impacts ($M)	1.04	0.59	13.13	0.42
Direct Impacts ($M)	0.85	0.47	12.47	0.35
Indirect Impacts ($M)	0.11	0.07	0.40	0.04
Induced Impacts $M	0.09	0.06	0.26	0.04

Multipliers	1.23	1.26	1.05	1.21

	Personal Income Tax	Corp Income Tax	Taxes on Unincorp. Business Profits	Sales Tax	Fuel Tax	Tobacco Tax	Total
Provincial Government Revenue Impacts ($M)	0.038	0.007	0.005	0.021	0.007	0.003	0.081
Federal Government Revenue Impacts ($M)	0.069	0.008	0.007	0.037	0.000	0.000	0.121

Operational Impact Summary

	Gross Output Impact	GDP at Basic Prices	Employment Impact (jobs)	Labour Income Impact
Total Impacts ($M)	4.73	2.20	22.53	1.55
Direct Impacts ($M)	0.01	1.03	10.05	1.03
Indirect Impacts ($M)	4.25	0.86	11.10	0.43
Induced Impacts $M	0.47	0.30	1.38	0.09
Multipliers	719.83	2.12	2.24	1.50

	Personal Income Tax	Corp Income Tax	Taxes on Unincorp. Business Profits	Sales and Excise Taxes
Provincial Government Revenue Impacts ($M)	0.172	0.014	0.026	0.000
Federal Government Revenue Impacts ($M)	0.249	0.017	0.035	0.000

DEFINITIONS

Visitors:
A visitor is defined as an individual travelling to a Canadian destination at least 80 km one-way from home for any reason except in the following cases: travel to and from work or school (i.e., commuting); one-way travel involving a change of residence; travel of operating crew members of buses, airplanes, boats, etc.; travel in an ambulance to a hospital or clinic; or trips that did not originate in Canada; trips longer than a year.1 A trip may involve one person travelling alone or several persons from the same household travelling together. In other words, a person travelling from Moose Jaw to Regina is not a visitor. Someone commuting more than 80 km one way to Regina each day is not a visitor.

Leakages:
Here the user determines if the initial impact of visitor spending can be handled by the already existing local sources. Typically, a small sub-provincial economy relies extensively on imports from within the rest of the province, from other provinces, and from international sources to meet new demand. The impact model expects this scenario and has default leakages built into it; simply stated, these adjust a new expenditure at the local level by the amount expected to be imported from outside the region. However, leakages would not apply to small or medium sized tourist events where all accommodation and meals are expected to be met by local sources. But in most cases, users should enter "N" into the "apply leakages" section above.

Induced impact:
This refers to the additional impact of new spending which results from changes in household income

Direct Impacts:
These are equivalent to the initial expenditure less import leakages. In plain English, this refers to trip expenditures made in the community by all household members who have come on the trip. These expenditures may have been paid for by individuals, by government, or by a private sector business.

Expenditures are broken down into the following categories: vehicle rental, vehicle operation, local transportation, intercity transportation, food or beverages purchased at restaurants or bars, food or beverages purchased at stores during the trip, accommodation, recreation and entertainment, clothing, and other expenditures. The following items are excluded:

- food purchased before the trip for use while on the trip;
- items purchased to be resold or used in business (including items used on a farm);
- vehicles such as cars, caravans, boats;
- capital investments, such as real estate, works of art, rare articles, and stocks;
- cash given to friends or relatives during a holiday trip which does not represent payment of tourism goods or services, as well as donations made to institutions.

Gross Output:
This refers to total expenditures made by tourists on local goods and services as well as payments to labour and business profits. Gross output includes items counted twice (such as cost of goods sold) rather than net value added alone. For example, a tourist orders a meal in a restaurant and pays $20. The gross output of the transaction is $20, but included in that $20 is $12 for the restaurant's cost of the meal, $4 for the waitress/waiter's wages, and $4 in profit for the restaurant.

Gross Domestic Product (GDP) at Factor Cost:
This is the measure of net economic activity within a prescribed geographic area. It represents the payments made to final factors of production: labour, unincorporated business profits, and other operating surplus (corporate profits, interest income, inventory valuation adjustments, and capital consumption allowances). GDP at factor cost excludes the value of intermediate goods and services used in production. The GDP of the above tourist restaurant transaction is $8.

Labour Income:
New wages, salaries, and supplementary labour income (benefits and employer contributions to pension plans)

Employment:
This measured in jobs/positions.

Indirect Impact:
This refers to the secondary impact of the initial tourist expenditure. It includes inter-industry transactions and purchases of inputs from supporting industries. In the tourism sector this might include restaurant purchases of wholesale food and supplies, hotel purchases of stationery and cleaning products.

Induced Impact:
This refers to the additional impact of new spending which results from changes in household income.

The Fiscal Module
An expansion in economic activity, especially when wages and salaries compose a significant portion of incremental gross domestic product, is expected to generate incremental government revenues. The economic impact model fiscal module is based on the latest provincial budget and estimates provincial government revenues as follows:

- Provincial personal income tax is calculated by using the provincial personal income tax rate that would apply to average industry annual income. This is applied to model-generated labour income.

- Federal personal income tax is calculated by using the federal personal income tax rate that would apply to average industry annual income applied to model-generated labour income.
- Corporation income tax is calculated by applying the respective provincial and federal corporate tax rate to incremental corporate profits before taxes calculated by the model.
- Unincorporated business income taxes are calculated by applying the small business tax rate to incremental unincorporated business profits calculated by the model.
- Corporate capital tax is calculated by applying the ratio of provincial corporate capital tax to corporate income tax to incremental corporate profits before taxes calculated by the model. Corporate capital taxes are no longer applied beginning in 2008.
- Federal and Provincial sales taxes collected on goods are calculated using an estimated split of federal provincial taxes applied to model generated indirect taxes on products. All model generated indirect taxes on services are considered federal sales and excise tax revenues.