

Canadian Sport Tourism Alliance



Alliance canadienne du tourisme sportif

2015 Staal Foundation Open Thunder Bay, Ontario

Economic Impact Assessment

September 2015

The following analysis provides the economic impact of the PGA Tour of Canada's 2015 Staal Foundation Open hosted at the Whitewater Golf Club in Thunder Bay, Ontario from July 13-19, 2015, as generated by the Sport Tourism Economic Assessment Model, Professional version.

Economic Impact Assessment Funding Partners

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1.0 Background

The Mackenzie Tour – PGA TOUR Canada Staal Foundation Open presented by Tbaytel was hosted at the Whitewater Golf Club in Thunder Bay, Ontario from July 13-19, 2015. The Staal Foundation Open is a highlight on the PGA TOUR Canada circuit with exceptional scenery and tremendous support from the local community. Moreover, the event gives back to the community in a big way, with the 2015 edition donating \$190,500 to charities in Northwestern Ontario. The tournament attracts hundreds of players, spectators and sponsors and the spending of these visitors, along with the expenditures made by the organizers in hosting the tournament has a substantial economic impact on the community.

The next section of the report provides details of the results obtained from the on-site survey that was given to spectators and participants at the golf tournament. The survey results were used to ascertain both the number and origin of visitors and the expenditures that visitors made while in Thunder Bay for the tournament. Section 3 provides details of operational expenditures and revenues that further contributed to the impact of the event, while Section 4 presents the STEAM PRO¹ results from the combined expenditures of the visitors and the host committee's operational expenditures. The appendices include additional information regarding the economic impact model and a glossary of the terms used.

¹The Canadian Sport Tourism Alliance's (CSTA's) **Sport Tourism Economic Assessment Model**, Professional version (STEAM PRO) was used to generate the economic impact estimates detailed in this report. STEAM PRO, which was developed in 2006, is a model that has been designed to incorporate the results of primary data collected from event visitors and the budget / capital expenditures of event organizers and others to prepare economic impact assessments. The model is based on the Canadian Tourism Research Institute's (CTRI - a branch of The Conference Board of Canada) TEAM model, which is the most widely used tourism economic impact model in Canada. The results of STEAM PRO are fully consistent with the CSTA's STEAM model. A more detailed description of STEAM PRO is contained within Appendix 1.

2.0 Methodology / Survey Results

Information regarding the origin and spending of spectators and participants attending the 2015 Staal Foundation Open was collected through the administration of an on-site intercept survey. The survey captured information about the origin of the professional golfers, the pro-am participants as well as spectators attending the event. Out of town visitors were also asked questions about their visit and the expenditures while they were in Thunder Bay.

Survey Results

A total of 447 surveys were collected over the course of the event with the responses collected from 271 audience members, 13 Pro-Am participants, 73 Pro golfers, 15 sponsors, 48 volunteers, 16 caddies and 11 others.

The overall survey found that 81% of spectators in attendance were from Thunder Bay with strong representation from regional Ontario (6%) and from long-haul visitors (8%). The number of unique individuals attending the tournament as spectators was calculated by first allocating the total attendance of 14,000 by visitor origin and then dividing by the average number of days each spectator was in attendance. The end result shows that the 2015 Staal Foundation Open was attended by 5,533 spectators of which 856 were from outside of Thunder Bay (Table 2.1)

Table 2.1 Visitor Origin - Spectators

Origin	Spectator Origin	Attendance	Days per person	Individual attendance
Thunder Bay	81%	11,365	2.4	4,677
Region Northwest Ontario (Kenora Fort Frances Geraldton Terrace Bay etc.)	6%	878	2.9	305
Other Ontario	2%	258	2.0	129
Manitoba	1%	155	5.0	31
Midwest USA (Minnesota Wisconsin Illinois North Dakota)	1%	155	4.3	36
Other Canada / USA / International	8%	1,188	3.4	355
Total	100%	14,000	2.6	5,533
Visitors	19%	2,635	3.1	856

Out of town spectators were asked about their accommodation use while attending the Staal Foundation Open with a significant number of Ontario spectators staying with friends and family. Overall, spectators at the tournament accounted for 448 room nights. (Table 2.2)

Table 2.2 Accommodation Use – Spectators

Origin	Share in Hotels	average nights	average party size	Room nights
Thunder Bay	n/a	n/a	2.91	
Region Northwest Ontario <i>(Kenora Fort Frances Geraldton Terrace Bay etc.)</i>	12%	4.85	2.94	59
Other Ontario	0%	5	2.8	0
Manitoba	67%	6	2.67	46
Midwest USA <i>(Minnesota Wisconsin Illinois North Dakota)</i>	100%	5	2	89
Other Canada / USA / International	26%	8.57	3.13	253
Total	25%	6.73	2.92	448

Spectator Expenditures

Out of town spectators were also asked what they spent in Thunder Bay while they were attending the 2015 Staal Foundation Open. The result, detailed in Table 2.3 below shows that the typical spectator spent \$1,247 per party or \$427 per person. While the spending on accommodation was relatively low, visitor expenditures in other categories were relatively high due to the long length of stay which averaged 6.7 nights. Combining the spending per person with the overall attendance shows that overall spectator spending reached \$365,300. As a final step, spectators from outside of Thunder Bay were asked as to the importance of the Staal Foundation Open in their decision to travel. Overall the importance of the event was moderately high with an overall score of 71%.² The attribution factor is then applied to the aggregate expenditure calculation to determine the amount of spending that is directly as a result of hosting the event. The results show that the spending directly attributable to the Staal Foundation Open was \$259,400 in 2015.

Table 2.3 Spectator Spending

Spectators	Per Party	Per Person	Aggregate	Scaled by Importance
Accommodation	\$224.08	\$76.74	\$65,656	\$46,616
Restaurants	\$330.71	\$113.26	\$96,899	\$68,798
Grocery / Other Food and Beverage	\$137.63	\$47.13	\$40,326	\$28,631
Recreation & Entertainment	\$187.58	\$64.24	\$54,961	\$39,022
Shopping	\$227.51	\$77.91	\$66,661	\$47,329
Vehicle Expenses	\$120.51	\$41.27	\$35,310	\$25,070
Other Transportation	\$18.85	\$6.46	\$5,523	\$3,921
Total	\$1,246.87	\$427.01	\$365,335	\$259,388

² Using a scale of 0-10 with 0 indicating the event had no influence in the decision to travel and 10 indicating it was the only reason for coming to Thunder Bay.

Other Visitor Expenditures

As previously notes information was also collected from Pro-Am and Pro golfers taking part in the Staal Foundation Open. The average golfer spent \$1,661 in Thunder Bay and with 152 golfers, this amounted to \$252,460. In addition to the participant expenditures the study also includes estimates made by other attendees such as participating celebrities and guests, sponsor guests and other.

Table 2.4 Participant Expenditures

Participants	Spendign per participant	Aggregate
Accommodation	\$639.34	\$97,180
Restaurants	\$394.04	\$59,894
Grocery / Other Food and Beverage	\$119.00	\$18,088
Recreation & Entertainment	\$125.72	\$19,109
Shopping	\$122.29	\$18,588
Vehicle Expenses	\$137.69	\$20,929
Other Transportation	\$122.84	\$18,672
Total	\$1,660.92	\$252,460

3.0 Operations Expenditures

The organizers of the 2015 Staal Foundation Open invested significantly in producing a high-caliber event in Thunder Bay, with expenditures covering items such as rental of the venue, volunteers, advertising, food and beverages and the business operations of supporting the event.

Even though they are not included directly in the budget, the 2015 Staal Foundation Open was supported by hundreds of volunteers from Thunder Bay who donated considerable amounts of their time to make the tournament happen.

4.0 Economic Impact Results

The combined spending of out of town spectators and participants in combination with the expenditures made by the organizers through hosting the 2015 Staal Foundation Open totaled \$1.8 million. This generated an estimated \$4.0 million in economic activity for the Province of Ontario, of which \$2.8 million occurred in Thunder Bay. These expenditures supported \$1.2 million in wages and salaries in the Province through the support of 25 jobs, of which an estimated 18 jobs and \$767,000 in wages and salaries were supported in Thunder Bay.³ The total net economic activity (GDP) generated by the event was \$2.0 million through the Province, with \$1.2 million occurring in Thunder Bay.

Considerable tax revenues were also produced by the event, totaling \$729,000. The event supported federal government tax revenues of \$354,000 with an additional \$263,000 in taxes accrued to the Province of Ontario. Moreover, \$111,000 in taxes was supported in Ontario municipalities, of which \$76,000 accrued in Thunder Bay.

Table 4.1 Staal Foundation Open Economic Impact – Summary Table

	Total Ontario	Thunder Bay
Initial Expenditure	\$1,818,298	\$1,818,298
GDP	\$1,986,240	\$1,164,673
Wages & Salaries	\$1,203,117	\$767,210
Employment	25.4	18.3
Industry Output	\$4,025,236	\$2,803,975
Total Taxes	\$728,800	\$457,637
Federal	\$354,373	\$217,006
Provincial	\$263,028	\$164,893
Municipal	\$111,399	\$75,738

³ Jobs reported in this study refer to the number of jobs, vs. full time equivalent (i.e.: two people working half time in a job that typically features half time employment would represent two jobs or one FTE). Additionally, the direct employment effects are generally extra shifts or overtime for existing workers rather than new employment.

Table 4.2 Total Economic Impact

		Total Ontario		Total Thunder Bay		Rest of Ontario
Initial Expenditure		\$1,818,298		\$1,818,298		\$0
Gross Domestic Product						
Direct Impact		\$472,692		\$472,692		\$0
Indirect Impact		\$1,014,998		\$464,812		\$550,186
Induced Impact		\$498,550		\$227,169		\$271,381
Total Impact		\$1,986,240		\$1,164,673		\$821,567
Industry Output						
Direct & Indirect		\$2,944,026		\$2,311,354		\$632,672
Induced Impact		\$1,081,211		\$492,621		\$588,589
Total Impact		\$4,025,236		\$2,803,975		\$1,221,261
Wages & Salaries						
Direct Impact		\$261,234		\$261,234		\$0
Indirect Impact		\$635,873		\$369,788		\$266,085
Induced Impact		\$306,010		\$136,188		\$169,823
Total Impact		\$1,203,117		\$767,210		\$435,908
Employment (Full-year jobs)						
Direct Impact ⁴		7.0		7.0		-
Indirect Impact		12.1		7.5		4.7
Induced Impact		6.3		3.8		2.5
Total Impact		25.4		18.3		7.1
Taxes (Total)						
Federal		\$354,373		\$217,006		\$137,367
Provincial		\$263,028		\$164,893		\$98,135
Municipal		\$111,399		\$75,738		\$35,661
Total		\$728,800		\$457,637		\$271,163

⁴ Direct employment impact is generally extra shifts or overtime for existing workers rather than new employment.

Appendix 1: Economic Impact Methodology – Sport Tourism Economic Assessment Model

Background

Briefly, the purpose of STEAM is to calculate both the provincial and regional economic impacts of sport tourism. The economic impacts are calculated on the basis of capital and operating expenditures on goods, services and employee salaries, and on the basis of tourist spending within a designated tourism sector. The elements used to measure the economic impacts are Gross Domestic Product (GDP), Employment, Taxes, Industry Output and Imports. STEAM measures the direct, indirect & induced effects for each of these elements.

Technical Description of the Impact Methodology used by STEAM

STEAM and many other impact studies are based on input-output techniques. Input-output models involve the use of coefficients that are based on economic or business linkages. These linkages trace how tourist expenditures or business operations filter through the economy. In turn, the coefficients applied are then used to quantify how tourism related activity in a particular region generates employment, taxes, income, etc. The input-output approach indicates not only the direct and indirect impact of tourism, but can also indicate the induced effect resulting from the re-spending of wages and salaries generated.

All impacts generated by the model are given at the direct impact stage (i.e. the "front line" businesses impacted by tourism expenditures), indirect impact stage (i.e. those industries which supply commodities and/or services to the "front line" businesses) and the induced impact stage (induced consumption attributable to the wages and salaries generated from both the direct and indirect impact). In this sense, the model is closed with respect to wages. Imports are also determined within the model, so the model is closed with respect to imports. Exports are not endogenized (i.e. additional exports are not assumed with the induced impact) which consequently generates more conservative impacts. Another assumption of the model, which leads to more conservative impacts, is that not all commodities and/or services purchased are assumed to have at least one stage of production within the province. This assumption is crucial for souvenirs, gasoline and other commodities.

Taxes and employment are key economic considerations. However, as these concepts fall outside of the System of National Account Provincial input/output tables, their impacts must be calculated separately. Current tax and employment data for each region is used to econometrically estimate a series of coefficients and rates. These coefficients and/or rates are then applied to measures determined within the input-output framework of the model, yielding the final tax and employment figures.

Regional (Sub-Provincial) Impact Methodology

The method used to simulate intraprovincial commodity flows and ultimately regional impacts follows directly from regional economic principles. The principle is referred to as the "gravity model". Basically the "gravity model" states that the required commodity (& service) inputs will be "recruited" in a manner that takes into consideration economies of scale (i.e. production costs), transportation costs and the availability of specific industries. Economies of scale (i.e. lower production costs) are positively correlated with input demand while greater transportation costs are negatively correlated with input demand. Fulfilling that demand from other provincial regions is contingent on the fact that the specific industry does actually exist. An advantage of using the "gravity model" to simulate intraprovincial commodity flows is that as the industrial composition of the labour force changes, or as new industries appear for the first time in specific regions, the share of production between the various sub-provincial regions also changes.

By following this principle of the gravity model, all sub-provincial regions of a province are assigned a coefficient for their relative economies of scale in each industry (using the latest industry labour force measures) as well as a coefficient to represent the transportation cost involved to get each industry's output to the designated market. One variation on the "gravity model" principle involves the estimation of "relative trade distances" by incorporating different "weights" for different modes of transport. Once these coefficients are generated for all regions and over all industries, a measure of sensitivity (mostly relative to price, but in the case of service industries also to a "local preference criteria") is then applied to all commodities. Another variation on the strict "gravity model" approach is that the measure of sensitivity is adjusted by varying the distance exponent (which in the basic "gravity model" is 2) based on the commodity or service required. The variation in distance exponents revolve, principally, around two research hypotheses: (1) the greater the proportion of total shipments from the largest producer (or shipper), the lower the exponent, and (2) the greater the proportion of total flow which is local (intraregional), the higher the exponent.

Appendix 2: Glossary of Terms used by STEAM

Initial Expenditure - This figure indicates the amount of initial expenditures or revenue used in the analysis. This heading indicates not only the total magnitude of the spending but also the region in which it was spent (thus establishing the "impact" region).

Direct Impact - Relates ONLY to the impact on "front-line" businesses. These are businesses that initially receive the operating revenue or tourist expenditures for the project under analysis. From a business perspective, this impact is limited only to that particular business or group of businesses involved. From a tourist spending perspective, this can include all businesses such as hotels, restaurants, retail stores, transportation carriers, attraction facilities and so forth.

Indirect Impact - Refers to the impacts resulting from all intermediate rounds of production in the supply of goods and services to industry sectors identified in the direct impact phase. An example of this would be the supply and production of bed sheets to a hotel.

Induced Impact - These impacts are generated as a result of spending by employees (in the form of consumer spending) and businesses (in the form of investment) that benefited either directly or indirectly from the initial expenditures under analysis. An example of induced consumer spending would be the impacts generated by hotel employees on typical consumer items such as groceries, shoes, cameras, etc. An example of induced business investment would be the impacts generated by the spending of retained earnings, attributable to the expenditures under analysis, on machinery and equipment.

Gross Domestic Product (GDP) - This figure represents the total value of production of goods and services in the economy resulting from the initial expenditure under analysis (valued at market prices).

NOTE: The multiplier (A), Total/Initial, represents the total (direct, indirect and induced) impact on GDP for every dollar of direct GDP. This is a measure of the level of spin-off activity generated as a result of a particular project. For instance if this multiplier is 1.5 then this implies that for every dollar of GDP directly generated by "front-line" tourism businesses an additional \$0.50 of GDP is generated in spin-off activity (e.g. suppliers).

The multiplier (B), Total/\$ Expenditure, represent the total (direct, indirect and induced) impact on GDP for every dollar of expenditure (or revenue from a business perspective). This is a measure of how effective project related expenditures translate into GDP for the province (or region). Depending upon the level of expenditures, this multiplier ultimately determines the overall level of net economic activity associated with the project. To take an example, if this multiplier is 1.0, this means that for every dollar of expenditure, one dollar of total GDP is generated. The magnitude of this multiplier is influenced by the level of withdrawals, or imports, necessary to sustain both production and final demand requirements. The less capable a region or province is at fulfilling all necessary production and final demand requirements, all things being equal, the lower the eventual economic impact will be.

GDP (at factor cost) - This figure represents the total value of production of goods and services produced by industries resulting from the factors of production. The distinction to GDP (at market prices) is that GDP (at factor cost) is less by the amount of indirect taxes plus subsidies.

Wages & Salaries - This figure represents the amount of wages and salaries generated by the initial expenditure. This information is broken down by the direct, indirect and induced impacts.

Employment - Depending upon the selection of employment units (person-years or equivalent full-year jobs) these figures represent the employment generated by the initial expenditure. These figures distinguish between the direct, indirect and induced impact. “Equivalent Full-Year Jobs”, if selected, include both part-time and full-time work in ratios consistent with the specific industries.

NOTE: The multiplier (B) is analogous to Multiplier (B) described earlier with the exception being that employment values are represented per \$1,000,000 of spending rather than per dollar of spending. This is done to alleviate the problem of comparing very small numbers that would be generated using the traditional notion of a multiplier (i.e. employment per dollar of initial expenditure).

Industry Output - These figures represent the direct & indirect and total impact (including induced impacts) on industry output generated by the initial tourism expenditure. It should be noted that the industry output measure represents the **sum** total of all economic activity that has taken place and consequently involve double counting on the part of the intermediate production phase. Since the Gross Domestic Product (GDP) figure includes only the **net** total of all economic activity (i.e. considers only the value added), the industry output measure will always exceed or at least equal the value of GDP.

Taxes - These figures represent the amount of taxes contributed to municipal, provincial and federal levels of government relating to the project under analysis. This information is broken down by the direct, indirect and induced impacts.

Imports - These figures indicate the direct, indirect and induced final demand and intermediate production requirements for imports both outside the province and internationally.