Canadian Sport Tourism Alliance

Alliance canadienne du tourisme sportif

2013 ISU World Figure Skating Championships

London, Ontario

Economic Impact Assessment

May 2013

The following analysis provides the economic impact of the 2013 International Skating Union World Figure Skating Championships hosted in London Ontario from March 11-17, 2013 as generated by the Sport Tourism Economic Assessment Model – Professional Version.

Economic Impact Assessment Funding Partner

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1.0 Background

The International Skating Union (ISU) hosted the 2013 World Figure Skating Championships in London Ontario from March 11-17, 2013. The competition was held at the Budweiser Gardens and with the smaller size of the venue the event took on a boutique atmosphere. Featuring the world's top athletes, the competition attracted thousands of spectators from Canada and around the world in addition to hundreds of skaters and members of the media. The spending of these visitors, along with that of the event organizers had a considerable economic impact on the city of London, which which is the subject of this report.

In measuring the economic impact of the World Figure Skating Championships, spectators at the event were surveyed as to their origin, length of stay, and spending in London, with the survey methodology and results being the subject of the next section. The event organizers also invested significantly in hosting the World Figure Skating Championships, as noted in Section 3. Finally, section 4 reports the STEAM-PRO[1] results from the combined expenditures of the athletes, spectators, capital improvements and the event organizers' operational expenditures. The appendices include more details about STEAM PRO, the economic impact assessment model used, and a glossary of terms.

[1]The 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 composition and spending of spectators at the 2013 World Figure Skating Championships was collected through the administration of a face-to-face intercept survey. The survey captured essential information to determine the origin of spectators attending the event and the expenditures of out-of-town visitors to the London region. The survey was conducted using iPod Touch PDAs running Survey Analytic's Survey Pocket software.[2]

Survey Results

A total of 477 visitor parties were approached on various competition days over the course of the event, with 460 parties agreeing to participate (a rejection rate of 4%). The overall sample of valid surveys found that around three-quarters of those intercepted (75%) or 343 visitor parties representing 769 visitors were from outside of London.[3]

Respondents to the survey were asked as to the average number of competitions that they attended during the World Figure Skating Championships, with the typical local spectator going to 5 competitions while out of town respondents went to an average of 7.1 competitions. This information, along with the overall attendance data was used to determine the total number of unique spectators attending the event. The net result is that the World Figure Skating Championships attracted 9,708 spectators, of which 6,525 were from outside of London.

Table 2.1 Attendance Calculations

Origin	Survey Share	Attendance	Events per person	Total Individuals
London	26%	15,971	5.02	3,183
GTA	8%	5,143	7.00	735
Other Ontario	32%	19,896	6.68	2,980
Other Canada	13%	7,985	8.07	990
US	13%	8,392	7.57	1,108
International	8%	5,008	7.03	713
Total	**100%**	**62,395**	**6.62**	**9,708**
Visitors	*74%*	*46,424*	*7.11*	*6,525*

[2]The survey and methodology were prepared in consultation with the "Guidelines for Measuring Tourism Economic Impact At Gated Festivals and Events", available at:
http://www.tourism.gov.on.ca/english/tourdiv/research/resources.htm

[3] The sample size of 769 visitors from a total of 6,525 visitors gives a statistically significant confidence interval of +/- 3.3%, 19 times in 20.

Visitor Spending

Out-of-town visitors were asked for details about their trip and expenditures while staying in London. While many GTA and regional residents either made day trip or stayed with friends and relatives in London, most interprovincial travellers stayed overnight in London for the competition. Those making day trips made an average of 4.3 trips to London while the average overnight visitor spent 6.3 nights in London for the competition.

Table 2.2 Accommodation Use

Accommodation Type	GTA	Other Ontario	Other Canada	US	International	Overall
Making day trips only	13%	23%	2%	2%	0%	12%
Staying in hotel in London	51%	47%	83%	89%	78%	64%
Staying with friends relatives	26%	24%	8%	5%	8%	16%
Staying in hotel not in London	8%	4%	7%	5%	11%	6%
Other	3%	2%	0%	0%	3%	1%
Avg. Day Trips	*4.5*	*4.3*	*4.3*	*3.5*	*5.0*	*4.3*
Avg. Nights in London	*5.8*	*5.6*	*6.7*	*6.0*	*7.3*	*6.1*

The different kinds of accommodations used are reflected in the overall spending patterns as illustrated in Table 2.3; those visitors who used hotels in London spent more in the city. Note that the expenditure figures below excludes the cost of the event tickets.

Table 2.3 Visitor Spending per Person

	GTA	Other Ontario	Other Canada	US	International	Average
Accommodation	$285.81	$361.42	$546.43	$619.46	$586.82	$464.51
Restaurants	$115.46	$123.24	$207.06	$211.55	$240.58	$162.79
Grocery / Other F&B	$23.85	$20.09	$26.33	$14.43	$51.01	$23.31
Recreation & Entertainment	$14.18	$7.91	$17.56	$20.48	$26.39	$14.33
Shopping	$43.20	$67.83	$56.91	$58.06	$101.70	$64.38
Transportation Spend	$48.49	$49.48	$63.65	$82.37	$55.39	$57.25
Total	**$530.97**	**$629.96**	**$917.94**	**$1,006.35**	**$1,061.89**	**$786.58**
Per person per night	*$90.92*	*$113.30*	*$137.21*	*$166.61*	*$144.87*	*$128.74*

Combining the attendance estimates of Table 2.1 with the average spending per person from Table 2.3 shows that spectators spent $5.0 million in London as a result of attending the World Figure Skating Championships.

Table 2.4 Aggregate Visitor Spending

	GTA	Other Ontario	Other Canada	US	International	Total
Visitors	*735*	*2,980*	*990*	*1,108*	*713*	*6,525*
Accommodation	$209,993	$1,077,141	$540,853	$686,346	$418,202	$2,932,536
Restaurants	$84,833	$367,299	$204,943	$234,390	$171,448	$1,062,912
Grocery / Other F&B	$17,520	$59,861	$26,063	$15,985	$36,352	$155,781
Recreation & Entertainment	$10,419	$23,560	$17,378	$22,690	$18,809	$92,856
Shopping	$31,740	$202,149	$56,332	$64,324	$72,478	$427,022
Transportation Spend	$35,624	$147,457	$63,000	$91,264	$39,473	$376,818
Total	$390,129	$1,877,466	$908,569	$1,114,999	$756,762	$5,047,925

Additional Spending Estimates

The spending result reported in Table 2.4 represents the spending made by spectators at the World Figure Skating Championships. There were a considerable number of other out of town visitors in attendance for the event including: participants, coaches, other national team members, ISU officials and judges, Skate Canada staff, observers, sponsors, suppliers, and members of the media. In total, these visitors accounted for an additional 10,000 person nights in London. While some of these visitors had their expenses covered by the event organizers, others did not (i.e. members of the media) thus their expenditures have also been included in the analysis.

3.0 Capital & Operational Expenditures

Capital

A number of capital improvements were made as a result of hosting the World Figure Skating Championships. For the purposes of this analysis, we included capital legacy projects that were specifically associated with hosting the competition and excluded others that would have occurred in the absence of the event (i.e. repaving)[4]. In total, capital legacy expenditures associated with the event totalled $1.8 million.

Operations

An analysis was also made of the operational expenditures made by the event organizers in hosting the 2013 World Figure Skating Championships. In addition to the event organizers, the City of London, Tourism London and the many sponsors of the event also invested to support the success of the event. The operational expenditures also include the costs associated with the 'Tree of Light' show and additional beautification efforts made by the City as a result of hosting the event.

While not included as a direct expenditure in the budget, the 2013 World Figure Skating Championships was supported by more than 500 volunteers and the success of the event was due in a large part to the efforts of this group.

[4] Projects included for the analysis include: Market lane upgrades, Downtown lighting enhancement, Tree purchase and installation, the fan celebration at Victoria Park, Street Furniture, Streetscape enhancement, expansion of downtown WiFi coverage, Way Finding Signage, and the Flags of the World display.

4.0 Economic Impact Results

The spending of spectators, participants, members of the media and the event organizers in hosting the event made as part of the 2013 World Figure Skating Championships totalled $20.7 million, generating an estimated net economic activity (GDP) of $23.2 million in the Province of Ontario, of which $17.2 million occurred in London. These expenditures supported $12.6 million in wages and salaries in the Province and an estimated 261 jobs, of which 213 jobs and $9.6 million in wages and salaries was in London.[5] The total economic activity (industry output) generated by the event was $42.6 million in the Province, with $32.1 million occurring in London.

The total tax revenues supported by the 2013 World Figure Skating Championships reached $8.1 million. Of this total, $3.7 million was attributable to the federal government while provincial tax revenues reached $2.9 million and municipal taxes were $1.5 million, of which $1.2 million was in London.

[5] Jobs reported in this study refers to the number of jobs, vs. full time equivalent (FTE: two people working half time would represent two jobs, or one FTE).

Table 4.1 Total Economic Impact

	Total Ontario	Local Area London	Rest of Ontario
Initial Expenditure	$20,741,876	$20,741,876	$0
Gross Domestic Product			
Direct Impact	$9,672,342	$9,672,342	$0
Indirect Impact	$8,289,310	$4,732,085	$3,557,225
Induced Impact	$5,266,347	$2,762,542	$2,503,805
Total Impact	$23,227,998	$17,166,969	$6,061,030
Industry Output			
Direct & Indirect	$31,123,909	$26,077,715	$5,046,194
Induced Impact	$11,426,672	$5,991,262	$5,435,409
Total Impact	$42,550,581	$32,068,977	$10,481,604
Wages & Salaries			
Direct Impact	$4,515,593	$4,515,593	$0
Indirect Impact	$4,889,531	$3,371,442	$1,518,089
Induced Impact	$3,235,523	$1,688,624	$1,546,899
Total Impact	$12,640,647	$9,575,659	$3,064,988
Employment (Full-year jobs)			
Direct Impact[6]	87.9	87.9	-
Indirect Impact	102.2	75.6	26.6
Induced Impact	71.0	49.5	21.6
Total Impact	261.1	212.9	48.2
Taxes (Total)			
Federal	$3,680,268	$2,672,643	$1,007,625
Territorial	$2,937,973	$2,180,584	$757,389
Provincial	$1,481,173	$1,210,094	$271,079
Total	$8,099,414	$6,063,321	$2,036,093

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

Appendix 1: Economic Impact Methodology – STEAM

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.