

Canadian Sport Tourism Alliance



Alliance canadienne du tourisme sportif

2009 Canada Summer Games

Economic Impact Assessment

May 2010

The following analysis provides the economic impact of the 2009 Canada Summer Games, hosted in Prince Edward Island from August 15-29, as generated by the Sport Tourism Economic Assessment Model, Professional version.

Economic Impact Assessment Funding Partner

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1.0 Background

The Canada Games, held every two years, and alternating between winter and summer, are Canada's largest reoccurring multi-sport event. Prince Edward Island hosted the 2009 summer edition of the Games from August 15-29. The first week was centered in Summerside with events staged throughout the western half of the province and the second week was based in Charlottetown with events in the eastern part of the province. As the best in their age group, young competitors come to the Games having trained many years to be among those chosen to represent their respective province or territory. Since 1967, nearly 50,000 athletes have participated in the Games, with hundreds of thousands having engaged in try-outs and qualifying events. Over 90,000 coaches, officials and volunteers have been directly involved in planning and staging the Games over the 40 year history of the event. 2009 was no exception, with over 4,400 athletes, coaches and managers came to Prince Edward Island to compete in 18 sports, supported by more than 5,800 volunteers. In addition to the influx of athletes and coaches to the Island, as well as the considerable number of parents and other spectators who came to support them, the Canada Games also left behind a considerable infrastructure legacy, with a number of venues throughout the Island being upgraded as part of the Games.

The objective of this study is to measure the economic impact of the 2009 Canada Summer Games (CSG) on the province of Prince Edward Island which arises from the spending of the visitors to the Island, as well as the money spent in hosting the event and upgrading facilities across P.E.I. The next section of the report provides details of the intercept survey that was conducted in order to ascertain both the number of visitors and the expenditures that visitors made while in Prince Edward Island for the event. Section 3 provides details of operational and capital expenditures that further contributed to the impact of the event, while Section 4 presents the STEAM-PRO¹ results from the combined expenditures of operations, capital and visitor expenditures. Section 5 concludes the document with a summary of the findings. The appendices include additional information, including detailed survey results, more information regarding the economic impact model, a glossary of the terms used and a copy of the survey.

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 composition and spending of spectators and participants at the 2009 Canada Summer Games 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 Prince Edward Island.² The survey was conducted using Palm PDAs running Techneos Entryware software.³ A copy of the survey instrument used can be found in Appendix 3.⁴

Survey Results

A total of 371 visitor parties were approached at various events over the course of the Games, with 335 parties agreeing to participate (a rejection rate of 9.4%). Of this group, 17 parties had been previously surveyed (5.1%), yielding a total of 319 valid surveys. The overall sample of valid surveys found nearly two-thirds (64.6%), or 206 visitor parties representing 641 visitors were from out-of-province. The majority of those interviewed were family members of participants (54%) or other spectators (27%; see Figure 2.1 for details). Surveys were conducted at a total of 17 different sports over the two week period, with the sampling plan being designed to ensure that different provincial teams were captured over the course of the event.

The visitors interviewed at the 2009 Canada Summer Games were from across the country and every province and territory was represented in the sample. With the Games being held in PEI, the number of visitors from Atlantic Canada was relatively high (Figure 2.2).

A key calculation in conducting the economic impact assessment was the determination of the overall number of non-participating visitors attending the Games, as attendance figures were not collected at each of the individual sports. Attendance was determined through the use of ticket sales data. Table 2.1 illustrates the ticket sales calculations. For the calculation of attendance, the ticket sales of medal round events and opening and closing ceremonies were not included as the survey found that there were no parties which purchased tickets in these categories without also purchasing a one or two week pass, a day ticket, or a single event ticket. Additionally, spectators who purchased some form of week pass did not purchase day passes or single event tickets. Finally, the survey found that there was some overlap between same-day ticket purchasers and single event ticket purchasers (3.2% of PEI day or single event ticket holders surveyed had both kinds of tickets, as did 7.1% of out of province visitors). In total, the combined ticket sales data and survey results suggest that there were a total of 22,640 unique

² With the event taking place at various locations throughout Prince Edward Island, for the purposes of this report, a 'visitor' is defined as someone from outside of the province.

³ For more information please visit www.techneos.com.

⁴ 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>

spectators at the 2009 Canada Summer Games, of which 51% were from out of province.⁵ Data provided by the Confederation Centre box office found that 78% of pre-event tickets sold were to out of province residents, which was supported by the survey. In addition, 78% of all one and two week passes were purchased by out of province residents (i.e. the sum of the first three lines in the columns two and three of Table 2.1). The difference in the proportion of visitors is due to the fact that a significantly larger share of PEI residents were consumers of the single event passes and day tickets, which could only be purchased at the venue gates. Finally, note that some of the events did not require a ticket (e.g. cycling, triathlon), thus the number of tickets purchased per spectator may be less than one.

Table 2.1 Spectator Attendance Calculations

	Ticket Sales	Reported survey tickets		Share of survey tickets		Tickets per spectator (survey)		Estimated Attendance		
		Total	PEI	Visitor	PEI	Visitor	PEI	Visitor	PEI	Visitor
Two Week Pass	162	31	42	42%	58%	1.0	1.0	69	93	
Week 1 Pass	2,097	40	188	18%	82%	1.0	1.0	368	1,729	
Week 2 Pass	1,626	58	230	20%	80%	1.0	1.0	327	1,299	
Day Pass	3,002	54	89	38%	62%	0.8	0.9	1,453	1,862	
Single Event Pass	17,302	119	72	62%	38%	1.2	0.9	8,940	6,500	
								Total	11,157	11,482

⁵ This sample size of 206 out of town responses representing 641 out-of-town spectators yields a statistically significant confidence intervals of +/- 3.7 % for statistics reporting all visitors. For the expenditure results, the valid sample size is 187 parties representing 592 spectators, yielding a confidence interval of +/- 4.0%. The higher proportion of locals overall as compared to the initial intercept sample is likely due to the fact that out of town spectators attended more competitions than locals, thus were intercepted more often.

Figure 2.1 Role

(What is your primary role at the Canada Summer Games?)

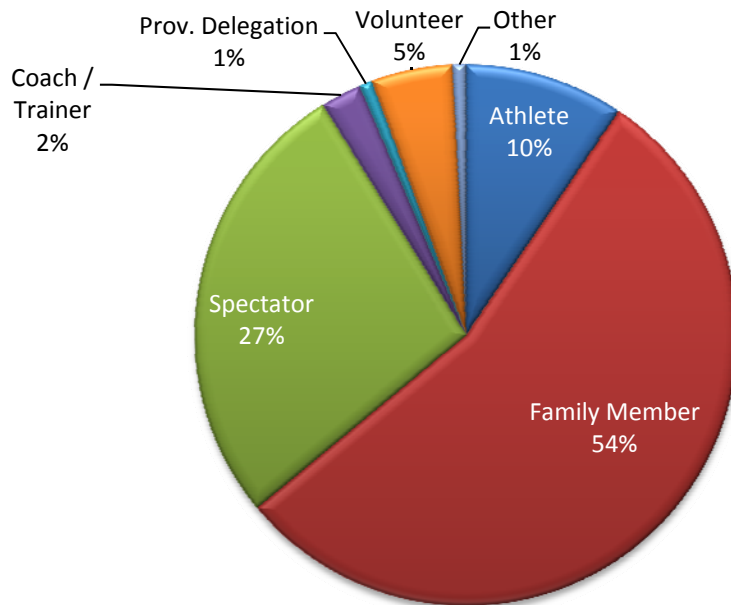
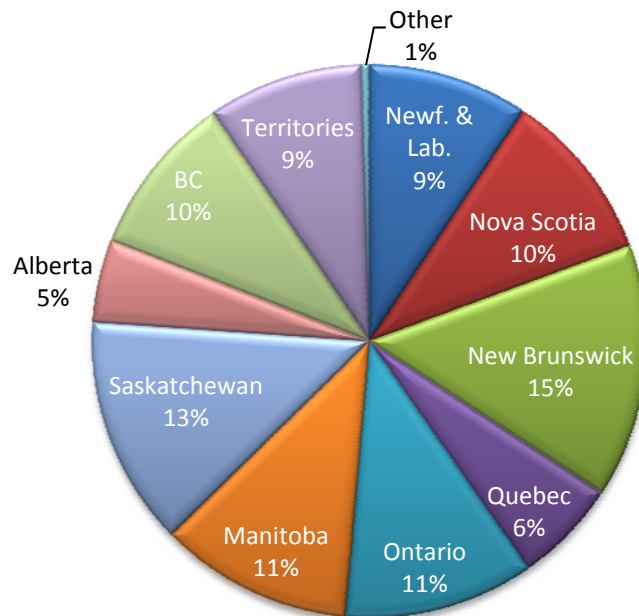


Figure 2.2 Visitor Origin

(Where are you from?)



Visitor Expenditures

Spectators

Out-of-town visitors were asked about their expenditures while in Prince Edward Island. The average visitor to the 2009 Canada Summer Games spent \$494 per person, or \$73 per person per night. Family members of participants, who were the primary off Island spectators at the event spent considerably more than visitors with who were taking part in the Games (i.e. participants, coaches, managers, etc.). The survey results from the 'other' category also suggest that some coaches elected to stay in hotels rather than the accommodation provided by the event organizers. Expenditures for Chef de Mission staff were collected through a separate survey issued directly to the individual provincial delegations. Note that the per person expenditures for the Chef de Mission staff were considerably higher than for other visitors, however the typical mission staff member stayed on the Island for 3 weeks or more.

Table 2.2 Average Visitor Expenditures (per person, by role)

	Family Members	Other Spectators	Coaches / Officials	Athletes	Chef de Mission
Accommodation	\$241.28	\$197.26	\$97.50	\$0.00	\$1,467.74
Restaurant / Concession	\$136.62	\$96.58	\$101.88	\$29.28	\$919.35
Grocery / Other F&B	\$41.91	\$28.41	\$11.50	\$3.64	\$217.74
Event Tickets	\$60.43	\$31.58	\$24.68	\$5.19	\$0
Other Rec. & Ent.	\$30.24	\$24.11	\$33.00	\$5.58	\$275.81
Retail Clothing	\$49.16	\$25.07	\$42.25	\$46.17	\$90.32
Other Shopping	\$14.00	\$41.78	\$0.00	\$21.39	\$74.19
Car Rental	\$46.20	\$8.22	\$12.50	\$0.00	\$677.42
Vehicle Expenses (gas, repairs)	\$35.89	\$27.40	\$9.75	\$0.00	\$134.19
Taxi	\$2.27	\$0.00	\$0.50	\$0.00	\$0
Public Transit	\$0.22	\$0.05	\$0.00	\$0.30	\$0
<i>Total</i>	\$658.24	\$480.45	\$333.55	\$111.55	\$3,856.77

Chef de Mission

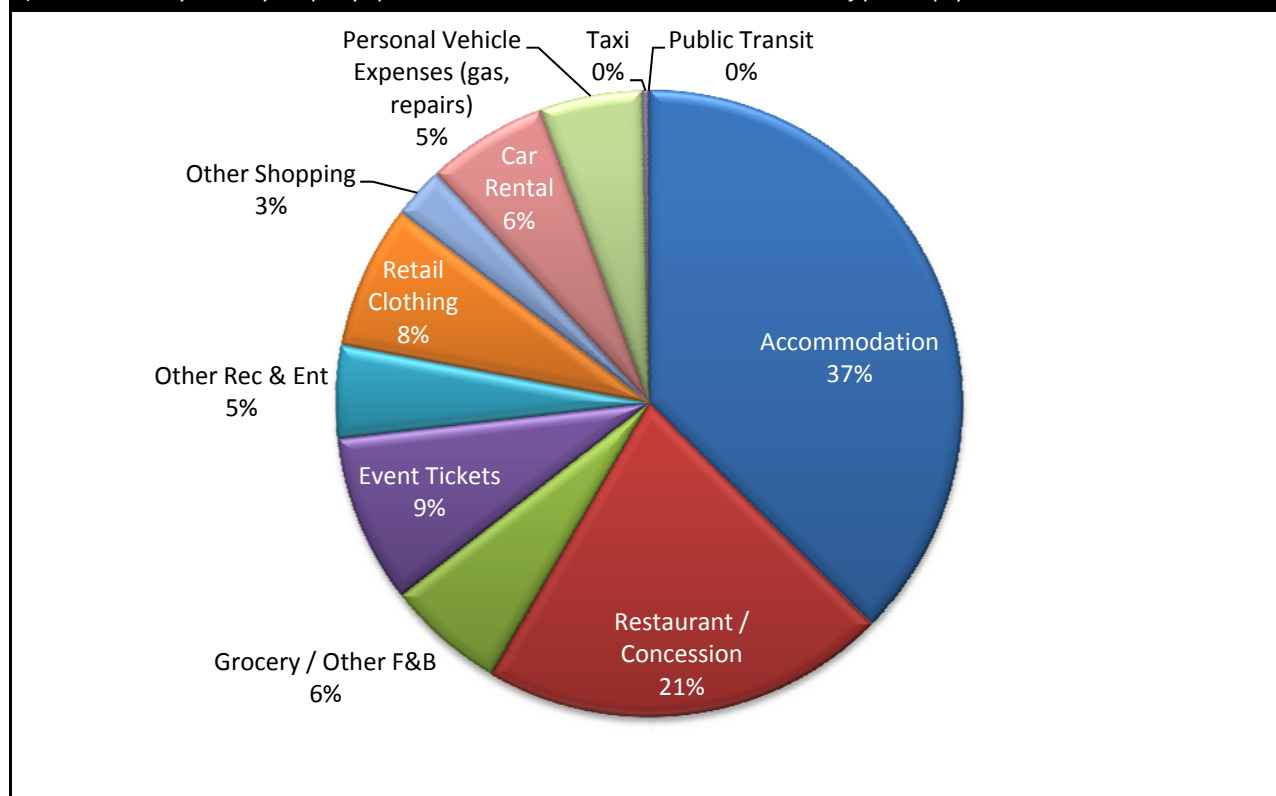
In addition to the athletes and other sport participants, each province sends a team to which acts as the liaison between the event organizers and the participants. In addition to the intercept survey, the provincial delegations were surveyed separately, and their results have been included in Tables 2.2 and 2.3. Their average expenditure per person tends to be quite high as the average length of stay was 18 to 20 days in P.E.I.

Table 2.3 Total Visitor Expenditures

	Family Members	Other Spectators	Coaches / Officials	Athletes	Chef de Mission	Total
Accommodation	\$1,848,248	\$753,987	\$119,828	\$0	\$290,613	\$3,012,675
Restaurant / Concession	\$1,046,554	\$369,139	\$125,204	\$105,623	\$182,032	\$1,828,553
Grocery / Other F&B	\$321,066	\$108,595	\$14,134	\$13,139	\$43,113	\$500,047
Event Tickets	\$462,935	\$120,690	\$30,326	\$18,718	\$0	\$632,669
Other Rec. & Ent.	\$231,616	\$92,154	\$40,557	\$20,139	\$54,610	\$439,075
Retail Clothing	\$376,549	\$95,819	\$51,925	\$166,530	\$17,884	\$708,707
Other Shopping	\$107,258	\$159,699	\$0	\$77,152	\$14,690	\$358,799
Car Rental	\$353,931	\$31,416	\$15,363	\$0	\$134,129	\$534,838
Vehicle Expenses (gas, repairs)	\$274,957	\$104,720	\$11,983	\$0	\$26,570	\$418,231
Taxi	\$17,379	\$0	\$615	\$0	\$0	\$17,994
Public Transit	\$1,713	\$209	\$0	\$1,070	\$0	\$2,993
Total	\$5,042,206	\$1,836,428	\$409,933	\$402,371	\$763,641	\$8,454,580

Figure 2.2 Total Visitor Expenditure by Expense Category (Family & Other Spectators)

(How much will you and your party spend in Prince Edward Island over the duration of your trip?)



3.0 Operations & Capital Expenditures

Operations

The 2009 Canada Summer Games Host Society invested significantly to produce a high-caliber event. The Host Society was responsible for providing meals and accommodations for more than 4,400 athletes, coaches, and managers, who competed in 18 sports events around the Island. Additionally, the Host Society was responsible for hosting 500 VIPs, 140 Games observers, 170 sport observers, 150 medical staff and 498 officials. Other operational expenditures included salaries of the host Society staff, information technology, spending on volunteers, community relations, and other expenses. In addition, operations expenditures that were made by members of the media in reporting and broadcasting the event, as well as the expenditures associated with the Federal/Provincial/Territorial Sport Ministers' meeting that is affiliated with the Canada Games have also been included as part of this assessment. Finally, adjustments were made to the operating budget to exclude out-of-province expenditures⁶ and interprovincial travel of the athletes. In total, operational expenditures at the 2009 Canada Games totaled \$20.0 million, with the details shown in Table 3.1.

The Canada Summer Games were supported by more than 5,800 volunteers, who collectively contributed in excess of 90,000 hours of their time, and greatly contributed to the success of the Games.

⁶ These expenditures include the Canada Games Council's events rights fees as well as the cost of travel to the 2007 Canada Winter Games in Whitehorse, including a reception that was hosted in the Yukon. The total exclusions came to \$168,000.

Table 3.1 CSG Operational Expenditures

Category	Amount
Salaries, Fees and Commissions	\$4,655,008
Advertising Services	\$351,619
Professional Services	\$1,552,130
Financial Services	\$55,355
Insurance	\$131,933
Rent	\$575,641
Laundry and Cleaning Services	\$0
Other Services ⁷	\$2,284,206
Communication	\$138,627
Energy and Other Utilities	\$5,099
Guest Room Supplies	\$0
Office Supplies	\$232,454
Kitchen Supplies	\$0
Other Supplies ⁸	\$3,076,766
Repairs	\$28,354
Food & Beverage (Participants, Host Society, VIP)	\$2,114,283
Accommodations (Participants, Host Society, VIP)	\$2,962,838
Merchandise and Retail	\$714,878
Personal Travel	\$577,248
Transportation and Storage	\$544,234
Municipal Tax	\$981
Total	\$20,001,655

⁷ Other Services includes costs related to security services, medical services, broadcasting services, set-up of the opening and closing ceremonies as well as set-up costs at the various sporting venues, design services, ticketing services, printing services, and communications services such as web-site design and IT support.

⁸ Similarly, Other Supplies includes expenditures such as the miscellaneous items required for fitting out the sporting venues, miscellaneous IT goods, Games and accreditation office goods such as lanyards, supplies for the opening and closing ceremonies such as fireworks, medical supplies, and other miscellaneous items.

Capital

Considerable capital expenditures were also associated with the 2009 Canada Games on Prince Edward Island. The Host Society contributed to the capital improvements of a number of facilities throughout the Island, the most substantial being the development of the new track and field facility at the University of PEI in Charlottetown. In addition, a number of other facilities were affiliated with the Games, such as the Montague Wellness Centre and Credit Union Place in Summerside, however for the purposes of this analysis, their inclusion in the analysis has been limited to the contribution actually made by the Canada Games Host Society. In total, the capital expenditures associated with the Games totaled \$10.9 million (Table 3.2).

Table 3.2 Capital Expenditures

Project	CSG Share
CARI Swimming and Diving Infrastructure	\$199,400
Ball field Upgrades (Cardigan)	\$166,500
Upgrade Memorial Field to Canada Games Standards	\$340,635
Victoria Park Tennis Court Development	\$229,000
Montague Wellness Centre	\$100,000
Fabrication Shop	\$462,649
O'Leary Recreational Fields	\$361,955
Summerside Canada Games Venue	\$2,210,619
Canada Games Track & Field Facility	\$6,793,332
Total	\$10,864,090

4.0 Economic Impact Results

The 2009 Canada Summer Games provided a significant economic impact to the province of Prince Edward Island. The combined capital, operations, and visitor expenditures directly associated with the event totaled \$38.7 million⁹, resulting in an increase in net economic activity (GDP) of \$37.7 million in the Province. These expenditures supported \$27.0 million in wages and salaries in the Province through the support of 778 jobs.¹⁰ The total economic activity (Industry Output) generated by the event was \$81.5 million throughout Prince Edward Island.

Considerable tax revenues were also produced by the event, totaling \$14.0 million. The event supported federal government tax revenues of \$6.4 million, while an additional \$6.1 million in taxes accrued to the Province of Prince Edward Island. Moreover, \$1.5 million in taxes was supported in municipalities throughout the province.

With the operational expenditures accounting for the largest portion of the overall budget, expenditures in this category generated the largest economic impact in the Province, supporting \$20.8 million in net economic activity. The expenditures of visitors to the Games were also substantial, supporting \$9.3 million in GDP. Note that the actual impact of visitors to the event was higher; however, as the event organizers were responsible for a significant share of the costs for Games' participants, these impacts are captured in the operations component of the report. Capital investment on the Island as a result of hosting the Games was also significant, with the investment directly attributable to hosting the Games totaling \$10.9 million. However, as P.E.I. needs to import some of the construction materials from other provinces, the net economic activity is somewhat smaller than the initial expenditure, totaling \$7.6 million.

⁹ The total of \$38.1 million differs from the sum of the individual components reported in the previous sections as the visitor expenditures on event tickets are have been excluded for the purposes of calculating the total expenditure. This exclusion is made in order to avoid double counting with the ticketing revenues that are included in the operations budget.

¹⁰ Jobs reported in this study refer 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 - Prince Edward Island				
	Visitors	Operations	Capital	Total
Initial Expenditure	\$7,821,908 ¹¹	\$20,001,655	\$10,864,090	\$38,687,653
Gross Domestic Product				
Direct Impact	\$3,831,800	\$4,655,990	\$2,971,942	\$11,459,732
Indirect Impact	\$2,489,236	\$10,767,527	\$2,754,146	\$16,010,910
Induced Impact	\$2,952,159	\$5,413,453	\$1,866,547	\$10,232,159
Total Impact	\$9,273,195	\$20,836,971	\$7,592,636	\$37,702,801
Wages & Salaries				
Direct Impact	\$3,027,190	\$4,655,008	\$1,901,277	\$9,583,475
Indirect Impact	\$1,736,661	\$6,934,357	\$1,863,642	\$10,534,660
Induced Impact	\$2,180,415	\$3,316,652	\$1,389,500	\$6,886,567
Total Impact	\$6,944,267	\$14,906,017	\$5,154,419	\$27,004,702
Employment (Full-year jobs)				
Direct Impact	128.8	85.3	48.1	262.2
Indirect Impact	45.2	223.9	48.7	317.8
Induced Impact	58.2	101.4	38.3	197.8
Total Impact	232.2	410.6	135.1	777.8
Total Taxes				
Federal	\$1,972,742	\$3,217,022	\$1,230,894	\$6,420,658
Provincial	\$2,037,671	\$3,007,853	\$1,070,987	\$6,116,512
Municipal	\$623,716	\$621,832	\$227,747	\$1,473,295
Total	\$4,634,129	\$6,846,707	\$2,529,629	\$14,010,465
Industry Output				
Direct & Indirect	\$12,818,375	\$30,530,054	\$16,911,510	\$60,259,939
Induced Impact	\$5,951,153	\$11,568,459	\$3,740,391	\$21,260,003
Total Impact	\$18,769,527	\$42,098,513	\$20,651,901	\$81,519,941

¹¹ This number differs than the total reported in Table 2.3 as expenditures on event tickets were excluded in order to avoid double counting; these revenues are included in the operations budget.

5.0 Conclusion

The 2009 Canada Summer Games were a significant technical and organizational success, highlighting the achievements of some of Canada's top young athletes. Due to the geographic size of Prince Edward Island, the Games were also unique in that they were the first Canada Games to be hosted by a province as a whole. To this end, the Games received tremendous support from local residents through the efforts of the more than 5,800 volunteers and the support of an estimated 11,000 spectators from the Island. In addition, with more than 15,000 visitors coming to the Province as participants or spectators at the Games, and in combination with the capital and operational expenditures, the total spending generated by the Games was \$38.7 million. The resultant increase in net economic activity (GDP) was \$37.7 million throughout the province. The total industry output (or gross economic activity) supported by the event was \$81.5 million, supporting 778 jobs and \$27.0 million in wages and salaries throughout the Province. Tax revenues supported by spending associated with the Canada Games totaled \$14.0 million.

Appendix 1: Detailed Survey Results

Week of Survey

	Number	Percent
Week 1	158	42.5
Week 2	213	57.5
Total	371	100

Hello, my name is _____, and I am conducting a survey as to the economic impact of the 2009 Canada Summer Games on the behalf of the event organizers. Can I please speak to someone in your travel party who is knowledgeable with your trip planning and expenditures?

	Number	Percent
Yes	336	90.6
No	35	9.4
Total	371	100

Have you or anyone in your party previously been surveyed at this event?

	Number	Percent
Yes	17	5.1
No	319	94.9
Total	336	100

Are you from P.E.I. or from out of province?

	Number	Percent
From P.E.I.	113	35.4
Out of province	206	64.6
Total	319	100

Where are you from?

Origin	Parties	Party Members
Newf. & Lab.	15	60
Nova Scotia	22	64
New Brunswick	32	95
Quebec	13	39
Ontario	19	71
Manitoba	20	72
Saskatchewan	26	86
Alberta	16	31
BC	20	61
Territories	20	58
Other	3	3
Total	206	640

What is the primary role of your immediate travel party?

Role	PEI	Out of Province
Athlete	8	78
Athlete Family member	38	455
Other Spectator	171	75
Coach / Manager / Trainer	2	20
Provincial Delegation / CDM	0	7
Volunteer	41	3
Other	4	3
Total	264	641

Nights in P.E.I.

Role	Nights in P.E.I.
Family Member	6.7
Other Spectator	7.2
Total	6.8

Appendix 2: 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 3: 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.

Appendix 4: 2009 Canada Summer Games Survey

Canada Games 2009 v1

Intro1

1 Week

- Week 1
- Week 2

Week1

2 Location of Survey

- Basketball
- Cycling (TT)
- Cycling (Crit)
- Cycling (MTB)
- Cycling (Road)
- Diving
- Rowing
- Rugby
- Sailing
- F Soccer
- Softball
- Tennis
- Triathlon
- Beach VBall
- M Wrestling

Week2

3 Week 2 Location

- Athletics
- Baseball
- Canoe - Kayak
- Golf
- M Soccer
- Open Swim
- Swimming
- Volleyball
- F Wrestling

Intro

4 Hello, my name is _____. I am conducting a survey on the behalf of the Canada Games. Can I please speak to the member in your party who is the most knowledgeable with your party's trip planning and expenditures.

- Yes
- No

Previous

5 Have you or anyone in your travel party been surveyed regarding your trip to the Canada Games?

- Yes
- No

Local

6 Are you from PEI or from out of province?

- PEI
- Out of Province

FSA

7 Which province are you from?

- Newf. & Lab.
- Nova Scotia
- New Brunswick
- Quebec
- Ontario
- Manitoba
- Saskatchewan
- Alberta
- BC
- Territories
- Other _____

Localptysize

8 Including yourself, how many people are in your visitor party?

Answer: _____

Ptysize

9 Including yourself, how many people are in your (immediate travel) party?

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10+
- Define ITP

Role

10 Please provide a breakdown of the role of everyone in your visitor party. How many people are:

- Athlete _____
- Athlete Family member _____
- Other Spectator _____
- Coach / Manager / Trainer _____
- Chef de Mission _____
- Provincial Delegation _____
- Volunteer _____
- Other _____

Numspec

11 (if one or more athletes, coaches, officials only) How many non-participant family members / friends came to PEI with you?

Answer: _____

Bothweeks1

12 Will you be attending games / events in week 2?

- Yes
- No

Bothweeks2

13 Did you attend any games / events in week 1?

- Yes
- No

Ticktype

14 Over the course of the 2009 Canada Summer Games, how many tickets has your party / will your party purchase?

- Two Week Pass _____
- Week 1 Pass _____
- Week 2 Pass _____
- Day Pass _____
- Single Game Tickets _____
- Medal Round Pass _____
- Medal Round Rush Tickets _____

MedalRoundtix

15 Which sports have you / will you buy medal round tickets for?

- Baseball
- Basketball
- Rugby
- Soccer
- Beach Volleyball
- Indoor Volleyball
- Softball

OthWeek1Sport

16 In addition to [@Week1], what other sports have you / will you attend?

- | | |
|---|--------------------------------------|
| <input type="checkbox"/> Basketball | <input type="checkbox"/> Softball |
| <input type="checkbox"/> Cycling (TT) | <input type="checkbox"/> Tennis |
| <input type="checkbox"/> Cycling (Crit) | <input type="checkbox"/> Triathlon |
| <input type="checkbox"/> Cycling (MTB) | <input type="checkbox"/> Beach VBall |
| <input type="checkbox"/> Cycling (Road) | <input type="checkbox"/> M Wrestling |
| <input type="checkbox"/> Diving | |
| <input type="checkbox"/> Rowing | |
| <input type="checkbox"/> Rugby | |
| <input type="checkbox"/> Sailing | |
| <input type="checkbox"/> F Soccer | |

OthWeek2Sport

17 In addition to [@Week2], what other Week 2 sports have you / will you attend

- Athletics
- Baseball
- Canoe - Kayak
- Golf
- M Soccer
- Open Swim
- Swimming
- Volleyball
- F Wrestling

daytrip

18 Are you making day trips or staying overnight away from home?

- Day Trip
- Overnight Trip

numdays

19 Over the course of the 2009 Canada Summer Games, how many day trips have you / will you make?

Answer: _____

Totnight

20 In total, how many nights will you be away from home?

Answer: _____

PEInight

21 In total, how many nights will be spent in PEI?

Answer: _____

NightsComm

22 How many of these nights will be spent in commercial accommodation (Hotel, Motel, B&B)?

Answer: _____

Ptyverify1

23 (parties of 7 or more only) Are you able to report the spending for all [@Pysize] members of your party for the duration of your stay in PEI, or would a different party size be more appropriate?

- Yes, I can report total spending for all [@Pysize] members of my party
- No, a different party size would be better

ptysize2

24 Please enter a more appropriate party size:

Answer: _____

Spendintro

25 Now think about the money that you and your travel party have spent in PEI on this trip. How much will your party spend on each of the following items? If your trip is not yet over, please provide your best estimate as to what you and your entire travel party will spend for your entire stay in PEI. How much was spent on the following:

Spendcat

26 Spending per party per trip:

- Accommodation _____
- Restaurant / Concession _____
- Grocery / Other F&B _____
- Event Tickets _____
- Other Rec & Ent _____
- Retail Clothing _____
- Other Shopping _____
- Car Rental _____
- Personal Vehicle Expenses (gas, repairs) _____
- Taxi _____
- Public Transit _____

Importance

27 On a scale of 0 to 10, with 10 indicating that the 2009 Canada Summer Games were the only reason you came, how important was the event in your decision to come to PEI?

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

Timing

28 Did you change the timing of a trip you would normally take to PEI in order to attend the 2009 Canada Summer Games?

- Yes
- No

Lengthen

29 Did you lengthen the duration of a trip to PEI in order to attend the Canada Summer Games?

- Yes
- No

Lengthdays

30 By how many days?

Answer: _____

Thankyou

31 Thanks for your time, this completes the survey. (Surveyor Comments)
