
KELOWNA 2008 BC SUMMER GAMES

ECONOMIC IMPACT ANALYSIS

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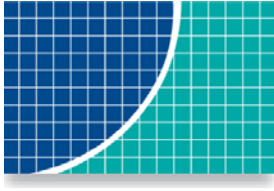
Prepared for the:

BC Games Society

Prepared by the:

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September 2008



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September 21, 2008

Mr. Kelly Mann, CEO
BC Games
200-990 Fort Street,
Victoria, BC V8V 3K2

Dear Kelly:

Re: 2008 Kelowna Summer Games Economic Impact

This report describes the findings of our analysis of the economic impacts of the 2008 Kelowna Summer Games held in late July 2008. The report contains expenditure estimates by the Games' competitors, spectators and volunteers. Also included are estimates of the spending by the Games' organizing societies and other contributors.

Thank you, once again, for involving the Economic Planning Group in this analysis.

Yours sincerely,
Economic Planning Group

G David Hall, P.Phys.
Partner

SUMMARY OF FINDINGS

Based on the research conducted for this event, the Kelowna 2008 BC Summer Games created direct economic impact in the area of nearly \$2.6 million. Nearly three-quarters (74%) of this impact was created by the spending of Games participants, while one-quarter was contributed by Games Society organizers.

- Direct spending within these two categories was as follows:

Spending by participants	\$1,902,000
Spending by organizers	<u>\$682,100</u>
Total	\$2,584,100

- Direct spending by the participants was as follows:

Competitors	\$537,000
Spectators	\$1,092,000
Volunteers	<u>\$273,000</u>
Total	\$1,902,000

- Direct spending in Kelowna by Games organizers and other agencies was as follows:

Kelowna 2008 BC Summer Games Society	\$612,000
BC Games Society	\$36,000
VIPs/Media/Scouts	\$27,400
Air Canada/Jazz	<u>\$6,700</u>
Total	\$682,100

Spending by Games participants occurred over the four days of the Games during the last weekend of July. Spending by the Games organizers occurred over a longer period of time - prior to, during, and after the Games.

The demand survey technique used to measure the economic impact of the Games provided a defensible analysis process. Based on the survey sample sizes, the results are considered accurate to within +/- 7% for the participant survey, +/-7% for the spectator survey, and +/-10% for volunteers.

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1.0 INTRODUCTION

1.1 BACKGROUND

The Kelowna area hosted the 2008 BC Summer Games from July 24 to 27, 2008. The Games took place from Thursday to Sunday, and included 21 different sports (three with separate boys and girls competitions) held in 23 venues, located in and around Kelowna. The Games involved 2,800 competitors (athletes, coaches and officials) from the eight provincial sport zones. The host communities provided nearly 2,700 local volunteers who assisted in administrating the Games. Numerous businesses and agencies in the community also donated a great deal of in-kind support.

Hosting a BC Games produces a surge of economic activity in the host community. This impact is created through spending by both the local Games organization and by the BC Games Society – and also by spending of Games competitors, spectators and volunteers. The BC Games Society periodically sponsors analysis aimed at quantifying the economic impact created by the Games. The Economic Planning Group (EPG) was retained to conduct this analysis. EPG has conducted several previous BC Games economic studies over the years, including the BC Summer Games in Victoria and Port Alberni, Winter Games in Kimberley-Cranbrook and Quesnel, plus four Northern BC Winter Games.

1.2 OBJECTIVES

The primary purpose of this study was to estimate the economic impact of the Kelowna 2008 BC Summer Games on the host community. Economic impact was measured by calculating direct spending in the local area. Impacts were estimated by the local spending of the:

- Kelowna 2008 BC Summer Games Society
- BC Games Society
- VIPs/Media
- Athletes/Coaches/Officials
- Spectators
- Volunteers

A second objective was to compare the findings of this direct survey technique with the results produced by a predictive computer model. The model was the Sport Tourism Economic Assessment Model (STEAM) operated by the Canadian Sport Tourism Alliance.

1.3 METHODOLOGY

Two sources of information were used to collect economic impact information, and the resulting findings are additive creating a spending total. The two sources are described below:

- **Participant (Competitor, Spectator and Volunteer) Spending**

This spending analysis technique involved collecting information on individuals within the three participant categories who spent money in the community as a result of their involvement in the Games. These individuals included the competitors (athletes/coaches/officials), spectators and volunteers. A sample of individuals from each of these participant groups was interviewed about their Games related spending.

A group of employees and clients of CBD Network Inc. of Kelowna assisted in the research by conducting the interviews. These individuals were trained by the partner of the Economic Planning Group on the Saturday morning of the Games weekend. Instructions were provided on respondent selection and interviewing procedures. Each person was also given clipboards and questionnaires to record the interview results for a sample of athletes, spectators and volunteers. Interviewers were assigned to most of the sport venues.

Completed questionnaires were collected and edited, the spectator turnover ratios calculated, and the sport zones coded. Each questionnaire was numbered and the information entered into survey analysis software. Frequency distributions and averages were produced for each question for each of the three categories of respondents.

- **Agency Spending**

This spending category involved local expenditures made by the two organizing societies involved with the Games, namely, the Kelowna 2008 BC Summer Games Society and the BC Games Society. This procedure was designed to capture all local spending by representatives of these administrative bodies related to hosting the Games. These figures were accessed from society representatives using society budget records. Also included in the totals was the spending of VIP's, out of town media, and Air Canada/Jazz.

Expenditures of the organizing society were tallied by category and totalled. In cases where spending occurred outside the Kelowna area (such as purchases of materials from outside suppliers), these amounts were not included.

2.0 COMPETITORS/OFFICIALS EXPENDITURES

2.1 ANALYSIS METHOD

The number of persons participating in the Games was obtained from the Games organizers. Total spending was estimated by interviewing a sample of these athletes/coaches/officials and asking them about their Games related expenditures. In order to capture a representative sample of competitors/officials, interviewers were stationed at most of the sport venues plus the athlete food facility located at the Kelowna Curling Rink. A total of 204 questionnaires were completed, representing 7.3% of the athletes, coaches and officials.

Average spending was calculated from this athletes survey sample and was multiplied by the total number of competitors to obtain total spending. A total of 2,800¹ individuals (athletes/officials/coaches) participated in the Games. The distribution of competitors/officials by sport is tabulated in Table 2-1. A listing of the number of participants by sport zone is tabulated in Table 2-2.

¹ Final count of participants as per Participant Zone Summary, dated August 5, 2008

Table 2-1: Number of Competitors by Sport and Type

Sport	Athletes	Coaches	Officials	Total
Athletics	241	33	29	303
Athletics - Special Olympics	15	4	1	20
Baseball	107	21	10	138
Basketball - Boys	80	12	14	106
Basketball - Girls	80	17	2	99
Cycling/BMX	42	13	1	56
Diving	35	9	8	52
Equestrian	33	11	11	55
Field Hockey - Girls	94	12	13	119
Golf	59	17	11	86
Lacrosse - Box	143	23	13	179
Lacrosse - Field	111	15	8	134
Rugby - Boys	122	16	9	147
Rugby - Girls	55	14	0	69
Sailing	49	13	7	69
Shooting Sports	19	8	10	37
Soccer - Boys	96	22	10	128
Soccer - Girls	96	22	13	131
Softball - Boys	93	23	8	124
Softball - Girls	120	32	9	161
Synchronized Swimming	49	10	13	72
Towed Water Sports	40	12	17	69
Triathlon	24	7	3	34
Volleyball - Beach	56	14	7	77
Volleyball - Boys	90	17	9	116
Volleyball - Girls	96	17	1	114
Wrestling	82	12	11	105
Grand Total	2127	426	248	2800
Percent	76%	15%	9%	100%

Source: BC Games, Kelowna 2008 BC Summer Games, Participant Sport Zone Summary, August 5/08

Table 2-2: Number of Athletes/Coaches by Sport and Sport Zone

Sport Zone	Kootenays	Thompson- Okanagan	Fraser Valley	Fraser River Delta	Vancouver- Squamish	Van. Island- Central Coast	North West	Cariboo- North East	Total
Zone Number	1	2	3	4	5	6	7	8	
Sport									
Athletics	10	33	53	20	40	58	27	33	274
Athletics - Special Olympics	0	5	8	0	2	4	0	0	19
Baseball	14	19	19	19	19	19		19	128
Basketball - Boys	11	11	11	11	12	12	11	13	92
Basketball - Girls	12	12	12	12	12	12	12	13	97
Cycling/BMX	6	10	9	5	8	10	0	7	55
Diving	5	4	14	4	11	5	0	0	44
Equestrian	2	10	8	5	5	8	4	2	44
Field Hockey - Girls	16	18	18	18	18	18	0	0	106
Golf	8	10	10	10	8	10	10	10	76
Lacrosse - Box	20	22	22	20	19	22	22	19	166
Lacrosse - Field	0	21	21	22	21	22	0	19	126
Rugby - Boys	0	42	24	24	24	24	0	0	138
Rugby - Girls	0	14	14	11	0	16	0	14	69
Sailing	2	13	13	3	14	11	2	4	62
Shooting Sports	0	8	0	0	0	7	7	5	27
Soccer - Boys	15	15	15	15	15	28	15	0	118
Soccer - Girls	15	15	14	14	30	15	15	0	118
Softball - Boys	0	19	17	20	0	29	15	16	116
Softball - Girls	20	20	38	20	18	18	0	18	152
Synchronized Swimming	7	13	5	9	9	16	0	0	59
Towed Water Sports	6	9	0	6	9	13	0	9	52
Triathlon	6	7	2	1	7	8	0	0	31
Volleyball - Beach	10	14	15	10	10	11	0	0	70
Volleyball - Boys	14	16	25	13	12	14	0	13	107
Volleyball - Girls	14	28	14	14	14	14	0	15	113
Wrestling	0	10	16	12	14	26	0	16	94
Grand Total	213	418	417	318	351	450	140	245	2553

Source: BC Games Society, Kelowna 2008 BC Summer Games, Participant Sport Zone Summary, August 5/08

2.2 COMPETITORS/OFFICIALS CHARACTERISTICS

- **Distribution of Competitor/Officials**

Nine out of ten competitors/officials interviewed (90%) were from outside the Kelowna area. The distribution, and the number and percent interviewed, was as follows:

Table 2-3: Competitor/Officials Interviewed by Sport Zone

Zone	Name	Number Interviewed	% of Total Interviewed	Total Competitors
1	Kootenays	10	6%	213
2	Thompson-Okanagan	14	8%	418
3	Fraser Valley	43	24%	417
4	Fraser River Delta	34	19%	318
5	Vancouver-Squamish	13	7%	351
6	Vancouver Island-Central Coast	38	21%	450
7	North West	14	8%	140
8	Cariboo-North East	16	9%	245
	Officials	-	-	248
	No Response	22		
Total		204	7%	2800

Source: BC Games Society and EPG survey results

Note: The 2,800 total represents the actual athletes and coaches by region, plus 248 regionally unallocated officials.

- **Athletes/Coaches Interviewed by Sport**

A total of 204 competitors/officials, representing 7% of the total were interviewed, representing most sports. Table 2-4 depicts the distribution of persons interviewed by sport.

Table 2-4: Athletes/Coaches Interviewed by Event

Sport/Activity	Number Interviewed	Athletes/Coaches
Athletics	37	293
Baseball	11	128
Basketball	14	189
Cycling/BMX	0	55
Diving	0	44
Equestrian	4	44
Field Hockey	0	106
Golf	10	76
Lacrosse – Box	13	166
Lacrosse - Field	13	126
Rugby	28	207
Sailing	9	62
Shooting	9	27
Soccer	4	136
Softball	18	268
Synchronized Swimming	4	59
Triathlon	0	31
Volleyball (Beach and Indoor)	6	290
Water Towed Sports	5	52
Wrestling	0	94
No Response		
Total	204	2,553

Source: EPG survey results

- **Competitor/Officials Description**

Nine out of ten competitors (91%) were staying in Kelowna for the entire four-day duration of the Games. The average length of stay was 3.9 days. (Although the Games officially lasted four days, some competitors arrived the day before the Games began or left before the Games officially ended, when their event was over.)

Most persons interviewed (71%) were taking part in the Games as athletes. Another 19% were coaches, 8% as officials, and the remaining 2% either as managers or chaperones.

Nearly all of the competitors (95%) indicated that they had attended the Opening Ceremonies.

Well over half of athletes (62%) had friends or relatives come to the event to watch them compete. The average number of spectating friends and relatives per athletes was 4.9. It is noted that many of these spectators were watching more than one competitor, so the participant related totals are not additive. Distribution of the number of spectators watching friends and relatives compete is as follows:

– None	39%
– 1 spectator	7%
– 2 spectators	13%
– 3 spectators	12%
– 4 - 5 spectators	12%
– 6 - 9 spectators	8%
– 10 or more spectators	8%

2.3 COMPETITORS/OFFICIALS EXPENDITURES

- **Expenditures by Category**

Most competitors (86%) said they had spent, or would be spending, some money while participating in the Games. Most competitors indicated that these expenditures covered only their own spending, while the remainder indicated that their expenditures covered persons in addition to themselves ranging from two to five persons. For analytical purposes, all expenditures have been converted to per-person totals.

Table 2-5 illustrates the distribution of expenditures by dollar ranges and by expenditure category as a percentage. Average expenditures by category are also tallied.

Table 2-5: Competitors/Officials Expenditures by Category

Category	Percentage by Expenditure Group												Avg. Exp.
	\$0	\$1-10	\$11-20	\$21-30	\$31-40	\$41-50	\$51-60	\$61-70	\$71-80	\$81-90	\$91-100	\$101-+	
Accom.	82	2	1	1	0	2	0	0	1	0	1	13	\$52.39
Automobile	73	3	3	1	3	1	1	1	0	0	5	7	\$33.50
Concession	45	29	11	4	3	5	0	1	1	0	1	2	\$13.19
Gifts	53	6	11	8	6	5	2	2	4	1	2	2	\$22.51
Local Trans.	92	3	2	1	0	1	0	0	0	0	1	1	\$3.31
Groceries	73	9	5	3	3	3	0	1	0	0	2	2	\$12.15
Restaurant	60	11	7	1	2	5	0	2	0	0	4	8	\$30.13
Rec./Ent.	85	6	4	0	1	2	0	0	0	0	1	1	\$5.60
Shopping	81	4	1	2	2	2	0	0	0	0	4	4	\$18.54
Other	93	2	1	0	0	0	0	0	0	0	0	3	\$6.45
Total	15	3	7	10	3	7	12	3	4	3	4	29	\$191.96

Source: Interviews with 204 Games competitors/expenditures.

Notes:

1. Figures are Row Percentages (i.e., they add to 100% horizontally and have been rounded).
2. Numbers in the Average Expenditure column are the average dollar amounts spent in each expenditure category (including those that spent nothing).
3. The total expenditure is slightly different than the sum of the individual category totals as several questionnaires had a total spending only but no breakdown.

The average amount of money spent per person was **\$191.96**. Average spending ranged from a few dollars to several hundreds of dollars, with non-local residents spending appreciably more than local residents. The difference between local resident and non-local resident spending is as follows:

- Average expenditures for non-local residents \$198.72
- Average expenditure for local residents \$133.45

- **Total Expenditures**

The total amount of money spent by competitors was estimated to be **\$537,000** calculated as follows:

– Average expenditure per person	\$191.96
Times	x
– Number of competitors/officials	<u>2,800</u>
Equals	=
– Total s competitors/officials pending	\$537,000

The average pre diem spending was approximately **\$49.22** (i.e., \$191.96/3.9).

Competitors/officials spent money within a number of expenditure categories. Accommodation and automobile expenses were the biggest expenditure categories, followed by restaurant meals and gifts/souvenirs.

Distribution of the \$537,000 competitor spending by category was as follows:

Table 2-6: Distribution of Competitors/Officials Expenditures by Category

Expenditure Category	Average Amount Spent	Percent Distribution	Expenditure by Category
Accommodation	\$52.59	26.6%	\$142,652
Automobile	\$33.50	16.9%	\$90,870
Concession	\$13.19	6.7%	\$35,778
Gifts and Souvenirs	\$22.51	11.4%	\$61,059
Local Transportation	\$3.31	1.7%	\$8,978
Groceries	\$12.15	6.1%	\$32,957
Restaurant Meals	\$30.13	15.2%	\$81,729
Recreation/Entertainment	\$5.60	2.8%	\$15,190
Retail Shopping	\$18.54	9.4%	\$50,290
Other	\$6.45	3.3%	\$17,496
Total	\$197.97	100.0%	\$537,000

Notes:

1. There is a slight difference in average spending totals due to some questionnaires having only spending totals with no breakdown by category.
2. Accommodation is a significant category as coaches and officials stayed in commercial accommodation.

3.0 SPECTATOR EXPENDITURES

3.1 ANALYSIS METHOD

To calculate spectator spending, the estimated total number of spectators was multiplied by the average spending per spectator. Average spending was obtained from interviews with a sample of 203 spectators, who were interviewed at a variety of sport venues.

There are no spectator counts at BC Games since the events are open to the public and un-gated. Consequently, the number of spectators must be estimated. The peak number of spectators at each venue was determined by periodic counts over the course of the Games. Input to this peak at-one-time spectator count estimate was also provided by the venue hosts and sport chairpersons. It is noted that this figure represented the estimated number of dedicated spectators and does not include athletes who were watching other competitors. The figure is designed to represent the best estimate of the at-one-time peak attendance.

However, this figure double counts persons who visited more than one event. The analysis process used here needs to work with the total number of “unique” spectators in order to eliminate counting one person multiple times as they attend different events. The “spectator turnover ratio” is intended to eliminate double counting (i.e., counting the same person at more than one event). This ratio was determined by asking spectators to indicate the number of events they had watched or were planning to watch. The turnover ratio becomes the calculated average of the number of events (different sports) being watched divided by the number of days. By definition, this index must be equal to or greater than one.

The turnover ratio, generated from the sample of spectators interviewed, was applied to the total number of spectators recorded for each venue. This approach produced an estimate of the total number of unique spectators who attended events at the Games.

This is represented by the formula:

Number of Unique Spectators = Peak Number of Spectators / Spectator Turn-Over Ratio

3.2 SPECTATOR COUNTS

- **Number of Spectators**

The peak number of spectators who attended each venue is illustrated below. As noted, these estimates were made by periodic counts and by estimates of the sport chairpersons. The sample represents approximately 5% of the total number of unique spectators.

Table 3-1: Spectators Interviewed and Peak Spectator Counts by Sport

Sport	Spectators Interviewed	Maximum At-one-Time Spectators
Athletics	30	300
Athletics - Special Olympics		Included above
Baseball	36	325
Basketball - Boys	15	150
Basketball - Girls		Included above
Cycling	1	165
Diving	0	50
Equestrian	28	400
Field Hockey - Girls	5	175
Golf	9	150
Lacrosse - Box		100
Lacrosse - Field	9	115
Rugby - Boys	12	400
Rugby - Girls		Included above
Sailing	2	40
Shooting Sports	1	20
Soccer - Boys	5	300
Soccer - Girls		Included above
Softball - Boys	11	600
Softball - Girls		Included above
Synchronized Swimming	3	100
Towed Water Sports	12	200
Triathlon		30
Volleyball - Beach	14	300
Volleyball - Boys		400
Volleyball - Girls		Included above
Wrestling	2	200
Not Specified	8	
Grand Total	203	4,520

Source: EPG survey of spectators, plus counts and estimates by venue chairmen for spectator totals.

The total peak at-one-time spectator count was 4,520. The calculated spectator turnover ratio was 1.15, or expressed differently, each spectator attended 1.15 different events.

Consequently, the total number of unique individual spectators was estimated to be approximately **3,930** (i.e., $4,520 / 1.15 = 3,930$).

3.3 SPECTATOR CHARACTERISTICS

- **Spectator Origin**

One-third of the spectators interviewed (34%), were from the Kelowna area. The non-local spectators interviewed came from throughout the eight BC sport zones plus non-BC origins. The distribution is as follows:

Table 3-2: Spectators Interviewed by Sport Zone

Zone	Name	Number Interviewed	% of Total Interviewed
1	Kootenays	7	5%
2	Thompson-Okanagan	28	22%
3	Fraser Valley	28	22%
4	Fraser River Delta	18	14%
5	Vancouver-Squamish	15	12%
6	Vancouver Island-Central Coast	21	16%
7	North West	1	1%
8	Cariboo-North East	5	4%
	Other	6	4%
	No Response	74	NA
Total		203	100%

Note: 22% allocation of Zone 2 Spectators results from the large number (74) of “No Response”

- **Reason for Visiting the Area**

The BC Summer Games were the main reason for nearly all (98%) of the non-local residents being in the area.

- **Duration of Stay**

Nearly four out of ten spectators (38%) were attending the Games for all four days, and 27% were attending the Games for three days. The average length of stay in the Kelowna area was 2.9 days. The distribution of length of stay was as follows:

– 1 day	14%
– 2 days	21%
– 3 days	27%
– 4 days	38%

- **Games Participation**

Nearly four out of ten the spectators attended the Opening Ceremonies (38%). Eight of ten spectators (81%) were attending the Games to watch a friend or relative compete. The average number of persons they were watching was 2.4 persons. This figure is the average of those who came to watch one person (usually the person's son or daughter), and those who came to watch an entire team compete.

The average size of the spectator parties was 3.3 persons, and the distribution of spectator party size was as follows:

– 1 spectator	12%
– 2 spectators	31%
– 3 spectators	21%
– 4 spectators	18%
– 5+ spectators	18%

3.4 SPECTATOR EXPENDITURES

- **Distribution of Expenditures**

Most spectators (89%) spent money on goods and/or services while attending the Games. The following chart indicates the distribution of per person spending in ten dollar increments in a variety of categories.

Table 3-3: Spectator Expenditures by Category

Category	Percentage by Expenditure Group												Avg. Exp.
	\$0	\$1-10	\$11-20	\$21-30	\$31-40	\$41-50	\$51-60	\$61-70	\$71-80	\$81-90	\$91-100	\$101+	
Accommodation	62	1	1	1	1	0	1	1	1	1	4	28	\$88.80
Automobile	35	13	11	12	7	9	1	1	2	1	5	6	\$32.62
Concession	34	32	20	7	2	3	0	0	1	0	1	1	\$12.55
Gifts	59	6	13	9	3	4	1	0	0	0	3	4	\$18.44
Local Trans.	97	1	1	1	0	0	0	0	0	0	0	0	\$0.44
Groceries	57	8	9	7	4	5	0	0	2	0	3	6	\$28.13
Restaurant	38	5	7	5	3	10	2	4	3	1	12	11	\$48.62
Rec./Ent.	82	2	2	5	1	3	0	0	0	0	1	4	\$11.88
Shopping	64	2	4	9	2	9	1	1	1	0	4	5	\$31.15
Other	92	3	2	0	0	1	1	0	1	0	1	1	\$3.07
Total	7	5	7	6	3	4	2	6	1	2	2	57	\$277.78

Source: Interviews with 203 Games spectators

Notes:

1. Figures are Row Percentages (i.e., they add to 100% horizontally).
2. Numbers in the Average Expenditure column are the average dollar amounts spent in each expenditure category.
3. The total expenditure is slightly different than the sum of the individual category totals as several questionnaires had a total spending only but no breakdown.

- **Total Expenditures**

Spectators attending the Games had an average expenditure of **\$277.78** during their stay in the area. This figure is based on the following averages of locals and non-locals:

- Average spending by non-local residents \$385.87
- Average spending by local residents \$71.00

Applying the average expenditures to the total number of spectators results in a spectator spending total of **\$1,092,000** (i.e., \$277.78 x 3,930).

The per diem spending was **\$95.79** (i.e., \$277.78/2.9).

- **Distribution of Spectator Spending**

Spectators spent money on a variety of items within a number of expenditure categories. Accommodation was the largest category responsible for nearly one-third (32%) of spectator expenditures. Restaurant meals and automobile costs/retail shopping were the next largest expenditure categories, responsible for 18% and 11% respectively.

Distribution of the \$1,092,000 total by category was calculated as follows.

Table 3-4: Distribution of Spectator Expenditures

Expenditure Category	Average Amount Spent	Percent Distribution	Expenditure by Category
Accommodation	\$88.80	32.2%	\$351,721
Automobile	\$32.62	11.8%	\$129,202
Concession	\$12.55	4.6%	\$49,708
Gifts and Souvenirs	\$18.44	6.7%	\$73,038
Local Transportation	\$0.44	0.2%	\$1,743
Groceries	\$28.13	10.2%	\$111,418
Restaurant Meals	\$48.62	17.6%	\$192,575
Recreation/Entertainment	\$11.88	4.3%	\$47,055
Retail Shopping	\$31.15	11.3%	\$123,380
Other	\$3.07	1.1%	\$12,160
Total	\$275.70	100.0%	\$1,092,000

Note: There is a slight difference in the average spending totals and the expenditure by category due to a few questionnaires that had total spending only with no breakdown.

4.0 VOLUNTEER EXPENDITURES

4.1 ANALYSIS METHOD

As with competitors and spectators, volunteers were asked about their Games participation and related spending. A total of 2,684 volunteers were registered and assigned duties to assist with administration of the Games (Source: BC Games Society). Approximately 4% or 105 were interviewed throughout the duration of the Games, at a variety of venues.

Volunteers were asked about the volunteer category in which they were working, the number of days they would be volunteering, whether they had any friends or relatives attending the Games, and their spending. Average spending per person was multiplied by the total number of volunteers to estimate total spending by all volunteers.

4.2 VOLUNTEER CHARACTERISTICS

Volunteers were involved in the Games in a number of different capacities. The distribution of persons interviewed was as follows:

Table 4-1: Volunteers Interviewed by Category

Category	Number of Volunteers	Number Interviewed	Percent Interviewed
Accommodation	281	10	10%
Administration	85	7	7%
Ceremonies	226	1	1%
Communications	51	0	0%
Food Services	458	4	4%
Friends of the Games	6	0	0%
Medical Services	207	5	5%
Promotions	64	2	2%
Protocol	110	13	13%
Registration and Results	131	2	2%
Security	184	15	14%
Special Events	43	4	4%
Sports	718	28	27%
Transportation	114	5	5%
Others	6	8	8%
Total	2,684	105	100%

Notes:

1. The total number of volunteers by category was 2,684. (Source: BC Games Society)
2. Total number of volunteers interviewed by category was 105.

Most volunteers (57%) were working at the Games for three days or more, while the average duration was 2.5 days. The distribution was as follows:

- one day 11%
- two days 32%
- three days +57%

Most volunteers (71%) were not a friend or relative of a Games participant.

4.3 VOLUNTEER EXPENDITURES

- **Volunteer Spending Ranges**

Most volunteers bought some goods and/or services while assisting with the Games. Table 4-2 illustrates the distribution of expenditures in percentages, by category.

Table 4-2: Volunteer Expenditures by Category

Category	Percentage by Expenditure Group												Avg. Exp.
	\$0	\$1-10	\$11-20	\$21-30	\$31-40	\$41-50	\$51-60	\$61-70	\$71-80	\$81-90	\$91-100	\$101+	
Accommodation	98	1	0	0	0	0	0	0	0	0	0	2	\$23.68
Automobile	46	19	14	4	2	7	0	1	0	0	3	3	\$19.15
Concession	61	19	7	5	2	1	0	0	1	1	0	0	\$7.52
Gifts	89	1	2	0	0	3	0	0	1	0	2	1	\$6.70
Local Trans.	98	2	0	0	0	0	0	0	0	0	0	0	\$0.16
Groceries	89	3	1	0	0	1	0	0	0	0	1	4	\$9.89
Restaurant	81	2	4	4	1	1	0	0	1	0	1	4	\$21.83
Rec./Ent.	98	0	0	0	0	1	0	0	0	0	1	0	\$1.61
Shopping	93	0	1	1	0	0	0	0	0	0	3	1	\$5.86
Other	96	0	0	0	0	2	0	0	0	0	0	2	\$5.38
Total	27	14	15	11	10	2	5	0	1	0	3	12	\$101.59

Source: Survey of 105 volunteers.

Notes:

1. Figures are Row Percentages (i.e., they add to 100% horizontally).
2. Numbers in the Average Expenditure column are the average dollar amounts spent in each expenditure category.
3. The total expenditure is slightly different than the sum of the individual category totals as several questionnaires contained a total spending figure only but no breakdown.

The average expenditure by each volunteer over the duration of the Games was **\$101.59**.

The total expenditure of the 2,684 volunteers was approximately **\$273,000** (i.e., \$101.59 x 2,684).

The per diem spending was **\$40.64** (i.e., \$101.59/2.5).

- **Distribution of Volunteer Spending**

Volunteers spent money on a variety of items within a number of expenditure categories. Accommodation (23%), restaurant meals (21%) and automobile expenses (19%) were the largest individual categories. (It is noted that there were a number of non-resident volunteers who stayed in commercial accommodation. The relatively high automobile transportation expenditures were due to travel to the events located throughout the Kelowna area.)

Distribution of the \$273,000 total is allocated as follows:

Table 4-3: Distribution of Volunteer Expenditures

Expenditure Category	Average Amount Spent	Percent Distribution	Expenditure by Category
Accommodation	\$23.68	23.3%	\$63,516
Automobile	\$19.15	18.8%	\$51,365
Concession	\$7.52	7.4%	\$20,171
Gifts and Souvenirs	\$6.70	6.6%	\$17,971
Local Transportation	\$0.16	0.2%	\$429
Groceries	\$9.89	9.7%	\$26,528
Restaurant Meals	\$21.83	21.4%	\$58,554
Recreation/Entertainment	\$1.61	1.6%	\$4,318
Retail Shopping	\$5.86	5.8%	\$15,718
Other	\$5.38	5.3%	\$14,431
Total	\$101.78	100.0%	\$273,000

Source: Survey of 105 Volunteers

Note: Totals differ slightly from the sum of the columns as some questionnaires recorded only a total figure with no breakdown.

5.0 GAMES SOCIETY / OTHER EXPENDITURES

5.1 KELOWNA 2008 BC SUMMER GAMES SOCIETY

- **Games Revenue**

The Kelowna 2008 BC Summer Games Society was responsible for organizing and staging the Games. The Society had a budget of \$680,000 to host the Games. Revenues were categorized as follows:

Table 5-1: 2008 Summer Games Operating Budget

Category	Budget	Percent
BC Games Society Grant	\$600,000	88%
Municipal Grant	\$60,000	9%
Friends of Games Cash	\$15,000	2%
Tobacco Free Sport	\$5,000	1%
Total	\$680,000	100%

Source: BC Games Society

- **Expenditure Breakdown**

The spending of this money to purchase goods and services had an impact on the local economy since most was spent in the Kelowna area. The following is the budgeted expenditure allocation by category.

Table 5-2: 2008 Games Society Operating Expenditures

Category	Budget	Percent
Accommodation	\$15,000	2%
Administration	\$172,000	25%
Ceremonies	\$50,000	7%
Communications	\$30,000	4%
Food Services	\$130,000	19%
Friends of the Games	\$10,000	1%
Medical	\$3,000	0%
Promotions	\$30,000	4%
Protocol	\$65,000	10%
Reg. & Results	\$15,000	2%
Security	\$3,000	0%
Special Events	\$45,000	7%
Sport	\$70,000	10%
Transportation	\$42,000	6%
Total	\$680,000	100%

Source: Kelowna 2008 Summer Games Society, Administration Director, August 2008

The total local Games society spending was approximately \$680,000. It is important to note that the majority of these expenditures were made locally. Estimates made by the Games administration indicate that approximately 90% of the expenditures would have been made locally. Therefore, the estimated “local” spending was approximately **\$612,000**.

5.2 BC GAMES SOCIETY

BC Games Society employees incurred travel related expenditures as part of their assistance to the Kelowna Games organizers. Information supplied by BC Games indicated several person-trips had been made to Kelowna, prior to and during the Games. These trips included expenditures for accommodations, meals, vehicle rentals and miscellaneous costs, and totalled approximately **\$36,000**.

5.3 VIPs and MEDIA

- **Partner/Miscellaneous Agencies**

A number of representatives of other agencies were present in Kelowna for the Games. These included provincial government representatives, corporate partners, partner BC Games, sport partners, plus representatives of the Global TV television network. The tally of nights spent by category is as follows:

<u>Agencies</u>	<u>Nights</u>
- VIPs	105
- Global TV	25
- Contractors	7
Total	137

The estimated per diem for accommodation, food, transportation and entertainment is \$200 per person-night. This results in an estimated expenditure of **\$27,400**.

- **Air Canada/Jazz**

Air Canada/Jazz is contracted by the BC Games Society to fly in athletes and officials from the more remote sport zones. These costs are on top of the bus charters that are used to bring the more close in competitors.

There were a total of nine charter plane landings in Kelowna. Locally paid fees included landing fees, ground handling charges and fuel for an estimated total of **\$6,700**.

5.4 SYNOPSIS OF GAMES SOCIETY AND OTHER EXPENDITURES

The total expenditures of these other agencies were **\$682,100**. The following is a summary of Games societies' expenditures plus VIP/media expenditures.

- Kelowna 2008 BC Summer Games Society	\$612,000
- BC Games Society	\$36,000
- VIPs/Media	\$27,400
- Air Canada/Jazz	<u>\$6,700</u>
Total	\$682,100

6.0 “STEAM” ESTIMATES

6.1 BACKGROUND

The Canadian Sport Tourism Alliance is the sponsoring agency of an economic impact model known as the Sport Tourism Economic Assessment Model (STEAM). This model was developed several years ago in association with Sport Canada, the Canadian Tourism Commission, the Canadian Tourism Research Institute/The Conference Board of Canada and the Canadian Association of Convention and Visitor Bureaus. The model is a variation on the Conference Board’s Tourism Economic Assessment Model (TEAM) calibrated to reflect the unique aspects of sporting events.

This model was created in order to provide a predictive tool for users to estimate the economic impact of sporting events. The model is national in scope as one of its purposes is to compare the economic contributions of events in different locations throughout Canada. Consequently, the model uses standardized visitor expenditure profiles developed from survey data collected by the Canadian Sport Tourism Alliance. Attributes used in the model’s analysis include the person’s role in the event (spectator, participant or media), distance travelled, age and length of stay.

The model was designed as a predictive process to allow the user to estimate the likely economic impact of a sporting event. Data input to the model is based on templates, which require estimates for a number of values descriptive of the event. The model is web-based which allows the member agency user to access the model electronically.

The model allows users to provide information on four spending categories, including:

- Tourist Spending
- Capital Spending
- Operations Spending
- Combined Spending

The model uses the input information to create estimates for a number of outputs including:

- Total initial expenditure
- Gross Domestic Product
- Wages and Salaries
- Employment (FTEs)
- Industry Output
- Taxes

Within each of these categories, the model produces estimates of the direct, indirect and induced effects. Estimates are made for the selected city, the rest of the province, and the total province.

The purpose of using STEAM in the context of the 2008 BC Summer Games was to compare the outputs of the model against the findings of the direct survey approach described in this report. As described above, STEAM produces a variety of statistics descriptive of the event's economic impact. The BC Games primary data gathering approach produces just one comparable number - namely, direct spending. (STEAM then uses the direct spending number to calculate the other values.)

The analysis type selected from the STEAM menu of options was the category titled "tourist spending" as this category included spending by competitors and spectators, two groups that were included in the survey. The survey provided detailed information on most of the variables required to run the model. Based on this survey information collected of Games participants, the STEAM templates were filled out. The model was then run and the results produced.

6.2 FINDINGS

STEAM produces a range of estimates as described earlier, however, the one number of interest was direct spending. In the survey approach, this figure is derived by multiplying the average expenditure by the number of participants (in this case competitors and spectators). In the STEAM approach, a series of inputs are required and the model calculates the direct spending estimate.

The direct spending estimates produced by the model are significantly different than the estimates provided by the primary data gathering survey technique used for this analysis.

The findings for spending by competitors and spectators are as follows:

- BC Games survey approach	\$1,629,000
- STEAM estimate	\$782,000
- Percent Difference	48%

The reasons for this large discrepancy are uncertain, however, some possible explanations are as follows:

- STEAM uses national spending averages, which may differ from BC factors.
- STEAM uses expenditure data from 2005, while the direct survey method reflects 2008 values.

- BC Games experience a significant non-local spectator contingent, mainly comprised of the parents of competitors. These individuals are typically staying in commercial accommodation and generate significant per diem expenditures. STEAM may not be calibrated to accommodate this situation.
- Because Kelowna is a very popular summer vacation destination, a portion of spectator families (and competitors) extended their stay in Kelowna after the Games. These expenditures were captured in the survey, but may not be reflected in STEAM calculations.

Further testing of BC Games participant spending against STEAM calculated values may provide additional insights into the reasons for the discrepancies.

7.0 CONCLUSIONS

Based on the survey data collected for this event, the Kelowna 2008 BC Summer Games created direct economic impact in the area of nearly \$2.6 million. Nearly three-quarters (74%) of this impact was created by the spending of Games participants, while one-quarter was contributed by Games Society organizers.

- Direct spending within these two categories was as follows:

Spending by participants	\$1,902,000
Spending by organizers	<u>\$682,100</u>
Total	\$2,584,100

- Direct spending by the participants was as follows:

Competitors/Officials	\$537,000
Spectators	\$1,092,000
Volunteers	<u>\$273,000</u>
Total	\$1,902,000

- Direct spending in Kelowna by Games organizers and other agencies was as follows:

Kelowna 2008 BC Summer Games Society	\$612,000
BC Games Society	\$36,000
VIPs/Media/Scouts	\$27,400
Air Canada/Jazz	<u>\$6,700</u>
Total	\$682,100

Spending by Games participants occurred over the four days of the Games during the last weekend of July. Spending by the Games organizers occurred over a longer period of time - prior to, during, and after the Games.

The demand survey technique used to measure the economic impact of the Games provided a defensible analysis process. Based on the survey sample sizes, the results are considered accurate to within +/- 7% for the participant survey, +/-7% for the spectator survey, and +/-10% for volunteers.

APPENDIX

APPENDIX

ATHLETE QUESTIONNAIRE

SPECTATOR QUESTIONNAIRE

VOLUNTEER QUESTIONNAIRE

APPENDIX

KELOWNA 2008 BC SUMMER GAMES

ATHLETE SURVEY

Activity _____ Location _____ Fri. Sat. Sun.

- 1. Do you live in the Kelowna area: Yes (GO TO #4) No
2. If no, where is your home? (Community) _____ [Sport Zone ____]
3. How many days in total will you be spending in the area as a result of attending these Games? _____ days

- 4. Which sports/events/activities have you attended or will you be attending?
Friday 1 _____ 2 _____ 3 _____
Saturday 1 _____ 2 _____ 3 _____
Sunday 1 _____ 2 _____ 3 _____
Opening Ceremony Yes / No

- 5. In what capacity are you taking part?
Participant Official Coach Other _____

- 6. Have friends or relatives come to the Games to watch you? Yes How many? ____
No

- 7. Have you purchased, or will you be purchasing, any goods or services while either visiting the area or attending the Games? Yes No

- 8. How much do you estimate you and your party will spend in total in the area during the Games on the following items? (Enter amounts to nearest dollar.)
How many persons are covered by the expenditures? _____ persons.

Table with 4 columns: Item, Amount (\$), Item, Amount (\$). Rows include Accommodation, Automobile and Gas, Concession, Gifts and Souvenirs, Local Transportation, Groceries, Restaurant Meals, Recreation/Entertainment, Retail Shopping, Other, and Total.

APPENDIX

KELOWNA 2008 BC SUMMER GAMES

SPECTATOR SURVEY

Activity _____ Location _____ Fri. Sat. Sun.

- 1. Do you live in the Kelowna area? Yes (GO TO #4) No
2. If no, where is your home? (Community) _____
3. Are these Summer Games your prime reason for visiting the area today? Yes No Not sure/Don't know
4. How many days will you be spending at these Games? _____ days
5. Which sports/events/activities have you attended or will you be attending?

Friday 1 _____ 2 _____ 3 _____
Saturday 1 _____ 2 _____ 3 _____
Sunday 1 _____ 2 _____ 3 _____
Opening Ceremony Yes / No

- 6. Have you come to watch friends or relatives? Yes How many? _____ No
7. How many people, including yourself, are in your spectator party? _____
8. Have you, or will you be, purchasing any goods or services while either visiting the area or attending the Games? Yes No
9. How much do you estimate you and your party will spend in total in the area during the Games on the following items? (Enter amounts to nearest dollar.)
How many persons are covered by the expenditures? _____ persons

Accommodation \$ _____ Groceries \$ _____
Automobile and Gas \$ _____ Restaurant Meals \$ _____
Concession \$ _____ Recreation/Entertainment \$ _____
Gifts and Souvenirs \$ _____ Retail Shopping \$ _____
Local Transportation \$ _____ Other _____ \$ _____
Total \$ _____

APPENDIX

KELOWNA 2008 BC SUMMER GAMES

VOLUNTEER SURVEY

Activity_____	Location_____	Fri. <input type="checkbox"/>	Sat. <input type="checkbox"/>	Sun. <input type="checkbox"/>
---------------	---------------	-------------------------------	-------------------------------	-------------------------------

1. In which volunteer capacity are you working?

- | | | | |
|----------------------|--------------------------|------------------------|--------------------------|
| Accommodation | <input type="checkbox"/> | Promotions | <input type="checkbox"/> |
| Administration | <input type="checkbox"/> | Protocol | <input type="checkbox"/> |
| Ceremonies | <input type="checkbox"/> | Registration & Results | <input type="checkbox"/> |
| Communications | <input type="checkbox"/> | Security | <input type="checkbox"/> |
| Food Service | <input type="checkbox"/> | Special Events | <input type="checkbox"/> |
| Friends of the Games | <input type="checkbox"/> | Sport | <input type="checkbox"/> |
| Medical Services | <input type="checkbox"/> | Transportation | <input type="checkbox"/> |
| | | Others | <input type="checkbox"/> |
- _____

2. How many days will you spend working at these Games? _____ days

3. Are you a friend or relative of any of the participants (athletes or officials), in the Games? Yes No

4. How much do you estimate you will spend during the Games on the following items?
(Please record only expenditures that you have made, or will make, as a result of the Games?)

Accommodation	\$_____	Groceries	\$_____
Automobile and Gas	\$_____	Restaurant Meals	\$_____
Concession	\$_____	Recreation/Entertainment	\$_____
Gifts and Souvenirs	\$_____	Retail Shopping	\$_____
Local Transportation	\$_____	Other _____	\$_____
		Total	\$_____

Thank you for your assistance.