
NANAIMO

2014 BC SUMMER GAMES

ECONOMIC IMPACT ANALYSIS

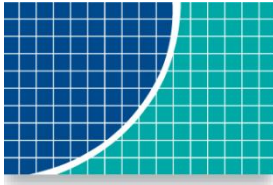
Prepared for the:

BC Games Society

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August 25, 2014

Mr. Kelly Mann
CEO BC Games Society
200 – 990 Fort Street
Victoria, BC, V8V 3K3

Dear Kelly:

Re: Nanaimo 2014 BC Summer Games Economic Impact Analysis

The following report presents our findings of the economic impact of the Nanaimo 2014 BC Summer Games held in mid-July this year. Our work involved the collection of expenditure data from a sample of athletes, spectators and volunteers, plus the spending of the Games organizers.

The analysis indicated that the overall direct spending impact created by the Games was nearly \$2.0 million, including over \$1.1 million in spending by the Games participants, over the four days of the Games. This direct spending resulted in a total estimated impact on the economy (including indirect and induced effects) of just over \$4.0 million.

Thank you for the opportunity to conduct this analysis.

Yours sincerely
Economic Planning Group

G D Hall

G. David Hall, P.Phys.
Partner

SUMMARY OF FINDINGS

Based on the survey data collected for this event, the Nanaimo 2014 BC Summer Games created direct economic impact in the area of nearly two million dollars. Just over one-half of this impact, was created by the spending of Games participants, while the remainder was contributed by Games Society organizers and related agencies.

- Direct spending within these two categories was:

Spending by participants	\$1,147,000
Spending by organizers	<u>\$821,700</u>
Total	\$1,968,700

- Direct spending by the participants was:

Athletes	\$308,400
Spectators	\$720,500
Volunteers	<u>\$118,100</u>
Total	\$1,147,000

- Direct spending in Nanaimo by Games organizers and other agencies was:

Nanaimo Games Society	\$702,500
Guests/Sponsors/Aircraft	<u>\$119,200</u>
Total	\$821,700

The total economic effects of the Games - including direct, indirect and induced spending impacts - and taxes were:

	<u>Direct</u>	<u>Indirect</u>	<u>Induced</u>	<u>Total</u>
Economic Impact¹	\$1,968,700	\$1,863,077	\$211,064	\$4,042,841
Taxes²	\$283,493	\$141,746	\$15,750	\$440,989

Spending by Games participants occurred over the four days of the Games during the third 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 +/- 8% for the athlete survey, +/-9% for the spectator survey, and +/-11% for volunteers.

¹ See definitions of measures, page 22

² Includes federal, provincial and municipal taxes

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1.0 INTRODUCTION

1.1 BACKGROUND

The City of Nanaimo hosted the 2014 BC Summer Games from July 17 to 20, 2014. The Games took place from Thursday to Sunday, and included 22 separate sports held in 27 different venues. Venue locations were mainly in Nanaimo, but extended from Duncan in the south to Parksville in the north.

The Games involved 3,182 participants including athletes, coaches and officials, from the eight provincial sport zones. The host community provided 2,945 local volunteers who assisted in administering the Games. Numerous businesses and agencies in the region also donated 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 also by spending of Games competitors, spectators and volunteers. Over the past two decades, the BC Games Society has sponsored periodic analyses of the economic impact created by a number of BC Games. For these 2014 BC Summer Games, the Economic Planning Group (EPG) was retained to conduct the analysis. (EPG has conducted several previous BC Games studies, including past BC Winter Games in Mission, Quesnel and Kimberly/Cranbrook, plus BC Summer Games in Victoria and Kelowna.)

1.2 OBJECTIVES

The primary purpose of this study was to estimate the economic impact of the Nanaimo 2014 BC Summer Games on the local economy. Economic impact was measured by calculating direct spending in the local area. Impacts were estimated by local spending of the:

- Nanaimo 2014 BC Summer Games Society
- BC Games Society/Other agencies
- Athletes/Coaches/Officials
- Spectators
- Volunteers

A second objective was to estimate the total economic impact created by these Games, including spin-off indirect and induced effects. This analysis was conducted using the BC Input Output Model operated by BC Stats, the statistical agency of the provincial government.

1.3 METHODOLOGY

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

- **Participant Spending (Competitors, Spectators and Volunteers)**

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 athletes/coaches/officials, spectators and volunteers. A sample of individuals from each of these participant groups was interviewed about their Games' related spending.

A local community group called Youth Sticking Together assisted in the research by conducting interviews of participants. Members of this organization met with the manager of the Economic Planning Group on two mornings of the Games weekend for a training session (seven on Saturday and three on Sunday). The purpose of the analysis was explained and the questionnaires reviewed, and 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 spectators and volunteers. Interviewers were assigned to sport venues, focusing on sites that were convenient to access and had concentrations of spectators. Athletes were interviewed at the food venue and John Barsby School where all participants were fed breakfast and dinner each day.

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 the local expenditures made by the two organizing societies involved with the Games - the Nanaimo 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 Games hosting. These figures were accessed from the BC Games Society using Society budget records. Also included in the totals was the spending of Games guests, and Games partners.

2.0 COMPETITOR 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 athletes/coaches/officials and asking them about their Games related expenditures. In order to capture a representative sample of participants, surveys were handed out and self-administered by participants at the food service venue located at John Barsby School. A total of 172 questionnaires were completed, representing over 5% of the athletes and officials.

Average spending was calculated from this athlete survey sample and was multiplied by the total number of competitors to obtain total spending. A total of 3,182³ individuals (athletes/officials/coaches/delegates) participated in the Games. The distribution of participants by sport is tabulated in Table 2-1. A listing of the number of participants by sport zone is tabulated in Table 2-2.

³ Final count of competitors as per Participant Zone Summary, August 2014

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

SPORT	Athletes	Coaches	Officials	Others	TOTAL
Athletics	270	21	33	13	327
Athletics – Special Olympics	15	4	-	-	19
Baseball	124	21	1	-	146
Basketball	156	31	6	1	194
Basketball 3x3	113	10	2	2	152
Canoe/Kayak	80	16	19	1	116
Equestrian	35	14	1	-	62
Golf	52	10	10	4	76
Inline Hockey	54	12	6	1	73
Lacrosse – Box	146	20	13	3	182
Lacrosse – Field	106	17	9	2	134
Rowing	28	11	12	-	51
Rugby	129	31	14	4	178
Sailing	56	1	11	2	70
Soccer	124	41	28	10	303
Softball	176	45	19	5	145
Swimming	174	23	4	2	185
Synchronized Swimming	45	9	17	-	71
Towed Water Sports	46	9	21	5	81
Triathlon	40	12	4	2	58
Volleyball - Beach	58	12	4	2	76
Volleyball	176	28	14	1	219
Wrestling	101	11	12	2	126
TOTALS	2,414	430	276	62	3,182

Source: BC Games, Nanaimo 2014 BC Summer Games Participant Summary, August 2014

Table 2-2: Number of Competitors by Sport and Sport Zone

Sport	Sport Zone								Officials	Total
	1	2	3	4	5	6	7	8		
Athletics	28	33	65	31	43	62	21	21	33	337
Athletics - Special O	-	1	10	2	2	4	-	-	-	19
Baseball	-	18	38	18	19	37	-	15	1	146
Basketball - 3x3 - Boys	-	12	14	10	12	13	-	12	14	87
Basketball - 3x3 - Girls	-	16	11	10	12	7	-	7	2	65
Basketball - Boys	-	12	11	10	23	12	12	13	4	97
Basketball - Girls	-	12	23	11	23	13	-	13	2	97
Canoe/Kayak	10	11	17	11	16	16	6	10	19	116
Equestrian	1	2	14	5	5	14	1	1	12	55
Equestrian - Para	-	-	3	-	-	3	-	-	1	7
Golf	9	10	10	10	10	11	-	6	10	76
Inline Hockey	-	-	28	-	15	11	-	13	6	73
Lacrosse - Box	21	22	22	21	18	44	-	21	13	182
Lacrosse - Field		23	22	20	18	22	-	20	9	134
Rowing	5	6	8	6	6	8	-	-	12	51
Rugby - Boys	-	15	15	17	13	31	2	-	8	101
Rugby - Girls	-	15	14	-	12	15	15	-	6	77
Sailing	7	10	9	1	16	18	3	5	1	70
Soccer - Boys	17	17	17	17	17	17	17	17	15	151
Soccer - Girls	17	17	17	16	18	17	17	17	16	152
Softball - Boys	-	14	14	14		17	19	17	11	106
Softball - Girls	16	20	20	20	18	18		19	8	139
Swimming	15	26	27	24	22	25	15	19	3	176
Swimming - Para	-	2	1	1	-	5	-	-	-	9
Swimming - Special O		2	6	10	2	7	-	-	1	28
Synchro Swimming	-	14	14	8	5	13	-	-	17	71
Towed Water Sports		12	7	9	8	13	-	11	21	81
Triathlon	6	8	8	8	8	10	-	6	4	58
Volleyball - Beach	10	10	6	7	8	12	10	9	4	76
Volleyball - Boys	12	14	14	14	13	15	-	13	6	101
Volleyball - Girls	14	14	14	12	14	15	14	14	7	118
Wrestling	-	12	22	7	19	27	12	15	12	126
Grand Total	188	400	521	350	415	552	164	314	278	3,182

Source: BC Games, Nanaimo 2014 BC Summer Games Participant Sport Zone Summary, August 2014

The geographic zones referred to above are as follows:

<u>Zone</u>	<u>Area</u>	<u>Zone</u>	<u>Area</u>
1	Kootenays	5	Vancouver - Squamish
2	Thompson-Okanagan	6	Vancouver Island - Central Coast
3	Fraser Valley	7	North West
4	Fraser River - Delta	8	Cariboo-North East

2.2 COMPETITOR CHARACTERISTICS

- **Distribution of Competitors**

A total of 172 competitors, representing over 5% of the total, completed survey forms. Nine out of ten of the competitors interviewed were from outside the Vancouver Island-Central Coast Zone. The distribution of the athletes, and the number and percent interviewed, was as follows:

Table 2-3: Competitors Interviewed by Sport Zone

Zone	Name	Number Interviewed	Percent Interviewed	Total Athletes
1	Kootenays	15	9%	188
2	Thompson-Okanagan	33	19%	400
3	Fraser Valley	23	13%	521
4	Fraser River Delta	20	12%	350
5	Vancouver-Squamish	22	13%	415
6	Vancouver Island-Central Coast	16	9%	552
7	North West	18	10%	164
8	Cariboo-North East	16	9%	314
	Officials	9	5%	278
	Total	172	100%	3,182

Source: BC Games Society and EPG survey results.

- **Competitors Interviewed by Sport**

Table 2-4 depicts the distribution of respondents by sport.

Table 2-4: Competitors Interviewed by Event

Sport	Surveyed	Percent	Competitors	Percent
Athletics	7	4%	327	10%
Athletics – Special O	0	0%	19	1%
Baseball	7	4%	146	5%
Basketball	9	5%	194	6%
Basketball 3x3	9	5%	152	5%
Canoe/Kayak	11	6%	116	4%
Equestrian	19	11%	62	2%
Golf	1	1%	76	2%
Inline Hockey	0	0%	73	2%
Lacrosse – Box	7	4%	182	6%
Lacrosse – Field	6	3%	134	4%
Rowing	0	0%	51	2%
Rugby	12	7%	178	6%
Sailing	1	1%	70	2%
Soccer	38	22%	303	10%
Softball	0	0%	145	5%
Swimming	3	2%	185	6%
Synchronized Swimming	0	0%	71	2%
Towed Water Sports	14	8%	81	3%
Triathlon	0	0%	58	2%
Volleyball - Beach	6	3%	76	2%
Volleyball	10	6%	219	7%
Wrestling	2	1%	126	4%
Unspecified	10	6%	0	0%
Total	172	100%	3,182	100%

Source: EPG survey results

- **Competitors Description**

The majority of competitors (69%) were staying in Nanaimo for the entire four-day duration of the Games, while 10% stayed three days, and 20% stayed five days. The average length of stay was 4.1 days. (Although the Games officially lasted four days, some competitors, arrived the day before the Games began or left the day after the Games officially ended.)

Most persons interviewed (81%), were taking part in the Games as athletes. Another 15% were coaches, 4% as officials, and the remaining 1% either as managers or chaperones.

Nearly all of the competitors (99%) indicated that they had attended the Opening Ceremonies.

Seven out of ten athletes (73%) had friends or relatives come to the event to watch them perform. The average number of spectating friends and relatives per athletes was 3.1.

2.3 COMPETITOR EXPENDITURES

- **Expenditures by Category**

Most of the competitors (84%) 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 four persons. For analytical purposes, all expenditures have been converted to per-person totals.

Table 2-5 illustrates the distribution of average expenditures by expenditure category as a total and as a percentage.

Table 2-5: Competitor Expenditures by Category

Expenditure Category	Amount	Percent
Accommodation	\$12.25	13%
Automobile	\$15.4	16%
Concession	\$11.10	11%
Gifts & Souvenirs	\$18.64	19%
Local Transportation	\$2.57	3%
Groceries	\$12.34	13%
Restaurants	\$15.46	16%
Recreation & Entertainment	\$2.03	2%
Retail Shopping	\$5.69	6%
Other	\$1.43	1%
Total	\$96.91	100%

Source: Interviews with 172 Games competitors/officials.

The average amount of money spent per person was **\$96.91**. Average spending ranged from a few dollars to several hundreds of dollars, with non-local residents spending appreciably more than local residents, as follows.

- Average expenditures for non-local athletes \$100.37
- Average expenditure for local athletes \$35.30

• **Total Expenditures**

The total amount of money spent by competitors was estimated to be **\$308,400** calculated as follows:

$$(\$96.91 \text{ expenditure per participant}) \times (3,182 \text{ participants}) = \mathbf{\$308,400}$$

The per diem spending was approximately **\$23.63** (i.e., \$96.91/4.1).

Competitors spent money within a number of expenditure categories. Gifts and souvenirs and restaurants were the biggest expenditure categories representing approximately \$59,000 and \$49,000 respectively.

Distribution of the \$308,400 competitor spending by category was as follows:

Table 2-6: Distribution of Competitor Expenditures by Category

Spending Categories	Expenditures	Percent	Allocation
Accommodation	\$12.25	13%	\$38,984
Automobile	\$15.4	16%	\$49,008
Concession	\$11.10	11%	\$35,324
Gifts & Souvenirs	\$18.64	19%	\$59,319
Local Transportation	\$2.57	3%	\$8,179
Groceries	\$12.34	13%	\$39,270
Restaurants	\$15.46	16%	\$49,199
Recreation & Entertainment	\$2.03	2%	\$6,460
Retail Shopping	\$5.69	6%	\$18,107
Other	\$1.43	1%	\$4,551
Total	\$96.91	100%	\$308,400

Source: Survey of 172 Games competitors.

Note: Accommodation is a significant category as coaches and officials stayed in commercial accommodation.

3.0 SPECTATOR EXPENDITURES

3.1 ANALYSIS METHOD

Spectator spending is a significant component of the economic impact created by the Games. Most of the non-local spectators tend to be friends and/or relatives (i.e., parents) of the competitors, while local spectators tend to be residents interested in specific sports. To calculate spectator spending, the total number of spectators was multiplied by the average spending per spectator. Average spending was obtained from interviews with a sample of spectators. A total of 167 spectators were interviewed, and they were interviewed at most sport venues.⁴

There are no spectator counts at BC Games since the events are free to attend and the venues were 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 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 uses the total number of “unique” spectators 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 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 sports at the Games.

This is represented by the formula:

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

⁴ No interviews were conducted at the events hosted in Parksville or Duncan. Interviews were also not conducted at the events where spectators were spread out such as golf and rowing.

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 just approximately 4% of the total number of unique spectators.

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

Sport	Spectators Interviewed	Peak at-one-time Spectators
Athletics	12	450
Athletics – Special O	-	Included above
Baseball	19	700
Basketball	7	300
Basketball 3x3	7	150
Canoe/Kayak	-	100
Equestrian	13	300
Golf	-	50
Inline Hockey	13	200
Lacrosse – Box	10	400
Lacrosse – Field	13	150
Rowing	-	100
Rugby	13	200
Sailing	-	50
Soccer	17	400
Softball	1	550
Swimming	4	250
Synchronized Swimming	-	250
Towed Water Sports	-	100
Triathlon	-	100
Volleyball - Beach	10	100
Volleyball	8	200
Wrestling	-	100
Unspecified	20	-
Total	167	5,200

Source: EPG survey plus counts and estimates by venue chairmen for spectators.

The total peak spectator count was **5,200**. The calculated spectator turnover ratio was 1.18, or expressed differently, each spectator attended 1.18 different events.

Consequently, the total number of unique individual spectators was estimated to be approximately **4,400** (i.e., 5,200/ 1.18 = 4,400).

3.3 SPECTATOR CHARACTERISTICS

- **Spectator Origin**

Over six in ten spectators interviewed (62%) were from the host Vancouver Island-Central Coast sport zone. The non-local spectators interviewed came from six of the other seven BC sport zones plus non-BC origins. (It is noted that the Vancouver Island-Central Coast Zone covers a large area with many spectators coming from communities in the south and north Island, or the Central Coast.) The distribution is as follows:

Table 3-2: Spectators Interviewed by Sport Zone

Zone	Name	Number Interviewed	% of Total Interviewed
1	Kootenays	0	0%
2	Thompson-Okanagan	9	5%
3	Fraser Valley	24	14%
4	Fraser River Delta	9	5%
5	Vancouver-Squamish	12	7%
6	Vancouver Island-Central Coast	104	62%
7	North West	2	1%
8	Cariboo-North East	5	3%
	Outside BC	2	1%
Total		167	100%

- **Reason for Visiting the Area**

The BC Summer Games were the main reason for most (92%) of the non-local residents being in the Nanaimo area.

- **Duration of Stay**

Just over one-quarter of spectators (27%) were attending the Games for all four days, and a further 33% were attending the Games for three days. The average length of stay in the Nanaimo area was 2.8 days. The distribution of length of stay was as follows:

– 1 day	16%
– 2 days	24%
– 3 days	33%
– 4 days +	27%

- **Games Participation**

Almost half of spectators attended the Opening Ceremonies (45%). Just over seven in ten spectators (71%) were attending the Games to watch a friend or relative compete. The typical spectator was watching one person (likely a son or daughter), while the average number of athletes being watched was 1.4.

The average size of the spectator parties was 3.9 persons, and the distribution of spectator party size was as follows:

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

3.4 SPECTATOR EXPENDITURES

- **Distribution of Expenditures**

Most spectators (90%) spent money on goods and/or services while attending the Games. The following chart indicates the distribution of per person spending in a variety of categories.

Table 3-3: Spectator Expenditures by Category

Expenditure Sectors	Amount	Percent
Accommodation	\$50.15	27%
Automobile	\$33.75	18%
Concession	\$11.45	6%
Gifts and Souvenirs	\$16.88	9%
Local Transportation	\$0.30	0%
Groceries	\$17.81	10%
Restaurant Meals	\$31.27	17%
Recreation/Entertainment	\$3.25	2%
Retail Shopping	\$15.42	8%
Other	\$4.15	2%
Total	\$184.43	100%

Source: Interviews with 167 Games spectators

- **Total Expenditures**

Spectators attending the Games had an average expenditure of **\$184.22** during their stay in the area.

Applying the average expenditure to the total number of spectators results in a spectator spending total of **\$720,500** (i.e., \$184.22 x 4,400 x 0.90). Consequently, the Nanaimo Summer Games were responsible for an injection of approximately three-quarters of a million dollars in spectator spending over the four days of the Games.

The per diem spending was **\$65.80** (i.e., \$184.22/2.8).

- **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 over one-quarter (27%) of spectator expenditures. Automobile costs and restaurant meals and were the next largest expenditure categories, responsible for 18% and 17% respectively.

Hotels in the area received \$196,000 in new business over the Games weekend, while gas stations approximately \$132,000, and restaurants saw an increase in revenue of \$122,000.

Overall distribution of the \$720,500 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	\$50.15	27%	\$195,918
Automobile	\$33.75	18%	\$131,849
Concession	\$11.45	6%	\$44,731
Gifts and Souvenirs	\$16.88	9%	\$65,944
Local Transportation	\$0.30	0%	\$1,172
Groceries	\$17.81	10%	\$69,577
Restaurant Meals	\$31.27	17%	\$122,160
Recreation/Entertainment	\$3.25	2%	\$12,697
Retail Shopping	\$15.42	8%	\$60,240
Other	\$4.15	2%	\$16,213
Total	184.43	100%	\$720,500

Source: Interviews with 167 Games spectators.

4.0 VOLUNTEER EXPENDITURES

4.1 ANALYSIS METHOD

As with competitors and spectators, a sample of volunteers were asked about their Games participation and related spending. A total of 2,945 volunteers were registered and assigned duties to assist with administration of the Games (Source: BC Games Society). Approximately 3% or 80 individual volunteers were interviewed 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 by category was as follows:

Table 4-1: Volunteers by Category

Category	Number of Volunteers
Accommodation	281
Administration	193
Ceremonies	103
Communications	29
Food Services	264
Friends of the Games	16
Medical Services	188
Promotions	166
Protocol	169
Registration and Results	144
Security	164
Special Events	125
Sport	899
Transportation	184
Others	20
Total	2,945

Source: BC Games Society, August 2014

Most volunteers (60%) were working at the Games for three days or more, while the average duration was 2.8 days. The distribution was as follows:

- one day 8%
- two days 25%
- three days 44%
- four days + 25%

Most volunteers (65%) were not a friend or relative of a Games participant.

4.3 VOLUNTEER EXPENDITURES

- **Volunteer Spending Ranges**

Most volunteers (70%) 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

Expenditure Category	Amount	Percent
Accommodation	\$3.66	6%
Automobile	\$12.13	21%
Concession	\$9.54	17%
Gifts & Souvenirs	\$12.99	23%
Local Transportation	\$0.73	1%
Groceries	\$4.11	7%
Restaurant	\$7.80	14%
Recreation/Entertainment	\$1.67	3%
Shopping	\$3.17	6%
Other	\$1.48	3%
Total	\$57.28	100%

Source: Survey of 80 volunteers.

The average expenditure by each volunteer over the duration of the Games was **\$57.28**.

The total expenditure of the 2,945 volunteers was approximately **\$118,100** (i.e., \$57.28 x 2,945 x .7).

The per diem spending was **\$20.46** (i.e., \$57.28 / 2.8).

- **Distribution of Volunteer Spending**

Volunteers spent money on a variety of items within a number of expenditure categories. Gifts and souvenirs and restaurant expenses were the largest individual categories at 23% and 21 % respectively.

Distribution of the \$118,100 total is allocated as follows:

Table 4-3: Distribution of Volunteer Expenditures

Expenditure Category	Average Amount Spent	Percent Distribution	Expenditure by Category
Accommodation	\$3.66	6%	\$7,546
Automobile	\$12.13	21%	\$25,010
Concession	\$9.54	17%	\$19,670
Gifts and Souvenirs	\$12.99	23%	\$26,783
Local Transportation	\$0.73	1%	\$1,505
Groceries	\$4.11	7%	\$8,474
Restaurant Meals	\$7.80	14%	\$16,082
Recreation/Entertainment	\$1.67	3%	\$3,443
Retail Shopping	\$3.17	6%	\$6,536
Other	\$1.48	3%	\$3,051
Total	\$57.28	100%	\$118,100

Source: Survey of 80 Volunteers

5.0 GAMES SOCIETY / OTHER EXPENDITURES

5.1 NANAIMO 2014 BC SUMMER GAMES SOCIETY

- **Games Revenue**

The Nanaimo 2014 BC Summer Games Society was responsible for organizing and staging the Games. The Society had a budget of \$702,500 to host the Games. Revenues were categorized as follows:

Table 5-1: 2014 Nanaimo Summer Games Operating Budget

Funding Source	Budget	Percent
BC Games Society Grant	\$600,000	85%
Nanaimo Municipal Grant	\$45,000	6%
Friends of Games	\$57,500	8%
Total	\$702,500	100%

Source: BC Games Society, August, 2014

- **Expenditure Breakdown**

The Games society spending of the \$702,500 budget to was used to purchase goods and services. This spending had an impact on the local economy since most was spent in the Nanaimo area. The following is the expenditure allocation by category.

Table 5-2: 2014 Summer Games Society Operating Expenditures

Category	Budget	Percent
Accommodation	\$11,800	2%
Administration	\$163,679	23%
Ceremonies	\$47,800	7%
Communications	\$20,900	3%
Food Services	\$123,250	18%
Friends of the Games	\$25,000	4%
Medical	\$7,800	1%
Promotions	\$25,400	4%
Protocol	\$55,000	8%
Registrations & Results	\$17,081	2%
Security	\$9,000	1%
Special Events	\$33,200	5%
Sport	\$90,000	13%
Transportation	\$72,590	10%
Total	\$702,500	100%

Source: BC Games Society, August, 2014

5.2 BC GAMES SOCIETY

BC Games Society employees incurred travel related expenditures as part of their assistance to the Games' organizers. Information supplied by BC Games indicated several person-trips had been made to Nanaimo, prior to and during the Games. These included expenditures for accommodations, meals, vehicle rentals and miscellaneous costs for a total of **\$23,100**.

5.3 OTHER EXPENDITURES

- **Guests/Sponsors**

A number of representatives of other agencies were present in Nanaimo for the Games. These included provincial government representatives, corporate partners, and sport partners. The total number of room-nights was 59 (Source: BC Games Society).

The estimated per diem for accommodation, food, transportation and entertainment is \$200 per person-night. This results in an estimated expenditure of **\$11,800**.

- **Aircraft charters**

Participants from northern BC were flown to the Nanaimo Airport on charter flights. The cost for landing fees, fuel, ground handling, airport improvement fees and incremental wages was estimated at **\$84,300**.

5.4 SYNOPSIS OF BC GAMES SOCIETY AND OTHER EXPENDITURES

The total expenditure of the administering agency plus related costs was \$821,700, allocated as follows:

Table 5.3 Administrative Expenses

Category	Expenditure	Percent
Nanaimo 2014 BC summer Games Society	\$702,500	85%
BC Games Society Personnel Related	\$23,100	3%
Guests/Sponsors	\$11,800	1%
Air charter and related costs	\$84,300	10%
Total	\$821,700	100%

6.0 TOTAL ECONOMIC EFFECTS

6.1 BACKGROUND

The analysis process described above produces direct spending estimates for participants in the BC Games. The second objective of the analysis was to estimate the total economic impact, including spin-off or multipliers effects. These estimates trace the flow of money through the economy based on the initial expenditures of Games' participants.

To estimate total economic benefits, direct spending estimates are inputted into the BC Input-Output Model (BCIOM). The BCIOM is a computer model operated by BC Stats, the statistical agency of the provincial government. By inputting direct expenditure data, the model produces outputs describing impacts on the provincial economy.

The impact on the economy is made up of the following three components:

- **Direct effects** measure the provincial economic activity resulting from the initial expenditures. This category includes the actual expenditures directly generated by the athlete and spectator spending, plus the hosting agency expenditures.
- **Indirect effects** measure the provincial economic activity generated by sectors that supply goods and services used in the direct activities. These are often referred to as secondary effects as they measure expenditures that occur subsequent to the initial or direct spending. This category includes companies that supply goods and services to the accommodation sector, restaurant suppliers, wholesalers, etc.
- **Induced effects** measure the overall impact created by additional income accruing to individuals whose work was created by the direct and indirect activities described above. It reflects the spending of salaries paid to persons employed by employees of hotels, restaurants, retail outlets, entertainment facilities, etc.

The economic impact analysis process produces two key measures of economic activity, both of which have a direct, indirect and induced component. These are:

- **Total Economic Activity** is the sum of all revenues generated in the BC economy that result from the direct spending of BC Games participants. It is a measure of the total economic activity created as a result of staging the BC Games.
- **Tax revenues** are estimates of revenues accruing to the following three levels of government.

Canada	Federal personal income taxes, Corporate income taxes, Gasoline taxes, Federal excise taxes, Goods and services taxes
British Columbia	Provincial personal income taxes, Corporate income taxes, Licences, Fees and permits
Vancouver	Licences, Dues and permits, Property taxes, Business taxes

6.2 FINDINGS

The total direct expenditures generated by the BC Summer Games were nearly \$2 million distributed as follows:

Table 6.1: Total Direct Expenditures

Spending Category	Spending	Percent
Athletes	\$308,400	16%
Spectators	\$720,500	37%
Volunteers	\$118,100	6%
Games Administration	\$821,700	42%
Total	\$1,968,700	100%

The direct expenditures of just under \$2 million produced a total impact on the economy of over \$4 million. It also generated over \$440,000 in taxes, including \$177,000 in federal taxes, \$228,000 in provincial taxes, and \$35,000 in local government taxes.

The distribution of the impacts in terms of direct, indirect and induced effects is as follows:

Table 6.1: Total Economic Impacts of the Nanaimo BC Summer Games

Economic Measure	Direct	Indirect	Induced	Total
Total Economic Activity	\$1,968,700	\$1,863,077	\$211,064	\$4,042,841
Taxes				
Federal	\$114,185	\$59,061	\$3,937	\$177,183
Provincial	\$161,433	\$59,061	\$7,875	\$228,369
Local	\$7,875	\$23,624	\$3,937	\$35,437
Total Taxes	\$283,493	\$141,746	\$15,750	\$440,989

Source: BC Input Output Model, March 2014.

7.0 CONCLUSIONS

Over the four days of the BC Summer Games, a significant injection of spending benefited merchants in the Nanaimo region.

Based on survey data collected for this event, the Nanaimo 2014 BC Summer Games created direct economic activity in the area of nearly two million dollars. Just over one-half of this impact, was created by the spending of Games participants, while the remainder was contributed by Games Society organizers and related agencies.

- Direct spending within these two categories was:

Spending by Participants	\$1,147,000	58%
Spending by Organizers	<u>\$821,700</u>	<u>42%</u>
Total	\$1,968,700	100%

- Direct spending by the participants was:

Athletes	\$308,400	27%
Spectators	\$720,500	63%
Volunteers	<u>\$118,100</u>	<u>10%</u>
Total	\$1,147,000	100%

- Direct spending in Nanaimo by Games organizers and other agencies was:

Nanaimo BC Games	\$702,500	85%
Guests/Sponsors/Aircraft	<u>\$119,200</u>	<u>15%</u>
Total	\$821,700	100%

The participant spending benefited a broad cross-section of sectors within the local economy. The distribution was as follows for the three categories of participants.

Allocation of Expenditures	Athletes	Spectators	Volunteers	Total
Accommodation	\$38,984	\$195,918	\$7,546	\$242,447
Auto	\$49,008	\$131,849	\$25,010	\$205,866
Concession	\$35,324	\$44,731	\$19,670	\$99,724
Gifts and Souvenirs	\$59,319	\$65,944	\$26,783	\$152,045
Local Transportation	\$8,179	\$1,172	\$1,505	\$10,856
Groceries	\$39,270	\$69,577	\$8,474	\$117,321
Restaurant Meals	\$49,199	\$122,160	\$16,082	\$187,441
Recreation/Entertainment	\$6,460	\$12,697	\$3,443	\$22,600
Retail Shopping	\$18,107	\$60,240	\$6,536	\$84,884
Other	\$4,551	\$16,213	\$3,051	\$23,815
Total	\$308,400	\$720,500	\$118,100	\$1,147,000

The direct spending of participants and agencies creates additional economic activity as this money filters through the economy.

The total economic effects of the BC Summer Games - including direct, indirect and induced spending impacts and taxes - were:

Economic Measure	Direct	Indirect	Induced	Total
Total Economic Activity	\$1,968,700	\$1,863,077	\$211,064	\$4,042,841
Taxes:				
Federal	\$114,185	\$59,061	\$3,937	\$177,183
Provincial	\$161,433	\$59,061	\$7,875	\$228,369
Local	\$7,875	\$23,624	\$3,937	\$35,437
Total Taxes	\$283,493	\$141,746	\$15,750	\$440,989

Source: BC Input Output Model, run March 2014.

APPENDIX

APPENDIX

ATHLETE QUESTIONNAIRE

SPECTATOR QUESTIONNAIRE

VOLUNTEER QUESTIONNAIRE

APPENDIX

NANAIMO 2014 BC SUMMER GAMES

ATHLETE SURVEY

Sport _____	Location _____	Fri. <input type="checkbox"/>	Sat. <input type="checkbox"/>	Sun. <input type="checkbox"/>
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- Do you live in the Nanaimo region: Yes (GO TO #4) No
- If no, where is your home? (Community) _____ [Sport Zone _____]
- How many days in total will you be spending in the area as a result of attending these Games? _____ days
- Which sports have you attended or will you be attending?

Friday	1 _____	2 _____	3 _____
Saturday	1 _____	2 _____	3 _____
Sunday	1 _____	2 _____	3 _____
Opening Ceremony	Yes / No		
- In what capacity are you taking part?

Athlete Official Coach Other _____
- Have friends or relatives come to the Games to watch you? Yes How many? _____
No
- Have you purchased, or will you be purchasing, any goods or services while either visiting the area or attending the Games? Yes No
- 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	\$ _____

NANAIMO 2014 BC SUMMER GAMES

SPECTATOR SURVEY

Sport _____	Location _____	Fri. <input type="checkbox"/>	Sat. <input type="checkbox"/>	Sun. <input type="checkbox"/>
-------------	----------------	-------------------------------	-------------------------------	-------------------------------

1. Do you live in the Nanaimo region? 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 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

NANAIMO 2014 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"/> | Security | <input type="checkbox"/> |
| Communications | <input type="checkbox"/> | Social | <input type="checkbox"/> |
| Finance & Administration | <input type="checkbox"/> | Sports | <input type="checkbox"/> |
| Fundraising | <input type="checkbox"/> | Transportation | <input type="checkbox"/> |
| Medical | <input type="checkbox"/> | Volunteers | <input type="checkbox"/> |
| Public Relations | <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.