
MISSION

2014 BC WINTER GAMES

ECONOMIC IMPACT ANALYSIS

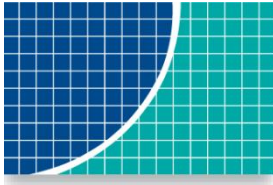
Prepared for the:

BC Games Society

Prepared by the:

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April 16, 2014

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

Dear Kelly:

Re: Mission 2008 BC Winter Games Economic Impact Analysis

The following report presents our findings of the economic impact of the Mission 2014 BC Winter Games held in late February this year. Our work involved the collection of expenditure data from a sample of athletes, spectators and volunteers, and included the spending of the host committee.

The analysis indicated that the overall direct spending impact created by the Games was nearly \$1.6 million, including over \$850,000 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 \$3.2 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 Mission 2014 BC Winter Games created direct economic impact in the area in excess of 1.5 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	\$851,300
Spending by organizers	<u>\$731,900</u>
Total	\$1,583,200

- Direct spending by the participants was:

Athletes	\$190,200
Spectators	\$539,400
Volunteers	<u>\$121,700</u>
Total	\$851,300

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

BC Games Society	\$540,000
District of Mission	\$124,000
Guests/Sponsors/Aircraft	<u>\$67,900</u>
Total	\$731,900

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	\$1,583,200	\$1,498,260	\$169,735	\$3,251,194
Taxes²	\$227,981	\$113,990	\$12,666	\$354,637

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

The direct spending amount represents a decline of approximately 11% from the 2008 Kimberly/Cranbrook BC Games (the last Games subject to an economic impact analysis). A number of issues have likely caused this decline, including a combination of: fewer

¹ See definitions of measures, page 22

² Includes federal, provincial and municipal taxes

athletes, sports, spectators and volunteers; a larger proportion of local (Fraser Valley) spectators who did not incur accommodation costs; and competition for spectator's time with a greater range of leisure activities in the metro Vancouver region.

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 +/- 9% for the athlete survey, +/-8% for the spectator survey, and +/-11% for volunteers.

Table of Contents

1.0	INTRODUCTION.....	1
1.1	Background	1
1.2	Objectives	1
1.3	Methodology	2
2.0	COMPETITOR EXPENDITURES.....	3
2.1	Analysis Method	3
2.2	Competitor Characteristics	6
2.3	Competitor Expenditures	8
3.0	SPECTATOR EXPENDITURES.....	10
3.1	Analysis Method	10
3.2	Spectator Counts	11
3.3	Spectator Characteristics	12
3.4	Spectator Expenditures	14
4.0	VOLUNTEER EXPENDITURES.....	16
4.1	Analysis Method	16
4.2	Volunteer Characteristics	16
4.3	Volunteer Expenditures	17
5.0	GAMES SOCIETY/OTHER EXPENDITURES.....	19
5.1	Mission 2014 BC Winter Games Society	19
5.2	BC Games Society	21
5.3	Other Agencies	21
5.4	Synopsis of Games Society and Other Agency Expenditures	21
6.0	TOTAL ECONOMIC EFFECTS	22
6.1	Background	22
6.2	Findings	23
7.0	CONCLUSIONS.....	24
	APPENDIX	
	Questionnaires	

1.0 INTRODUCTION

1.1 BACKGROUND

The District of Mission hosted the 2014 BC Winter Games from February 2 to 23, 2014. The Games took place from Thursday to Sunday, and included 18 separate sports held in 15 venues, located in seven separate communities (Mission, Abbotsford, Pitt Meadows, Maple Ridge, Matsqui, Langley and Whistler). The Games involved 1,841 participants from the eight provincial sport zones. The host communities provided 1,745 local volunteers who assisted in administration of the Games. Numerous businesses and agencies in the community 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 by the BC Games Society – 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 Winter Games, the Economic Planning Group (EPG) was retained to conduct the analysis. (EPG has conducted several previous BC Games studies over the years, including past BC Winter Games in Quesnel and in 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 Mission 2014 BC Winter Games on the host communities. Economic impact was measured by calculating direct spending in the local area. Impacts were estimated by local spending of the:

- Mission 2014 BC Winter 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 communities 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 group of local residents from the Mission Communities in Bloom Society assisted in the research by conducting interviews of participants. These volunteers met with the manager of the Economic Planning Group on the Saturday morning of the Games weekend for a training session. 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 participants. Interviewers were assigned to most of the sport venues and driven to their venues by a Games transportation volunteer.

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 Mission BC Winter 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 society representatives using society budget records. Also included in the totals was the spending of 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 these 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 Heritage Park High School. A total of 137 questionnaires were completed, representing approximately 6% 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 1,847³ 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 participants as per Participant Zone Summary, dated February 14, 2014

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

SPORT	Athletes	Coaches	Officials	Others	TOTAL
Archery	46	14	8	2	70
Badminton	76	16	4	-	96
Basketball - SO	64	20	2	-	86
Basketball - Wheelchair	38	8	6	6	58
Biathlon	30	13	14	3	60
Curling - Female	30	9	2	5	46
Curling - Male	35	9	3	4	51
Diving	35	9	11	4	59
Figure Skating	44	6	12	7	69
Gymnastics	83	22	19	2	126
Hockey - Female	155	16	20	15	206
Judo	104	18	14	2	138
Karate	89	20	23	1	133
Netball	45	7	11	1	64
Ringette	136	26	9	2	173
Skiing-Alpine (including Para)	107	16	2	5	130
Skiing-Cross Country (incl. Para)	64	18	12	2	96
Skiing-Freestyle	53	7	10	6	76
Speed Skating	66	16	21	7	110
TOTALS	1300	270	203	74	1,847

Source: BC Games, Mission 2014 BC Winter Games, Participant Sport Zone Summary, April 1/14

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

SPORT	Sport Zone								Officials	Total
	1	2	3	4	5	6	7	8		
Archery	7	8	9	7	8	8	7	8	8	70
Badminton	11	12	12	12	12	12	12	9	4	96
Basketball - SO	-	13	25	13	13	10	11	-	1	86
Basketball - Wheelchair	-	8	9	9	-	10	9	7	6	58
Biathlon	3	7	4	4	6	8	5	9	14	60
Curling - Female	6	6	12	-	-	6	7	7	2	46
Curling - Male	6	6	5	6	7	6	6	6	3	51
Diving	-	7	13	4	15	5	4	-	11	59
Figure Skating	4	11	8	13	9	6	-	6	12	69
Gymnastics	9	13	25	14	8	16	12	10	19	126
Hockey - Female	24	24	24	24	24	23	19	24	20	206
Judo	14	19	16	18	5	24	6	22	14	138
Karate	-	19	16	19	17	20	9	10	23	133
Netball	-	10	8	23	12	-	-	-	11	64
Ringette	-	42	22	21	24	13	21	21	9	173
Skiing-Alpine (including Para)	22	22	8	8	35	11	11	11	2	130
Skiing-Cross Country (incl. Para)	8	18	1	6	27	10	7	7	12	96
Skiing-Freestyle	6	20	6	2	12	9	8	3	10	76
Speed Skating	5	11	26	11	8	3	9	16	21	110
TOTALS	125	276	249	214	242	200	163	176	202	1,847

Source: BC Games, Mission 2014 BC Winter Games, Participant Sport Zone Summary, April 1/14

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**

Two thirds of the competitors interviewed (outside of Zones 3 and 4)) were from outside the Mission/Fraser Valley area. 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	% of Total Interviewed	Total Competitors
1	Kootenays	8	6%	125
2	Thompson-Okanagan	33	24%	276
3	Fraser Valley	35	26%	249
4	Fraser River Delta	14	10%	214
5	Vancouver-Squamish	11	8%	242
6	Vancouver Island-Central Coast	15	11%	200
7	North West	5	4%	163
8	Cariboo-North East	16	12%	176
	Officials	-	-	202
Total		137	6%	1,847

Source: Mission 2014 BC Winter Games Society and EPG survey results

- **Competitors Interviewed by Sport**

A total of 137 competitors, representing 6% of the total, were interviewed, and represented most sports. Table 2-4 depicts the distribution of persons interviewed by sport.

Table 2-4: Participants Interviewed by Event

Sport	Surveyed	Percent	Participants	Percent
Archery	16	12%	70	4%
Badminton	3	2%	96	5%
Basketball - Special O	0	0%	86	5%
Basketball-Wheelchair	3	2%	58	3%
Biathlon	0	0%	60	3%
Curling M & F)	29	21%	97	5%
Diving	0	0%	59	3%
Figure Skating	0	0%	69	4%
Gymnastics	0	0%	126	7%
Hockey	20	15%	206	11%
Judo	6	4%	138	7%
Karate	26	19%	133	7%
Netball	11	8%	64	3%
Ringette	5	4%	173	9%
Skiing - Alpine	5	4%	130	7%
Skiing - Cross Country	7	5%	96	5%
Skiing - Freestyle	6	4%	76	4%
Speed Skating	0	0%	110	6%
Total	137	100%	1,847	100%

Source: EPG survey results

- **Competitors Description**

The majority of competitors (87%) were staying in Mission for the entire four-day duration of the Games, while 13% stayed three days. 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 (70%), were taking part in the Games as competitors. Another 20% were coaches, 9% as officials, and the remaining 1% either as managers or chaperones.

Nearly all of the competitors (97%) indicated that they had attended the Opening Ceremonies.

Two thirds of athletes (68%) had friends or relatives come to the event to watch them perform. The average number of spectating friends and relatives per athletes was 2.2.

2.3 COMPETITOR EXPENDITURES

- **Expenditures by Category**

Most of the competitors 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

Total Expenditures	Amount	Percent
Accommodation	\$23.08	22%
Auto	\$15.89	15%
Concession	\$7.76	8%
Gifts and Souvenirs	\$26.47	26%
Local Transportation	\$2.34	2%
Groceries	\$8.71	8%
Restaurant Meals	\$13.22	13%
Recreation/Ent	\$0.89	1%
Retail Shopping	\$2.00	2%
Other	\$0.90	1%
Total	\$102.96	100%

Source: Interviews with 137 Games participants.

The average amount of money spent per person was **\$102.96**. 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 coaches/officials and athlete spending is as follows:

- Average expenditures for coaches and officials \$151.32
- Average expenditure for athletes \$78.58

• **Total Expenditures**

The total amount of money spent by competitors was estimated to be **\$190,200** calculated as follows:

$$(\$102.96 \text{ expenditure per participant}) \times (1,847 \text{ participants}) = \mathbf{\$190,167}$$

The per diem spending was approximately **\$26.40** (i.e., \$102.96/3.9).

Competitors spent money within a number of expenditure categories. Gifts and souvenirs and automobile costs were the biggest expenditure categories representing approximately \$49,000 and 42,000 respectively.

Distribution of the \$190,200 competitor spending by category was as follows:

Table 2-6: Distribution of Competitor Expenditures by Category

Total Expenditures	Amount	Percent	Allocation
Accommodation	\$23.08	22%	\$42,636
Automobile	\$15.89	15%	\$29,354
Concession	\$7.76	8%	\$14,335
Gifts and Souvenirs	\$26.47	26%	\$48,899
Local Transportation	\$2.34	2%	\$4,323
Groceries	\$8.71	8%	\$16,090
Restaurant Meals	\$13.22	13%	\$24,422
Recreation/Ent	\$0.89	1%	\$1,644
Retail Shopping	\$2.00	2%	\$3,695
Other	\$0.90	1%	<u>\$1,663</u>
Total	\$102.96	100%	\$190,200

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 176 spectators were interviewed, and they were interviewed at most sport venues.⁴

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 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 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 Do to transportation logistics, no interviews were conducted at the skiing events at Whistler and Hemlock Resort, nor the diving events in Langley.

3.2 SPECTATOR COUNTS

- Counted 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 8% of the total number of unique spectators.

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

Sport/Activity	Spectators Interviewed	Maximum At-one-time Spectators
Archery	10	375
Badminton	15	250
Basketball - Special O	7	75
Basketball-Wheelchair	11	80
Biathlon	-	50
Curling (M & F)	17	85
Diving	-	170
Figure Skating	18	250
Gymnastics	22	350
Hockey	66	450
Judo	4	200
Karate	-	300
Netball	-	30
Ringette	-	150
Skiing - Alpine	-	75
Skiing - Cross Country	-	50
Skiing - Freestyle	-	75
Speed Skating	2	200
Total	176	3,215

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

Note: Skiing venues were not included due to transportation logistics.

The total peak spectator count was **3,215**. The calculated spectator turnover ratio was 1.30, or expressed differently, each spectator attended 1.30 different events.

Consequently, the total number of unique individual spectators was estimated to be approximately **2,473** (i.e., $3,215 / 1.3 = 2,473$).

3.3 SPECTATOR CHARACTERISTICS

- **Spectator Origin**

Less than one-third of the spectators interviewed (29%), were from the Mission/Fraser Valley area. The non-local spectators interviewed came from throughout the other six 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	14%
2	Thompson-Okanagan	24	14%
3	Fraser Valley	31	5%
4	Fraser River Delta	7	24%
5	Vancouver-Squamish	26	1%
6	Vancouver Island-Central Coast	28	10%
7	North West	4	5%
8	Cariboo-North East	11	6%
	Other	1	21%
	No Response	36	NA
Total		176	100%

- **Reason for Visiting the Area**

The BC Winter Games were the main reason for most (85%) of the non-local residents being in the Mission area.

- **Duration of Stay**

Two-thirds of spectators (34%) were attending the Games for all four days, and a further 25% were attending the Games for three days. The average length of stay in the Mission area was 2.8 days. The distribution of length of stay was as follows:

– 1 day	18%
– 2 days	23%
– 3 days	25%
– 4 days	34%

- **Games Participation**

Just over one-third of spectators attended the Opening Ceremonies (34%), while 85% of spectators 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 2.0

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

– 1 spectator	12%
– 2 spectators	31%
– 3 spectators	12%
– 4 spectators	15%
– 5+ spectators	30%

3.4 SPECTATOR EXPENDITURES

- **Distribution of Expenditures**

Most spectators (94%) 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

Total Expenditures	Amount	Percent
Accommodation	\$64.99	28%
Automobile	\$40.56	17%
Concession	\$15.36	7%
Gifts and Souvenirs	\$25.2	11%
Local Transportation	\$0.69	0%
Groceries	\$8.02	3%
Restaurant Meals	\$47.3	20%
Recreation/Entertainment	\$3.95	2%
Retail Shopping	\$23.47	10%
Other	\$2.50	1%
Total	\$232.04	100%

Source: Interviews with 176 Games spectators

- **Total Expenditures**

Spectators attending the Games had an average expenditure of **\$232.04** during their stay in the area.

Applying the average expenditure to the total number of spectators results in a spectator spending total of **\$539,400** (i.e., $\$232.04 \times 2,473 \times 0.94$). Consequently, the Mission Winter Games were responsible for an injection of approximately \$539,400 in spectator spending over the four days of the Games.

The per diem spending was **\$82.87** (i.e., $\$232.04/2.8$).

- **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 (28%) of spectator expenditures. Restaurant meals and automobile costs were the next largest expenditure categories, responsible for 20% and 11% respectively. Hotels in the area received \$151,000 in new business over the Games weekend, while restaurants saw an increase in revenue of \$110,000, and gas stations approximately \$94,000.

Overall distribution of the \$539,400 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	\$64.99	28%	\$151,076
Automobile	\$40.56	17%	\$94,286
Concession	\$15.36	7%	\$35,706
Gifts and Souvenirs	\$25.20	11%	\$58,580
Local Transportation	\$0.69	0%	\$1,604
Groceries	\$8.02	3%	\$18,643
Restaurant Meals	\$47.30	20%	\$109,954
Recreation/Entertainment	\$3.95	2%	\$9,182
Retail Shopping	\$23.47	10%	\$54,558
Other	\$2.50	1%	\$5,811
Total	\$232.04	100%	\$539,400

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 1,745 volunteers were registered and assigned duties to assist with administration of the Games (Source: BC Games Society). Approximately 5% or 79 were interviewed at a variety of venues and at the Volunteer Appreciation event.

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	108
Administration	31
Ceremonies	65
Communications	3
Food Services	223
Friends of the Games	20
Medical Services	240
Promotions	110
Protocol	110
Registration and Results	96
Security	141
Special Events	75
Sport	424
Transportation	91
Others	8
Total	1,745

Source: BC Games Society, April 1/14

Most volunteers (60%) were working at the Games for three days or more, while the average duration was 2.4 days. The distribution was as follows:

- one day 15%
- two days 25%
- three days 60%

Most volunteers (72%) 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

Expenditure Category	Amount	Percent
Accommodation	\$1.39	2%
Automobile	\$15.34	22%
Concession	\$7.67	11%
Gifts & Souvenirs	\$11.85	17%
Local Transportation	\$1.39	2%
Groceries	\$2.79	4%
Restaurant	\$13.94	20%
Recreation/Entertainment	\$8.37	12%
Shopping	\$3.49	5%
Other	\$3.49	5%
Total	\$69.72	100%

Source: Survey of 79 volunteers.

The average expenditure by each volunteer over the duration of the Games was **\$69.72**.

The total expenditure of the 1,745 volunteers was approximately **\$121,700** (i.e., \$69.72 x 1,745).

The per diem spending was **\$29.05** (i.e., \$69.72/2.4).

- **Distribution of Volunteer Spending**

Volunteers spent money on a variety of items within a number of expenditure categories. Automobile and restaurant expenses were the largest individual categories at 22% and 20 % respectively. Responsible for about 17% of expenditure were by gifts and souvenirs, followed by recreation and entertainment at 12%.

Distribution of the \$121,700 total is allocated as follows:

Table 4-3: Distribution of Spectator Expenditures

Expenditure Category	Average Amount Spent	Percent Distribution	Expenditure by Category
Accommodation	\$1.39	2%	\$2,434
Automobile	\$15.34	22%	\$26,774
Concession	\$7.67	11%	\$13,387
Gifts and Souvenirs	\$11.85	17%	\$20,689
Local Transportation	\$1.39	2%	\$2,434
Groceries	\$2.79	4%	\$4,868
Restaurant Meals	\$13.94	20%	\$24,340
Recreation/Entertainment	\$8.37	12%	\$14,604
Retail Shopping	\$3.49	5%	\$6,085
Other	\$3.49	5%	\$6,085
Total	\$69.72	100%	\$121,700

Source: Survey of 79 Volunteers

5.0 GAMES SOCIETY / OTHER EXPENDITURES

5.1 MISSION 2014 BC WINTER GAMES SOCIETY

- **Games Revenue**

The Mission 2014 BC Winter Games Society was responsible for organizing and staging the Games. The Society had a budget of \$664,000 to host the Games. Revenues were categorized as follows:

Table 5-1: 2014 Mission Winter Games Operating Budget

Funding Source	Budget	Percent
BC Games Society	\$525,000	79%
BCGS Extra Funding for Whistler	\$15,000	2%
District of Mission	\$45,000	7%
District of Mission - Office Rent	\$9,000	1%
District of Mission - Tent	\$70,000	11%
Total	\$664,000	100%

Source: Mission 2014 Winter Games Society, Budget Chair, March 24, 2014

- **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 Fraser Valley area. The following is the expenditure allocation by category.

Table 5-2: 2008 Games Society Operating Expenditures

Category	Budget	Percent
Accommodation	\$11,460	2%
Administration	\$225,302	34%
Ceremonies	\$38,050	6%
Communications	\$12,750	2%
Food Services	\$104,886	16%
Friends of the Games	\$19,850	3%
Medical	\$5,475	1%
Promotions	\$17,680	3%
Protocol	\$47,010	7%
Registrations & Results	\$9,917	1%
Security	\$4,000	1%
Special Events	\$25,325	4%
Sport	\$80,370	12%
Transportation	\$61,925	<u>9%</u>
Total	\$664,000	100%

Source: Mission 2014 BC Winter Games Society, Budget Chair, March 24, 2008

The total local Games society spending was approximately \$664,000. It is noted that the virtually all of these expenditures were made locally.

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 Mission, prior to and during the Games. These included expenditures for accommodations, meals, vehicle rentals and miscellaneous costs. The Society also paid the costs to accommodate the bus drivers during the Games. Total BC Games Society personnel-related expenditures were **\$20,500**.

5.3 OTHER EXPENDITURES

- **Guests/Sponsors**

A number of representatives of other agencies were present in Mission for the Games. These included provincial government representatives, corporate partners, and sport partners. The total number of nights was estimated at 49 (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 **\$9,800**.

- **Aircraft charters/fuel/de-icing**

Participants from northern BC were flown to the Abbotsford Airport on charter flights. The cost for landing fees, fuel, and de-icing was **\$37,600**.

5.4 SYNOPSIS OF BC GAMES SOCIETY AND OTHER EXPENDITURES

The total expenditure of the administering agency plus related costs was \$731,900, allocated as follows:

Table 5.1 Administrative Expenses

Category	Expenditure	Percent
Mission 2014 BC Winter Games Society	\$664,000	91%
BC Games Society Personnel Related	\$20,500	3%
Guests/Sponsors	\$9,800	1%
Air charter and related costs	\$37,600	5%
Total	\$731,900	100%

6.0 TOTAL ECONOMIC EFFECTS

6.1 BACKGROUND

The analysis process described above produces direct spending estimates for participants at 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 direct expenditures of just over \$1.7 million produced a total impact on the economy of nearly \$3.6 million. It also generated over \$390,000 in taxes, including \$157,000 in federal taxes, \$203,000 in provincial taxes, and \$31,000 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 Mission BC Winter Games

Economic Measure	Direct	Indirect	Induced	Total
Total Economic Activity	\$1,583,200	\$1,498,260	\$169,735	\$3,251,194
Taxes				
Federal	\$101,274	\$52,383	\$3,492	\$157,149
Provincial	\$143,180	\$52,383	\$6,984	\$202,548
Local	\$6,984	\$20,953	\$3,492	\$31,430
Total Taxes	\$251,438	\$125,719	\$13,969	\$391,126

Source: BC Input Output Model, run March 2014.

7.0 CONCLUSIONS

Over the four days of the BC Winter Games, a significant injection of spending was experienced in the economies of Mission and its environs.

Based on the survey data collected for this event, the Mission 2014 BC Winter Games created direct economic impact in the area in excess of 1.5 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	\$851,300
Spending by organizers	<u>\$731,900</u>
Total	\$1,583,200

- Direct spending by the participants was:

Athletes	\$190,200
Spectators	\$539,400
Volunteers	<u>\$121,700</u>
Total	\$851,300

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

BC Games Society	\$540,000
District of Mission	\$124,000
Guests/Sponsors /Aircraft	<u>\$67,900</u>
Total	\$731,900

The direct spending amount represents a decline of approximately 11% from the 2008 Kimberly/Cranbrook BC Games (the last Games subject to an economic impact analysis). These BC Games generated a direct spending impact of \$1,786,000 compared to \$1,583,000 for these Mission Games.

A number of issues have likely caused this decline, including: fewer athletes, sports, spectators and volunteers; a larger proportion of local (Fraser Valley) spectators who did not incur accommodation costs; and competition for spectator's time with a greater range of leisure activities in the metro Vancouver region. The Mission Games also did not include boys hockey, typically a popular spectator event. The comparable participation rates were as follows:

	Mission (2014)	Kimberly/Cranbrook (2008)
- Athletes	1,847	1,998
- Sports	18	22
- Spectators	3,215	3,490
- Volunteers	1,745	3,033

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	\$42,636	\$151,076	\$2,434	\$196,146
Auto	\$29,354	\$94,286	\$26,774	\$150,414
Concession	\$14,335	\$35,706	\$13,387	\$63,428
Gifts and Souvenirs	\$48,899	\$58,580	\$20,689	\$128,167
Local Transportation	\$4,323	\$1,604	\$2,434	\$8,361
Groceries	\$16,090	\$18,643	\$4,868	\$39,601
Restaurant Meals	\$24,422	\$109,954	\$24,340	\$158,715
Recreation/Entertainment	\$1,644	\$9,182	\$14,604	\$25,430
Retail Shopping	\$3,695	\$54,558	\$6,085	\$64,338
Other	\$1,663	\$5,811	\$6,085	\$13,559
Total	\$190,200	\$539,400	\$121,700	\$851,300

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 Games - including direct, indirect and induced spending impacts - and taxes were:

Economic Measure	Direct	Indirect	Induced	Total
Total Economic Activity	\$1,583,200	\$1,498,260	\$169,735	\$3,251,194
Taxes				
Federal	\$101,274	\$52,383	\$3,492	\$157,149
Provincial	\$143,180	\$52,383	\$6,984	\$202,548
Local	\$6,984	\$20,953	\$3,492	\$31,430
Total Taxes	\$251,438	\$125,719	\$13,969	\$391,126

Source: BC Input Output Model, run March 2014.

APPENDIX

APPENDIX

ATHLETE QUESTIONNAIRE

SPECTATOR QUESTIONNAIRE

VOLUNTEER QUESTIONNAIRE

APPENDIX

MISSION 2014 BC WINTER GAMES

ATHLETE SURVEY

Activity_____ Location_____ Fri. Sat. Sun.

1. Do you live in the Mission-Abbotsford 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? Athlete 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.

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

MISSION 2014 BC WINTER GAMES

APPENDIX

SPECTATOR SURVEY

Activity_____	Location_____	Fri. <input type="checkbox"/>	Sat. <input type="checkbox"/>	Sun. <input type="checkbox"/>
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1. Do you live in the Mission-Abbotsford area? Yes (GO TO #4) No

2. If no, where is your home? (Community)_____

3. Are these Winter 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	\$ _____

MISSION 2014 BC WINTER 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.