Socioeconomic Impacts of New Gaming Venues in Four British Columbia Lower Mainland Communities

Final Report
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Prepared by:

Blue Thorn Research and Analysis Group, Victoria, BC

Authors:

Dr. Colin Mangham, Population Health Promotion Associates

Greg Carney, Sentinel Research & Consulting Corporation

Sean Burnett, Burnett Consulting Corporation

Dr. Robert Williams, Alberta Gaming Research Institute & University of Lethbridge

British Columbia

Author Note

Dr. Colin Mangham is a health promotion researcher with Population Health Promotion Associates in Langley, British Columbia. Greg Carney and Sean Burnett are economic and policy researchers with Sentinel Research & Consulting and Burnett Consulting respectively in Victoria, British Columbia. Dr. Robert Williams is a professor in the School of Health Sciences at the University of Lethbridge and a coordinator with the Alberta Gaming Research Institute.

Edward Ord is a managing partner of the Blue Thorn Research and Analysis Group in Victoria, British Columbia, and was the project manager for this study.

Government representatives to this project were Sue Birge, Director of Policy, Legislation and Standards with the Gaming Policy & Enforcement Branch of the Ministry of Public Safety & Solicitor General; Donna Klingspohn, Manager of the Problem Gambling Program, Ministry of Public Safety & Solicitor General; Alain Mickelson, Program Coordinator, Problem Gambling Program, Gaming Policy & Enforcement Branch, Ministry of Public Safety & Solicitor General and Kashi Tanaka, Policy Analyst, Gaming Policy & Enforcement Branch, Ministry of Public Safety & Solicitor General.

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Contents

List of Tables

List of Figures

Executive Summary

Casino style gambling began a rapid expansion across Canada beginning around 1993 and now accounts for a significant portion of all gambling revenue. However, despite this expansion, the overall socioeconomic costs, benefits, and impacts of casino gambling are unclear. The planned opening of four new gaming venues in the British Columbia Lower Mainland in late 2004 and early 2005 created an opportunity to scientifically study these impacts. Thus, the Gaming Policy and Enforcement Branch of the British Columbia Ministry of Public Safety and Solicitor General commissioned the present study in June 2004 to investigate these impacts so as to assist in its mandate to develop responsible gaming policies for the people of British Columbia.

The principal focus of this study is on the three communities where these new venues were eventually located (City of **Vancouver,** City of **Surrey,** City of **Langley**), as well as the **Township of Langley**, which surrounds the City of Langley. The specific venues were: the **Edgewater Casino in Vancouver,** which opened in February 2005; the **Hastings Racetrack in Vancouver,** whose planned addition of slot machines has not yet occurred; the **Fraser Downs Racetrack and Casino in Surrey,** which added additional slot machines and table games to its existing facility in November 2004; and the **Cascades Casino in Langley,** which opened in May 2005.

The study had three data collection periods. The first was in 2004, prior to the opening of the venues. The second was in 2005, and the third was in 2006. The main methodological elements of this longitudinal study were:

- **Random Digit Dial (RDD) telephone surveys** of approximately 2,500 residents of these four communities in 2004, 2005, and 2006 to assess current gambling behaviours, attitudes toward gambling, and problem gambling prevalence.
- **An examination of changes in available economic and social indicators** in 2004, 2005 and 2006 to assess impacts on employment rates, housing starts, value of residential and nonresidential construction, changes in revenues and number of businesses most typically affected by the introduction of gambling establishments, commercial bankruptcy rates, direct gaming revenue and its distribution, indices of problem gambling, and crime.
- **Employee surveys** at the new facilities in 2005 to determine previous employment, wages, and residency.
- **Surveys of representatives of the four municipalities** in 2005 to determine their perceptions of benefits and costs of the new venues.
- **Patron surveys** at the new facilities in 2005 and 2006 to establish the demographic profile of patrons, as well as their gambling behaviour and spending patterns.
- **Qualitative interviews** with local merchants, police, problem gambling counsellors, and city planners in 2005 and 2006 to ascertain their perception of what, if any, impacts have occurred.

The main findings of this study are as follows:

RDD Findings

LANGLEY

- Compared to 2004, there was less frequent purchase of raffle and charitable lottery tickets in 2006; less frequent purchase and lower expenditure on other lottery tickets in 2005 and 2006; and less frequent horse race betting in 2005.
- Compared to 2004, there was more frequent slot machine play in 2005 and 2006. This is consistent with a high rate (40%) of Cascades Casino patronage from Langley residents, and the fact that 39.2% of people in 2005 and 48.3% in 2006 who gambled at the new Cascades Casino had never patronized a casino before.
- The Cascades Casino resulted in significant repatriation of gambling money back to Langley from out-of-province venues and other Lower Mainland venues.
- There was a significant change in the community's negative general attitude toward gambling. In 2004 44.8% believed gambling's harms somewhat or far outweighed benefits, increasing to 50.0% in 2005 and 54.4% in 2006.
- In contrast, there was no significant change in the community's slightly positive attitude toward the Cascades Casino. In 2004, 39.9% believed it would be harmful, compared to 39.0% in 2005 and 34.2% in 2006. Langley was the only community to believe the new venue to have more benefits than harms.
- There was a statistically significant increase in the rate of moderate problem gambling from 2004 (2.0%) to 2006 (5.4%). In 2006, the City of Langley had the highest combined rate of moderate and severe problem gambling (6.0%) of the four communities studied. Langley

was the only community to experience a statistically significant change in problem gambling prevalence rates.

TOWNSHIP OF LANGLEY

- Compared to 2004, there was less frequent purchase of instant-win tickets in 2006; lower sports betting expenditure in 2005; and more frequent private gambling (e.g., poker) in 2005.
- Compared to 2004, there was more frequent slot machine play in 2005 and 2006. This is consistent with a fairly high rate of Cascades Casino patronage from Township of Langley residents (29.3% in 2005 and 32.8% in 2006), and the fact that 16.7% of people in 2005 and 29.1% of people in 2006 who gambled at the new Langley Cascades Casino had never patronized a casino before.
- The Cascades Casino resulted in a significant redirection of gambling money to Langley from other Lower Mainland venues.
- There was no significant change in the community's negative general attitude toward gambling, in 2004, 47.3% believed harms outweighed benefits, compared to 48.6% in 2005 and 55.9% in 2006.
- The community's somewhat negative attitude toward the Cascades venue did not significantly change: in 2004, 45% believed it would be harmful, compared to 39.3% in 2005 and 44.0% in 2006.
- No change in rates of problem gambling. Langley Township had lowest rates of the four communities studied (4.0% in 2004; 2.6% in 2005; 2.9% in 2006).

SURREY

- General gambling behaviour was unchanged from 2004 with the exception of more frequent Internet gambling in 2006.
- The lack of change in slot machine play is consistent with the fact that Surrey actually experienced a fairly small change in actual slot machine availability (i.e., compared to Langley), and there was relatively low rates of Fraser Down's patronage from Surrey residents (12.2% patronage in 2004; 11.6% in 2005; and 12.6% in 2006). Low patronage was partly due to only 60% of Surrey residents being aware of the new venue.
- The Fraser Downs expansion of slots did not produce increased patronage of the facility. However, there was a small increase in Surrey residents patronizing the Cascades venue rather than other Lower Mainland venues. The Cascades Casino continues to be a more popular destination than Fraser Downs.
- The community's negative general attitudes toward gambling became significantly more negative: in 2004, 51.9% believed harms outweighed benefits, increasing to 58.9% in 2005 and 59.7% in 2006.
- The community's negative attitude toward the expanded Fraser Down's facility became significantly more negative: in 2004, 42.9% believed it would be harmful, increasing to 47.4% in 2005 and 49.3% in 2006.
- No change in rates of combined moderate and severe problem gambling: 5.5% in 2004; 6.0% in 2005; 5.2% in 2006.

VANCOUVER

- Compared to 2004, there were lower expenditures on raffle and charitable lottery tickets in 2006; lower expenditures on lottery tickets in 2005; more frequent private gambling (e.g., poker) in 2005 and 2006; and more frequent Internet gambling in 2006.
- There was no change in slot machine play. This is consistent with the fact that actual gambling availability did not change appreciably from 2004 to 2005 and 2006 for most Vancouver residents, and only a small minority of Vancouver residents patronized the new Edgewater Casino (13.9% in 2005 and 9.6% in 2006). Low patronage was partly due to only 63% of Vancouver residents being aware of the new venue.
- The introduction of the Edgewater Casino did result in a small but significant redirection of patronage to the Edgewater Casino. However, the River Rock Casino in Richmond and Nevada continued to be much more popular places to gamble.
- Vancouver has the most negative attitudes toward gambling of the four communities. Their negative general attitude toward gambling significantly increased. In 2004, 56.6% of people believed the harm of gambling outweighed benefits, increasing to 57.4% in 2005, and 63.9% in 2006.
- The community's negative attitude toward the Edgewater Casino also became significantly worse. In 2004 only 26.0% believed it was likely to be somewhat or very beneficial to the community. This decreased to 24.4% in 2005 and only 15.1% in 2006.
- No significant change in rates of combined moderate and severe problem gambling: 6.0% in 2004, 3.7% in 2005 and 4.1% in 2006.

ALL FOUR COMMUNITIES COMBINED

- There was no marked change in the overall relative popularity of various forms of gambling or the amounts spent on each. However, compared to 2004 there was less frequent purchases of raffle and charitable lottery tickets in 2006; lower lottery expenditures in 2005; more frequent private gambling (e.g., poker) in 2005 and 2006; lower horse racing expenditures in 2006; and more frequent Internet gambling in 2006 and lower Internet gambling expenditures in 2005 and 2006.
- Compared to 2004, there was more frequent slot machine play, but lower slot expenditures in 2005. There were also lower table game expenditures in 2005. These findings suggest an influx of new gamblers spending more modest amounts.
- 2005 and 2006 saw a significant sustained increase in patronage of three new venues: Richmond – River Rock Casino; Langley – Gateway Casino; and Vancouver – Edgewater Casino, largely at the expense of Coquitlam - Great Canadian Casino; Burnaby - Gateway Casino; New Westminster - Royal City Star Riverboat; and Washington State. Gambling in Las Vegas and/or Reno continues to be the second most popular destination for casino gambling, with no significant changes in patronage in 2005 or 2006. Patronage of Washington State slots and tables is significantly lower, but this was not a common destination to begin with, and the magnitude of the decrease is fairly small.
- Negative general attitudes toward gambling became significantly worse: 54.0% in 2004 believed harms outweighed benefits, increasing to 56.9% in 2005 and 61.7% in 2006. Nonetheless, in all communities, most people believe that gambling is a matter of personal

choice (68.6% in 2006), rather than being morally wrong (10.5% in 2006).

- No significant change in rates of combined moderate and severe problem gambling: 5.6% in 2004, 4.4% in 2005, 4.5% in 2006. For historical comparison, in 2002, the rate for the British Columbia Lower Mainland was 4.7%.

Changes in Economic and Social Indicators

EMPLOYMENT IMPACTS

- There is no statistically identifiable increase in overall community employment subsequent to venue opening in any of the four communities.
- However, it is clear that these venues produce many new jobs. A reasonable estimate is perhaps a thousand new jobs in total for the three venues, with the majority of these associated with the Cascades Casino.
- However, the employment benefits are not exclusive to the community hosting the new venue, as 24% of people moved from another municipality for the employment and only 52% of current employees live in the same municipality as the gaming venue.

INDUSTRY IMPACTS

- There are no obvious impacts of the new venues on **Housing Starts** in any community.
- There are no obvious impacts of the new venues on **Value of Residential Construction** in any community.
- There are no obvious impacts of the new venues on **Value of Nonresidential Construction** in any community.
- There is an increase in **Hotel and Motel** revenue in 2004/2005, but it is not likely attributable to the new venues.
- There are no obvious impacts of the new venues on **Commercial Bankruptcy** rates in any community.
- Despite the lack of community-wide changes in economic indicators, it is clear that these new venues do generate significant revenues and do have positive spin-off effects. Thus it is necessary to take a more "micro" view and examine the actual revenue gains at the new gaming venues and how these revenues are distributed.

DIRECT GAMBLING REVENUE AND ITS DISTRIBUTION

- Fraser Downs's gaming revenue (not including horse racing) was $38.9 million in 2004/05 (with expanded slots only for the last 5 months) and $46.8 million in 2005/06. Edgewater Casino gross revenues were $10.6 million in 2004/05 (with 2 months of operation) and $73.1 million in 2005/06. The Cascades Casino revenue was $89.0 million in 2005/06 (with 11 months of operation). About 72% of revenue is from slot machines.
- These gaming revenues account for 27.1% of all Lower Mainland casino revenue in 2005/2006. Out of the 10 casinos in the Lower Mainland, the revenues of the Cascades ranks 4th, Edgewater 5th, and Fraser Downs 6th.
- Casino Service Providers receive roughly 34% of gross revenues and BCLC receives roughly 66%.
- The majority of the Casino Service Provider's gross revenues are spent in the local area in form of operating expenses (primarily wages). Operating expenses have exceeded revenues at Edgewater, resulting in bankruptcy protection and sale to another gaming company.

- Approximately 65% of BCLC revenue from casinos goes to general provincial government revenues; 18% goes to a provincial Health Spending Account; 16% goes to charitable and community organizations in the form of grants; 8% goes to host municipal governments.
- The Cities of Langley, Surrey, and Vancouver are all pleased with their respective new venues, pointing to significant financial benefits, minimal infrastructure costs, and several ancillary nonmonetary benefits.

PROBLEM GAMBLING INDICATORS

- Calls to the provincial **Problem Gambling Help Line** have steadily increased from 2001 to 2005 for all areas of British Columbia. Call volumes decreased in 2006. There was also a statistically significant increase in calls from Langley residents subsequent to the opening of the Cascades Casino, whereas there were no changes in call volumes from Vancouver or Surrey residents subsequent to their venues opening.
- **Total Problem Gambling Treatment Sessions** show a similar pattern of province-wide increases in 2004 and 2005, with declines in 2006. There was also a statistically significant increase in the number of treatment sessions delivered to residents of Surrey and Vancouver (but not Langley) following the introduction/expansion of their venues.
- There were no statistically significant increases in the **Rate of New Admissions to Problem Gambling Treatment** in any of the study communities from 2004 to 2006. In fact, Surrey had significant drop in number of new admissions for problem gambling treatment after June 2005.
- Most of the 14 **Gamblers' Anonymous** chapters in the Lower Mainland began in the 1990s, coincident with the introduction of several new casinos. Five have also opened in 2000 or subsequent, but two others have closed. It is not clear whether attendance was higher in 2005 relative to 2006, but attendance in 2007 appears to be down.
- There is no significant change in **Personal Bankruptcy rates** in any of the four communities from 1999 to 2006.
- There is no observed change in the number of **Suicides** in any of the communities subsequent to the introduction of the new venues.

CRIME

- Both Langley Township and Surrey experienced a statistically significant drop in the number of criminal code offenses after the introduction of gaming facilities near or in their communities. No change was observed for the City of Langley or Vancouver.

Patron Survey

DEMOGRAPHICS

- Patrons of these new venues are roughly representative of Lower Mainland demographics in terms of gender and income.
- Patrons tend to be significantly older than the general population, with ages 25-44 being under-represented and ages 55 – 74 over-represented. The Cascades attracts a much higher rate of people age 19 – 24 and Fraser Downs attracting a higher rate of people age 65 – 74 compared to the other venues. The older average age likely accounts for the fact that patronage has a high percentage of married people.
- The educational level of patrons is slightly lower than the general population.

- Only 3% of patrons are from outside of British Columbia, and almost all the British Columbia patrons are from the Lower Mainland. Most reside within 20 km of the venue, accounting for 85.9% of Edgewater patrons; 85.9% of Fraser Downs patrons; and 65.4% of the Cascades patrons. The primary patron draw is from the specific community in which the venue is located (69.4% for Edgewater; 55.1% for Fraser Downs; 38.6% for Cascades). The Cascades Casino is distinct because the majority of revenue is not drawn from Langley residents. This venue draws a significant portion of revenue from Surrey because of its proximity, and also from communities further up the Fraser Valley (Abbotsford, Chilliwack, Mission) where casinos are not present.

BEHAVIOURAL PROFILE

- 38% of patrons reported more gambling after the venue opened.
- Average reported per visit expenditure was $155 in 2006, with higher expenditures associated with higher frequency of visitation. Approximately 38% of casino revenue comes from people who visit several times a week or more, and approximately 69% to 79% of casino revenue comes from people who visit several times a month or more (see Appendix F). The RDD survey established that 24% of people (23 of 96 patrons who play slots regularly) who play slots in the three study casinos several times a month or more are problem gamblers.
- Average spending on food and drink averages $20 per visit.
- There is very little spending on accommodation as the large majority of patrons live within 20 km.
- About 12-16% of patrons report spending less money on other things as a consequence of their gambling at this new venue.
- Venue patronage patterns mirror the RDD results, with significant repatriation from neighbouring Lower Mainland jurisdictions to the new venues, and small degree of repatriation from out-of-province casinos (mostly Washington State).

Qualitative Interviews

MERCHANTS

- Most reported no change in business, but a few did report decreased revenues and a few reported increased revenues. Hoteliers in Langley reported increased business.
- About half reported an increase in traffic and congestion, and this was especially pronounced near the Cascades Casino.
- Decreased parking availability was an issue mentioned by Langley merchants.

CITY PLANNERS

- Most indicated that the approval of these venues was a complicated and very time intensive process.
- All city planners reported significant economic benefits as well as significant infrastructure improvements occurring either as a direct or indirect consequence of these new venues and revenues.
- These venues also provide local employment and sponsorship for community events.
- Few, if any, negative social impacts were noted.

- There was some concern about current or pending over-saturation of the market, as well as some acknowledgement of negative public attitudes toward the venues.
- City officials in Surrey report that the slot expansion provided significant support for the faltering horse racing at Fraser Downs.

POLICE

- In general, there has been very little crime or police work associated with the new venues.
- There has been some increase in vehicle theft due to the creation of large parking lots. Some cases of loan-sharking also occur, but are not unique to these gaming venues.

PROBLEM GAMBLING COUNSELLORS

- There has been an increase in people seeking problem gambling treatment services (at least in Langley) as a consequence of the greater convenience of these new venues. However, increased media campaigns about treatment and increased referral services have also contributed to this.

Conclusions

One of the main conclusions and generalizations that can be made from this study concerns the fact that no impacts were found for most variables, and the impacts that did occur tended to be modest in magnitude. The reality is that these three new venues have neither caused widespread economic rejuvenation, nor have they created major new social problems.

However, there have been some benefits, costs, and changes. One of the clearer economic benefits has been the creation of new ongoing employment for perhaps a thousand people, along with the attendant social benefits of this employment and the indirect economic spin-offs that these wages have had. The tens of millions of dollars the Casino Service Providers spent building these venues also represents a significant economic gain for the municipalities and businesses in Vancouver, Surrey, and Langley. Furthermore, the direct ongoing revenue that each host municipality receives from these venues contributes to significant ongoing enhancement of local infrastructure and community development. Whether these venues will continue to provide a net monetary benefit to these municipalities is more debatable, and very much dependent on patron origin and the future size and distribution of gaming revenues. For the most part, there has been very little repatriation of gambling dollars from out-of-province venues. Rather, the main impact of these new venues has been local repatriation of gambling dollars from neighbouring Lower Mainland venues, particularly for Langley and Langley Township.

Concerning social impacts, there is very little evidence that these new venues have exacerbated existing social problems, as there was no significant increase in the overall rates of crime or problem gambling. The important exception to this is the City of Langley, which did experience an increase in problem gambling. In general, the Cascades Casino appears to have impacted the gambling behaviour of Langley residents to a much greater extent than the new venues in the other communities, which is partly due to the greater pre-existing availability of casino gambling in Surrey and Vancouver. However, the failure to find increases in Vancouver and Surrey despite even greater availability is an important finding that supports the "social adaptation model" of gambling. This model contends that gambling typically produces most of its negative effects when first introduced and that after some time the community adapts to its presence and the negative effects diminish somewhat. This "adaptation" subsequently provides some inoculation from further harm if presence of the product is expanded or further increased.

BACKGROUND

The past 30 years have seen a remarkable increase in the worldwide availability of legalized gambling opportunities. This has been a contentious issue, with some people pointing to the benefits of increased government revenues, increased employment, repatriation of gambling expenditures from other jurisdictions, decreased illegal gambling, benefits to charity, etc. At the same time, other people have pointed to the costs of increased rates of problem gambling, crowding out of other entertainment industries, increased crime, etc. Surprisingly, this debate has occurred largely in the absence of good scientific evidence concerning what the actual impacts of increased gambling opportunities are, and whether the benefits do outweigh the costs (Grinols, 2004; Williams & Stevens, 2006). The little research that does exist on this topic tends to be either inconsistent, inadequate, biased, or all three (Stevens & Williams, 2004; Williams & Stevens, 2006). In early 2004, the British Columbia Ministry of Public Safety and Solicitor General recognized that the planned opening of four new gaming venues in the British Columbia Lower Mainland created an opportunity to scientifically study these impacts so as to assist in its mandate to develop responsible gaming policies for the people of British Columbia. A Request for Proposals was issued and a contract awarded to the present team in June 2004.

The principal focus of this study is on the three communities where these new venues were eventually located (City of **Vancouver**, City of **Surrey,** City of **Langley**), as well as the **Township of Langley,** which surrounds the City of Langley.

The specific venues were: the **Edgewater Casino in Vancouver**, which opened in February 2005; the **Hastings Racetrack in Vancouver**, whose planned addition of slot machines has not yet occurred; the **Fraser Downs Racetrack and Casino in Surrey**, which added additional slot machines and table games to its existing facility in November 2004; and the C**ascades Casino in Langley**, which opened in May 2005 (see Figure 1).

It is important to also understand this investigation in its wider historical and geographic context. Figure 1 and Figure 2 provide a detailed timeline of casino development in the Lower Mainland. As can be seen, casino gambling has a long history (over 20 years) in the Lower Mainland, with almost all communities (including Vancouver, Surrey, and Langley) having had casinos at some point. Table 1 also makes it clear that the availability of casino gambling is constantly changing, with new venues periodically opening and existing venues periodically closing, expanding, or consolidating. The expansion of the Fraser Downs Racetrack and Casino in late 2004 and the opening of the Edgewater and Cascades casinos in early 2005 represented a significant expansion of casino gambling availability (particularly slot machines) in the Lower Mainland. However, it is also true that slot machines and casino table games were also readily available prior to this time. Slot machine and table game availability in 2004, 2005, and 2006 is depicted in Figures 2, 3, and 4, respectively. This historical experience with casino gambling as well as the existing availability of casino gambling must be taken into account when interpreting the findings of the present study.

Figure 1: The Four Lower Mainland Communities being Studied

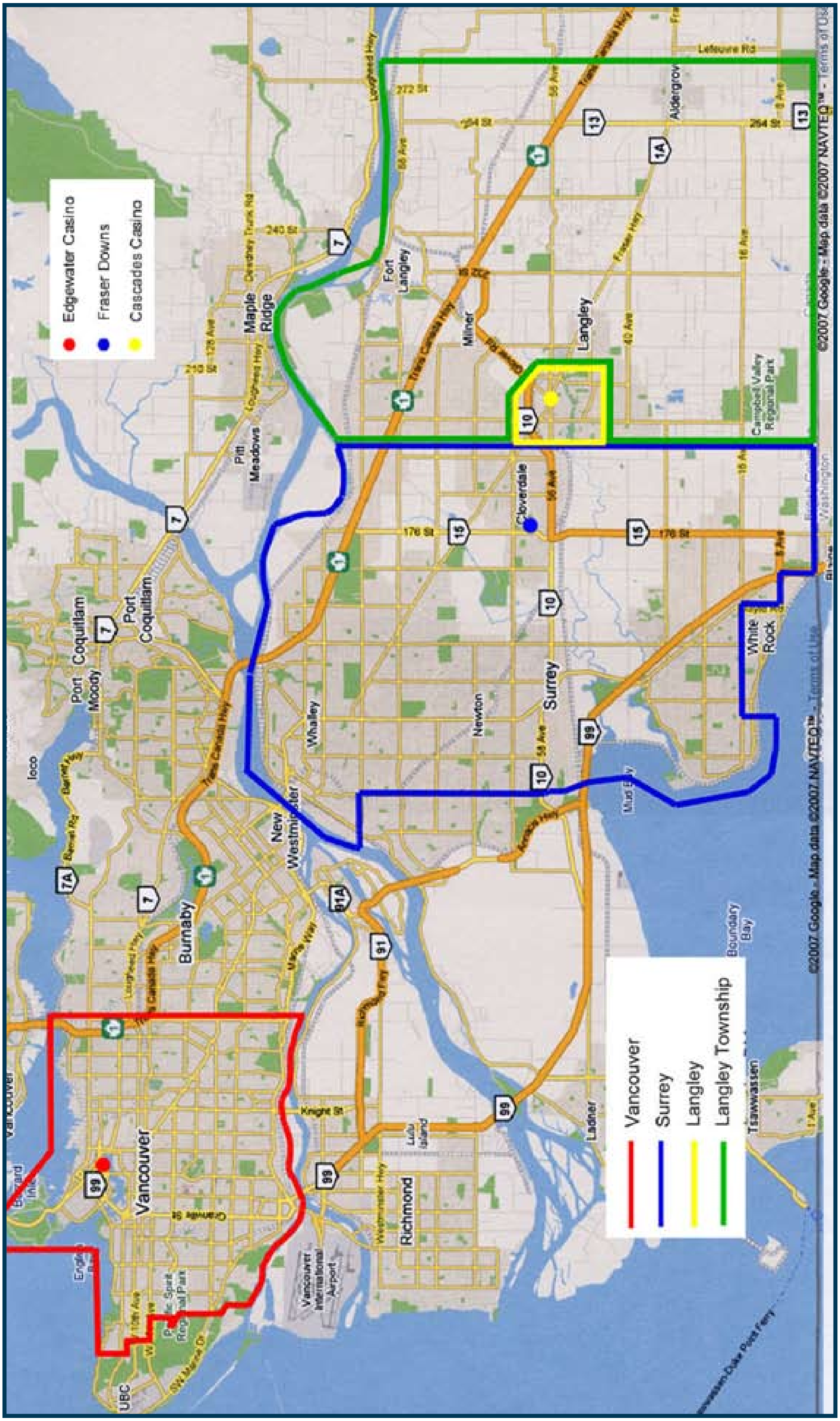


Table 1: Timeline of Casino Development in the British Columbia Lower Mainland

Date	Total Venues	Total Slot Machines	Total Table Games	Event
1982	0	0	0	Great Canadian Gaming begins operating temporary 2 to 3 day casinos in the Lower Mainland.
1986	1	0	36	BC's first permanent casino opens in Vancouver (Great Canadian Casino Holiday Inn; 36? tables).
1987	3	0	~70	Richmond casino opens (Great Canadian Casino - Richmond; 33? tables). Langley casino opens (Great Canadian Casino - Langley; tables only).
1988	5	0	80	Surrey casino opens (Great Canadian Casino - Newton; 28? tables). Vancouver opens 2nd casino (Gateway Casino - Mandarin Centre; 30? tables).
1992	4	0	138	Langley casino closes and its registration transfers to the Renaissance Casino in Vancouver.
1993	5	0	138	Vancouver opens 3rd casino (Great Canadian Casino - Renaissance; 24? tables).
1994	6	0	162	Vancouver opens 4th casino (Royal Diamond Casino; 30? tables).
1995?	7	0	192	Vancouver opens 5th casino (Grand Casino; 32? tables)
1997	7	185	224	British Columbia becomes the last province in Canada to authorize slot machines, under the auspices of the British Columbia Lottery Corporation (BCLC). Surrey casino (Great Canadian Casino - Newton) introduces slot machines.
Nov-97	8	354	224	New Westminster opens its 1st casino (Gateway Casino Royal Towers; 169 slots & 24 tables).
17-Apr-98	8	169	248	Slot machines taken out of service at Great Canadian Casino Newton in Surrey
01-Jun-98	8	169	248	BCLC assumes responsibility to conduct and manage table games, now making it responsible for all commercial gaming in the province.
01-Mar-99	9	469	248	Burnaby opens a casino (Gateway Casino; 300 slots & 33 tables).
05-Oct-99	10	810	281	New Westminster opens 2nd casino (Royal City Star Riverboat; 341 slots & 23 tables).
31-Mar-00	10	954	304	BCLC Report of slot and table game numbers for Lower Mainland Venues as of March 31
31-Mar-01	10	769	295	BCLC Report of slot and table game numbers for Lower Mainland Venues as of March 31
15-Jul-01	9	769	265	Vancouver casino closes (Royal Diamond Casino; 30 tables).
5-Oct-01	9	1219	269	Surrey casino closes (Great Canadian Casino - Newton) and relocates to Coquitlam (Great Canadian Casino - Coquitlam; 450 slots & 32 tables).

Date	Total Venues	Total Slot Machines	Total Table Games	Event
31-Mar-02	9	1069	336	BCLC Report of slot and table game numbers for Lower Mainland Venues as of March 31
31-Mar-03	9	1069	277	BCLC Report of slot and table game numbers for Lower Mainland Venues as of March 31
31-Mar-04	9	1271	275	BCLC Report of slot and table game numbers for Lower Mainland Venues as of March 31
5-Apr-04	10	1459	276	Surrey adds slots and table games to existing racetrack (Fraser Downs Racetrack & Casino; 188 slots & 1 table).
24-Jun-04	10	2459	318	Richmond casino (Great Canadian Casino - Richmond) relocates within Richmond and opens as the expanded River Rock Casino (1000 slots; 78 tables).
24-Jun-04	9	2459	294	Vancouver casino closes (Great Canadian Casino - Renaissance Hotel; 24 tables).
3-Nov-04	**9**	**2671**	**297**	**Fraser Downs Racetrack & Casino in Surrey opens in new facility with additional slot machines and table games (400 slots; 3 tables)**
21-Nov-04	8	2671	265	Vancouver casino closes (Grand Casino; 32 tables).
16-Dec-04	8	3053	265	Burnaby casino (Gateway Burnaby) adds 400 slot machines to bring total to 679.
03-Feb-05	**9**	**3650**	**316**	**Vancouver opens 1st casino with slots (Edgewater Casino; 600 slots & 51 tables) (consolidation of Grand Casino & Royal Diamond Casino).**
31-Mar-05	9	3650	320	BCLC Report of slot and table game numbers for Lower Mainland Venues as of March 31
30-Apr-05	8	3650	287	Vancouver casino closes (Gateway Casino - Mandarin Centre; 33 tables).
05-May-05	**9**	**4180**	**323**	**Langley casino opens (Gateway Cascades Casino; 530 slots; 36 tables).**
17-Nov-05	9	4680	361	Coquitlam Casino redeveloped and expanded as Boulevard Casino (950 slots; 70 tables).
30-Nov-05	8	4423	337	New Westminster casino closes (Royal Towers Casino; 169 slots & 24 tables)
31-Mar-06	8	4423	355	BCLC Report of slot and table game numbers for Lower Mainland venues as of March 31

***Note:** These dates and figures are derived from British Columbia Lottery Corporation (BCLC) annual reports and information collected from the gaming providers. The number of tables represents the maximum number of tables permitted, but the number of tables actually open fluctuates with patronage numbers. The number of venues indicates the number of permanent gaming venues offering either slot machines or table games.*

***Figure 2:* Timeline of Slot Machines and Casino Table Games in the Lower Mainland**

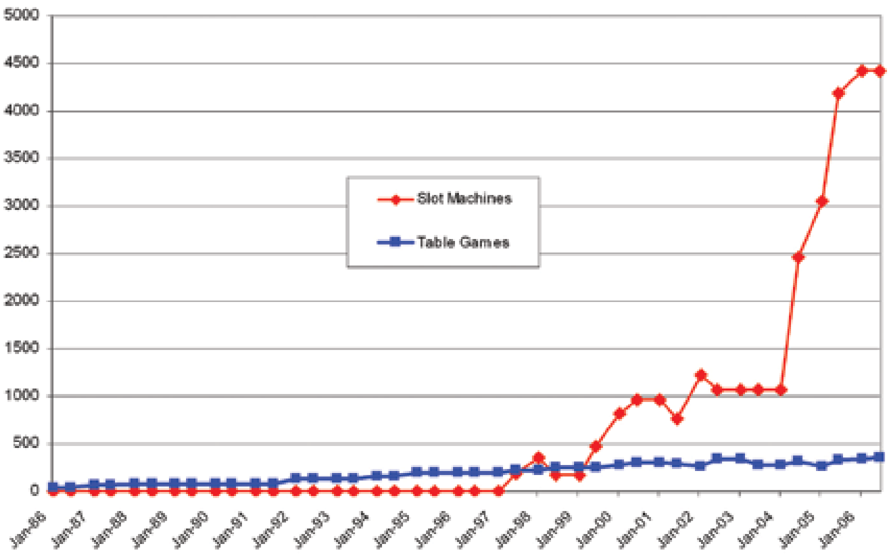
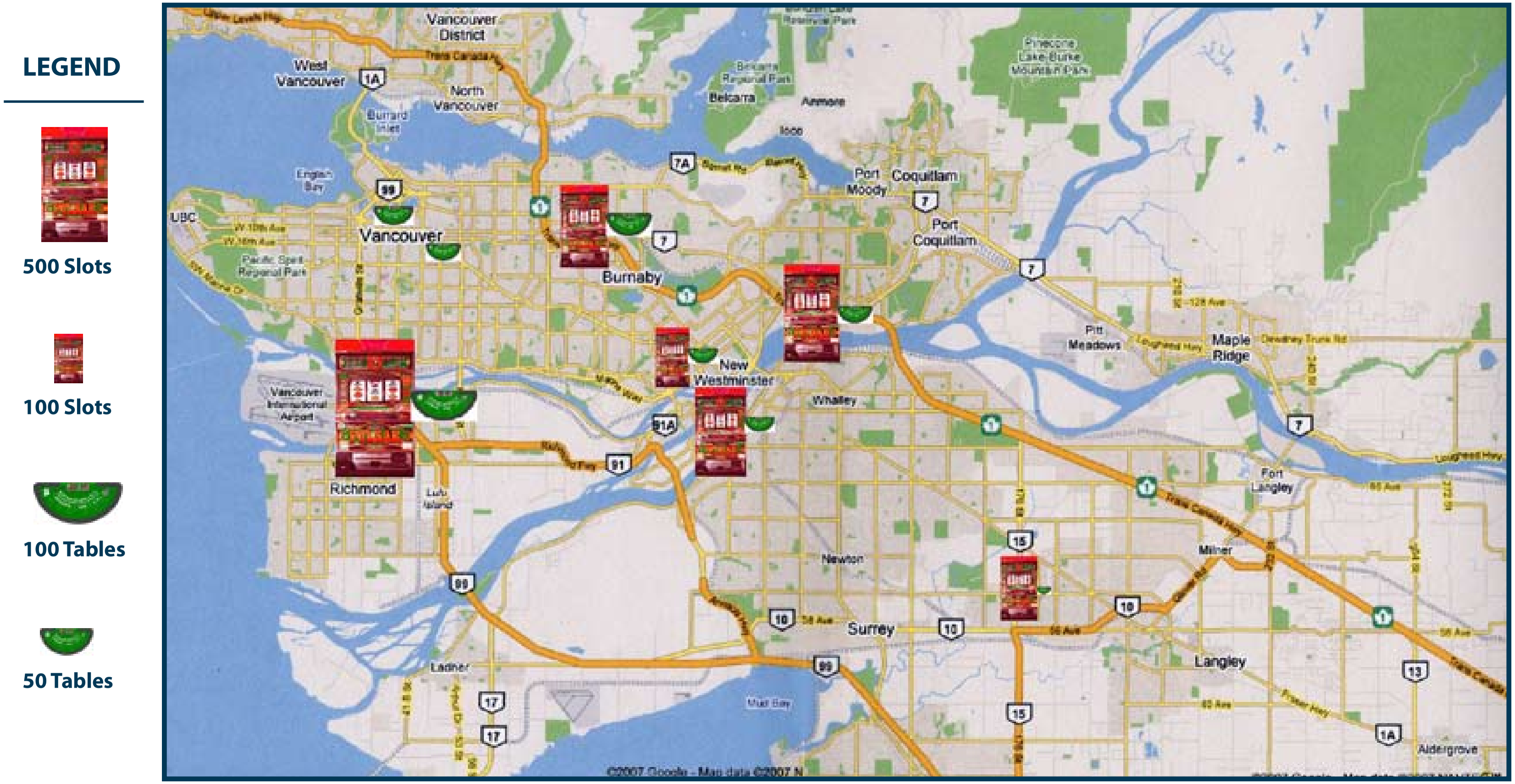


Figure 3: Slot Machines and Casino Table Games in the Lower Mainland in 2004 (November 1)



November 1 is just prior to the Fraser Downs expansion and is in the middle of the RDD Baseline assessment period.

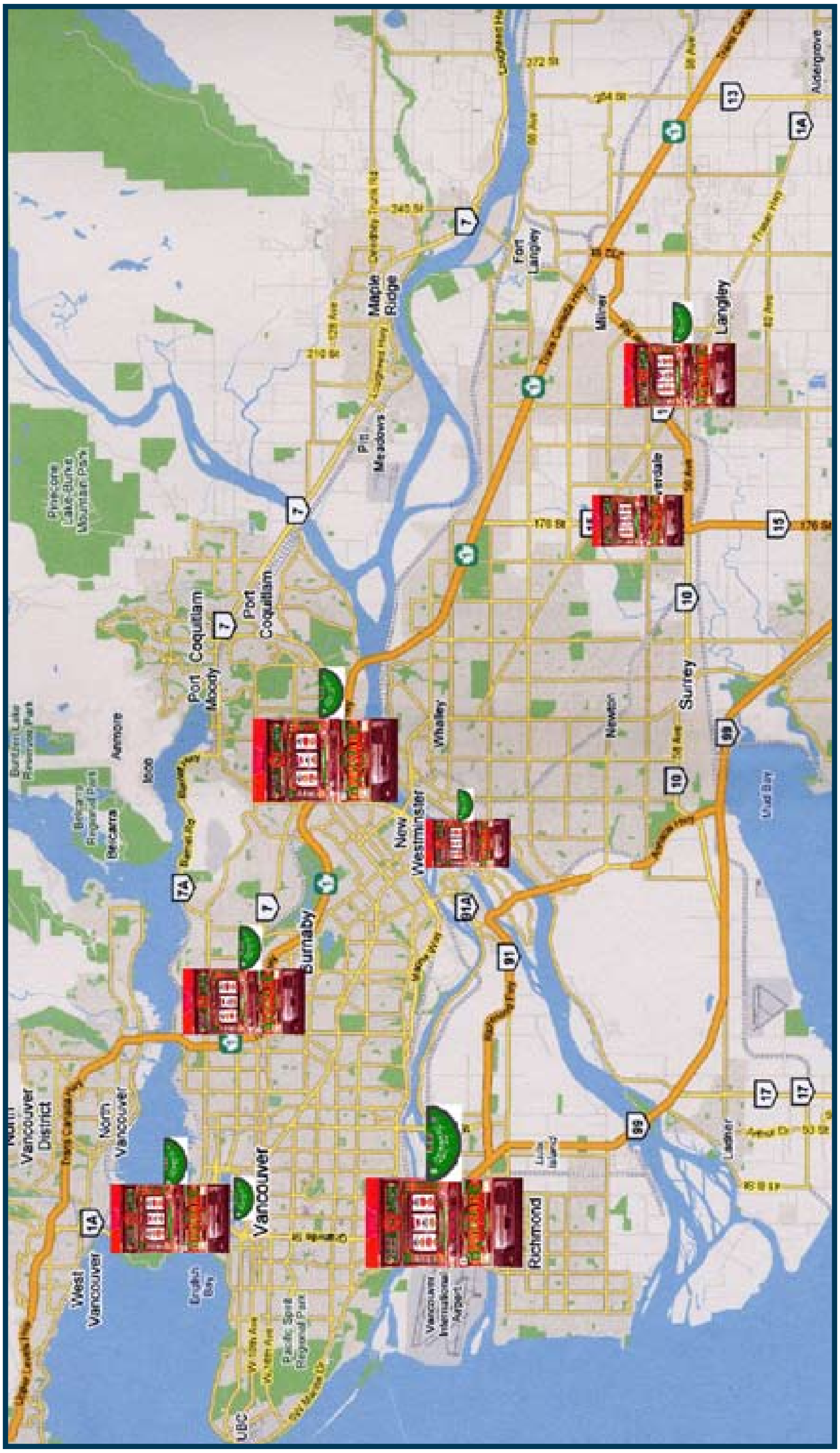
Total of 2459 Slots + 294 Tables on Nov 1.

***Figure 4:* Slot Machines and Casino Table Games in the Lower Mainland in 2005 (November 18)**

November 18 is just after the Coquitlam Casino redeveloped and expanded as the Boulevard Casino and is in the middle of the RDD 2005 assessment period.

Total of 4680 Slots + 361 Tables on Nov 18.

Figure 5: Slot Machines and Casino Table Games in the Lower Mainland in 2006 (November)



LEGEND

November is in the middle of the RDD 2006 assessment period.

Total of 4423 Slots + 355 Tables in November.

Methodological Approach

The present research has several important overarching features. One is the use of a multidisciplinary team to conduct the research. Socioeconomic impact studies of gambling are methodologically complex and draw upon expertise in the fields of economics, social science, epidemiology, and gambling studies. Thus, much of the economic impact data was collected and analyzed by economists on the team and much of the social impact data was collected and analyzed by social scientists on the team. However, a collective effort was used in determining the overall methodological approach, as well as the integration and interpretation of the results. This use of a multidisciplinary team is a fairly unique feature of this study, and has rarely been employed in prior socioeconomic studies of gambling.

The second important feature of the present research is the use of a before-after design. Many socioeconomic analyses of gambling impact consist simply of retrospective analyses of existing data. Prospective analyses are far superior, as they allow the collection of original data targeted at the variables of interest.

A third important feature is an extended follow-up. The length of time it takes for all economic and social impacts of gambling to manifest themselves is unknown. Much of the economic impact (e.g., revenues, employment, etc.) appears to be fairly immediate. On the other hand, it may take a few years for competing industries to fail or for increased utilization of roads, sewers, etc. to result in early repairs. Some economic impacts will also reverse themselves in a resilient economy as industry repositions itself. Social impacts may take longer to appear than economic impacts (e.g., Stokowski, 1993; McMillen, 2000). While some individuals plunge rapidly into gambling problems, many others gamble safely for several years before problems develop (NRC, 1999). Here again, there is evidence that rates of gambling and problem gambling may decline with extended exposure (e.g., Shaffer et al., 2004). It is also very important to realize that new gambling venues are always added to existing gambling opportunities (even if the pre-existing ones are illegal). Thus, lag effects of these pre-existing opportunities can easily be mistaken for immediate impacts of new facilities. Therefore, the present study had three data collection periods. The first was in 2004, prior to the opening or expansion of the identified venues, with this information reported in a Baseline Report (Blue Thorn et al., 2005). The second data collection period was in 2005, with this information contained in a First Impact Report (Blue Thorn et al., 2006). The third data collection period was in 2006. The present Final Report describes this 2006 data as well as providing an overall summary and integration of findings from all three years.

Another important feature of the present research is the comprehensive examination of both economic and social variables potentially impacted by new gaming venues. The introduction of any new economic activity has pervasive economic and social ripple effects throughout a community. Despite this, many studies of gambling's impact have measured and reported only the most apparent and obvious economic impacts that are easily quantifiable in monetary terms (e.g., employment, government revenues, etc.). There are many examples of this such as Anderson's (1997) study of U.S. casino gambling; Littlepage et al. (2004) study of riverboat gambling in Indiana; Rabeau's (2004) study of casino gambling in Quebec; and studies of the economic impacts of racinos in Ontario (Econometric Research, 2005). This creates a very unbalanced analysis in that the economic effects are not measured against the social effects. An exhaustive literature review of the socioeconomic impacts of casino gambling was undertaken prior to the start of this study (Stevens & Williams, 2004). The results of this literature review were used to guide which particular social and economic variables to examine.

The fourth feature of this research is the use of a multi-pronged approach with overlapping methodologies that allowed for the triangulation of results. The main methodological elements of this study were a:

1] **Random Digit Dialling (RDD) telephone survey** of approximately 2,500 adults in these four communities in 2004, 2005, and 2006 to examine:
   - past year gambling behaviour
   - current attitudes toward gambling
   - problem gambling prevalence

2] Examination of **changes in available economic and social indicators** in 2004, 2005 and 2006 to examine changes in:
   - employment rates
   - housing starts
   - value of residential and nonresidential construction
   - changes in revenues of industries most typically affected by the introduction of gambling establishments
   - changes in the number of

- businesses most typically affected by the introduction of gambling establishments
- commercial bankruptcy rates
- direct gaming revenue and its distribution
- infrastructure costs to the community for the new venues
- problem gambling treatment indicators
- personal bankruptcy rates
- suicide rates
- criminal code offenses

When available, these changes are compared to changes in these indicators for British Columbia generally.

3] **Employee surveys** of the new facilities in 2005 to determine:

- previous employment status
- previous wage rates
- current and previous residency

4] Surveys of representatives of the 4 municipalities in 2005 to determine:

- their perceptions of benefits and costs of the new venues

5] **Patron surveys** of the new facilities in 2005 and 2006 to establish:

- the demographic profile of patrons
- gambling behaviour of patrons
- spending patterns of patrons

6] **Qualitative interviews** with local merchants, police, problem gambling counsellors, and city planners in 2005 and 2006 to ascertain:

- their perception of what impacts have occurred as a result of the opening/expansion of the three venues

The present report is roughly organized by these methodological elements and their individual results. The Summary and Conclusion section at the end synthesizes and integrates these findings.

RANDOM DIGIT DIALLING TELEPHONE SURVEY

This telephone survey (Appendix A) comprehensively assessed people's gambling behaviour, gambling attitudes, and problem gambling status. The surveys in 2005 and 2006 were identical to the one administered in 2004 except that a) an additional question was asked about participation in electronic forms of gambling such as electronic Keno or electronic racetracks (as electronic Keno had been introduced to the BC Lower Mainland in 2005); and b) question wordings were changed to account for the fact that Cascades and Edgewater Casinos are now open for business, and thus to allow for reporting of present gambling relative to those venues.

Method

Sample

Venture Market Research Corporation based in Victoria, British Columbia was contracted to conduct an annual Random Digit Dialling (RDD) telephone survey of 2500 adults using a computer-assisted telephone interview (CATI). The sample was allocated as follows: 500 for the City of Langley; 500 for Langley Municipal District (Township of Langley); 500 for the City of Surrey; and 1,000 for the City of Vancouver. Vancouver had a larger sample size because of its larger population. These sample sizes are sufficiently large to detect any year to year changes for virtually all the variables being examined.

The following procedures were used to ensure optimal random sampling and valid self-report:

- The telephone number databank from which numbers were randomly drawn included unlisted numbers and excluded cell phones to prevent multiple sampling of the same household.
- The household interviewee was randomly determined by requesting the interview be conducted with the adult (19+) having the most recent birthday.
- Rigorous effort was made to complete an interview with the designated person.
- Up to 16 attempts were made to contact the person.
- The majority of the phone calls were made in the evening and on weekends.
- For some respondents with English as a second language, an offer was made to phone back and conduct the survey in Cantonese, Mandarin or Punjabi.
- Most households that initially refused to conduct the survey were re-contacted at a later date and asked again to do the survey.

The dates of the surveys and the size of the obtained sample are reported in Table 2.

Table 2: ***Obtained RDD Sample***

	2004	2005	2006
Survey Dates	Sep 28 - Nov 14, 2004 (refusal conversion: Jan 6 - Jan 13, 2005)	Oct 4 - Dec 13, 2005	Aug 11 – Dec 4, 2006
City of Langley	578	509	500
Township of Langley	672	587	503
City of Vancouver	1154	1004	1000
City of Surrey	596	508	500
Total Sample	**3000***	**2608**	**2503**

** The larger sample in 2004 was due to the refusal conversions being done after the 2500 quota had already been obtained.*

Response Rates

The most appropriate method of calculating response rates is the one recommended by the Council of American Survey Research Organizations (CASRO, 1982). Essentially, this is the number of completed interviews divided by the number of eligible telephone numbers (a /(a + b + c + e + g)). In the present survey, a telephone number was deemed eligible if it was a residential household located in one of the four designated communities. A large percentage of calls could not be determined as being eligible or not due to refusals to conduct the survey or instances where no one answered the phone. Telephone area codes are not unique to any particular municipality or region within the province since households may opt to keep their previous phone numbers when they move within the lower mainland area of BC. The percentage of unknown numbers that were deemed eligible was determined by multiplying the number of unknown cases (d + f + h) by the fraction of telephone numbers the survey generally found to be eligible (a + b + c + e + g)/ (a + b + c + e + g + i). Response rates and their calculation are reported in Table 3.

Table 3: ***RDD Response Rates***

		2004	2005	2006
a	Completed interviews	3000	2608	2503
b	Prematurely terminated interviews of eligible people	117	98	102
c	Refusals by eligible people	unknown	unknown	unknown
d	Refusals by people with unknown eligibility	6940	7765	9861
e	Interviews not conducted with eligible people because of language/hearing/competency difficulties	unknown	unknown	unknown
f	Interviews not conducted with people of unknown eligibility because of language/ hearing/competency difficulties	727	839	737
g	Eligible numbers that never answer (ascertained by info contained in answering machine message)	unknown	unknown	unknown
h	Eligibility unknown due to never answering and/or always busy or call-back requests that do not result in a completed interview.	6377	3258	3872
i	No interview attempt because of ineligibility (business number; out-of-service; residence was not within one of the 4 designated communities)	8238	3018	3997
CASRO Response Rate		**43.0%**	**31.4%**	**30.1%**

The lower response rates in 2005 and 2006 are primarily due to the fact that more targeted dialling was used in these years to decrease the number of ineligible numbers (i.e., relevant postal codes were used to create the universe of eligible numbers). (With fewer naturally occurring ineligible numbers, the percentage of unknown numbers that are projected to be eligible (d + f + h) becomes higher, which lowers the overall response rate.) Two other contributing factors are a shorter time interval between the initial contact and the refusal conversions compared to 2004, and a general trend toward higher refusal rates in RDD surveys in Canada. It is important to note that people with problems or pathology tend to have higher rates of survey refusal. Thus the somewhat higher refusal rates in the 2005 and 2006 surveys may mean that people with problems/ pathology are somewhat underrepresented relative to the 2004 survey. Weighting (see below) rectifies this problem to some extent, nonetheless it is still possible that decreases - or failure to find increases - in gambling activity/expenditure/problems in the 2005 and 2006 surveys may be partly an artefact of these lower response rates.

Weighting the Sample

Age, gender and ethnicity of each community's RDD sample were compared against Statistics Canada census data for the Cities of Vancouver, Surrey, and Langley, and the Township of Langley in 2001 (Statistics Canada, 2001). Demographic data from Statistics Canada is considered the "gold standard" because it assesses the entire population, achieves a very high response rate, and its self-administered format is more conducive to valid self-report. As is the case in most RDD surveys, the present survey sample tended to be under representative of young people, males, and ethnic minority groups. To compensate for this, weightings were assigned to the survey data for each community to match Statistics Canada age, gender, and ethnic categorizations (Aboriginal, Chinese, East Indian/Pakistani, All Others) for that community. In addition, tables were created for the total sample, wherein each community's data was weighted by its relative population size: the City of Langley (24,000 = .025 weight); the Township of Langley (63,000 = .065 weight); the City of Surrey (348,000 = .357 weight); the City of Vancouver (541,000 = .554 weight).

Statistical Analysis

Kruskal-Wallis tests were used to determine whether there were any statistically significant differences between the years (2004, 2005, 2006) on continuous variables (i.e., frequency of gambling, money spent, gambling attitudes, and problem gambling status). Chi-Square tests were used to determine whether there were any statistically significant differences between the years on nominal variables (e.g., where person normally plays slots, table games, and horse racing; awareness of new facility).

If significant differences were found between the years, pairwise Mann-Whitney U tests and/or z tests of proportions were used to determine whether differences existed in 2004 relative to 2005, and 2004 relative to 2006. A significance level of $p < .01$ was used for all analyses due to the large sample sizes and the large number of individual comparisons which tends to increase the likelihood of statistical significance by chance (Type 1 error). (A significance level of $p < .05$ was used in cases where the Bonferroni correction was automatically applied). On all tables, **blue shading** indicates a significant **increase from 2004** whereas **red shading** indicates a significant **decrease from 2004.** Note: individual cells were not compared to each other for frequency of gambling, hence, the entire row is highlighted if there is a significant difference between years.

Note: A "statistical significance" of $p < .01$ indicates that there is more than a 99% probability that the difference with the comparison group reflects a "real" or "true" difference.

Results

The following presents the self-reported general gambling behaviour, gambling patronage, perceived impact of the new venue in their community, gambling attitudes, perceived benefits and drawbacks of the new facility, and problem gambling status for each of the four communities in all three years, and any statistically significant changes that have occurred in 2005 and 2006 relative to 2004.

City of Langley

As seen in Table 4, the overall pattern of gambling behaviour in 2005 and 2006 is similar to 2004 in terms of the relative popularity of the various forms of gambling and the relative amount of money spent on each. However, while there have not been any major changes in the general pattern of gambling frequency and expenditure, there have been some statistically significant changes within certain forms. Specifically, compared to 2004, there was significantly:

- Less frequent purchasing of raffle and charitable lottery tickets in 2006.
- Less frequent purchasing and lower expenditure on other lottery tickets in 2005 and 2006.
- More frequent slot machine playing in 2005 and 2006.
- Less frequent horse race betting in 2005.

Some of the above changes reflect national trends (i.e., less frequent lottery play and horse race betting). However, it is possible that the introduction of a new form of gambling (Cascades Casino) may have accelerated the decreased involvement in these activities, as new forms of gambling often supplant older forms. Roughly 40% of Langley residents indicated they have been to the Cascades Casino, which is a fairly high rate of casino patronage relative to the rest of the province and to the three other communities (Table 5). There is very high awareness of the existence of the new casino among people surveyed: 97% - 98% (Table 7). More frequent slot machine play is also consistent with the report that 39.2% of people in 2005 and 48.3% in 2006 who gambled at the new Cascades Casino had never patronized a casino before (Table 5). Roughly 76% of people who patronized the new casino reported that it did not affect their overall gambling activity, but approximately 17% indicate that it had increased their gambling. The large majority of people (about 95%) also indicated that their spending on other things had not changed as a result of their patronage of the Cascades Casino.

As seen in Tables 5 and 6, there were several significant changes in terms of where people gambled. Specifically, there was a significant relocation of slot and table play from several other jurisdictions (including Nevada and Washington) and venues to the new Cascades Casino, which became the overwhelmingly favourite place for casino gambling in 2005 and 2006. The repatriation of gambling dollars that was previously going to Nevada and Washington represents an economic gain for British Columbia. Whether it also represents an economic gain for the City of Langley depends on how much of the Cascades Casino revenue derives from Langley residents and how much of the

Langley-derived revenue comes back to Langley in the form of direct grants and provincial services.

In terms of attitudes toward gambling, the existing negative beliefs about the benefits/harms of gambling in 2004 became more negative in 2006, with 54.4% of the populace in 2006 now indicating they believed gambling's harms either somewhat or far outweighed gambling's benefits, compared to 44.8% in 2004 (Table 7). (It is notable that residents of the three other communities tended to have consistently more negative attitudes toward gambling.) Nonetheless, there was no significant change in the fact that the large majority of people in all three years continue to believe that gambling is a matter of person choice. Despite their negative general attitude toward gambling, in 2006 more City of Langley residents believed the new Cascades Casino was either beneficial or very beneficial (49.4%) to the community compared to 34.2% who believed it was somewhat or very harmful. (Langley was the only community to have the belief that their venue had more benefits than harms). These sentiments were not different from 2004. Table 8 shows that the main perceived benefits of the new facility in 2006 were: provides money for good causes; increases local or provincial revenue; provides employment; and increases tourism. The main perceived drawbacks in 2006 were: negatively impacts people who can least afford it; increases gambling addiction; and adds to crime and/or policing costs.

Table 9 shows that there was a significant increase in the rates of moderate problem gambling from 2004 (2.0%) to 2006 (5.4%). There were no statistically significant changes in the rates of non gamblers, non problem gamblers, low risk gamblers, or severe problem gamblers. In 2006, the City of Langley had the highest combined rate of moderate plus severe problem gambling (6.0%) of the four communities studied. It was also the only community to experience a significant change in problem gambling prevalence rates. This change is consistent with the fact that compared to residents of the three other communities, Langley residents had a higher rate of slot machine gambling in 2005 and 2006, and greater increase in slot machine patronage from 2004, a higher rate of new venue patronage, and tended to have the highest percentage of people reporting that the new facility had increased their gambling.

As will be seen, the evidence suggests that residents of Langley have experienced a greater behavioural impact from the new facility in their community compared to the three other communities.

Table 4: ***General Gambling Behaviour of City of Langley Residents***

	Year	Past Year Frequency of Involvement: Not at all	Few days	Once a month or less	Several times a month	Several times a week	Daily	Kruskal-Wallis Test	Money spent in a typical month (for people reporting any spending in a typical month): Average	Median	Kruskal-Wallis Test
Raffles and Charitable Lotteries	2004	43.8%	39.3%	10.7%	4.1%	1.9%	0.3%	$x^2(2) = 11.6$, $p = .003$	$23.48	$10.76	$x^2(2) = 5.39$, $p = .067$
	2005	49.6%	36.5%	9.2%	2.9%	1.6%	0.2%		$23.88	$10.00	
	2006	50.5%	39.0%	8.6%	1.7%	0.2%	0%		$22.47	$10.00	
Other lotteries	2004	30.6%	19.5%	16.4%	20.8%	12.4%	0.3%	$x^2(2) = 18.2$, $p = .000$	$22.86	$12.00	$x^2(2) = 15.5$, $p = .000$
	2005	35.2%	19.3%	21.5%	15.3%	7.4%	1.3%		$18.36	$10.00	
	2006	30.6%	27.0%	21.1%	16.3%	4.9%	0.2%		$20.06	$10.00	
Instant Win Tickets	2004	52.8%	22.0%	10.2%	9.5%	4.7%	0.8%	$x^2(2) = 5.73$, $p = .057$	$14.89	$10.00	$x^2(2) = 8.13$, $p = .017$
	2005	55.8%	17.2%	13.7%	8.8%	4.3%	0.2%		$12.00	$6.00	
	2006	58.2%	19.3%	9.4%	10.6%	1.6%	0.8%		$15.53	$10.00	
Bingo	2004	90.7%	5.4%	1.7%	1.7%	0.5%	0%	$x^2(2) = 4.77$, $p = .092$	$54.55	$30.35	$x^2(2) = 1.31$, $p = .521$
	2005	93.0%	5.9%	0.6%	0.2%	0.4%	0%		$56.41	$40.00	
	2006	93.7%	4.0%	1.0%	0.8%	0.3%	0.2%		$64.31	$40.00	
Electronic Keno & Racetracks	2004	not assessed									
	2005	87.5%	7.8%	2.1%	1.2%	1.2%	0.2%	$x^2(1) = .08$, $p = .930$	$46.93	$25.00	$x^2(1) = .31$, $p = .580$
	2006	87.6%	7.8%	2.6%	1.6%	0.2%	0.2%		$37.28	$25.00	
Slot Machines	2004	76.5%	17.9%	3.4%	1.7%	0.3%	0.2%	$x^2(2) = 33.8$, $p = .000$	$130.01	$60.00	$x^2(2) = 2.94$, $p = .230$
	2005	59.5%	29.4%	6.8%	3.3%	0.4%	0.6%		$96.51	$50.00	
	2006	66.4%	24.9%	5.4%	2.5%	0.9%	0%		$99.30	$50.00	
Casino Table Games	2004	89.0%	8.6%	1.9%	0.2%	0%	0.3%	$x^2(2) = 4.77$, $p = .092$	$147.25	$50.00	$x^2(2) = .96$, $p = .620$
	2005	87.9%	9.2%	1.6%	0.4%	0.4%	0.6%		$227.30	$200.00	
	2006	86.0%	9.7%	3.1%	0.4%	0.7%	0%		$158.80	$100.00	
Horse Racing	2004	91.9%	6.4%	0.5%	0.3%	0.5%	0.3%	$x^2(2) = 8.90$, $p = .010$	$46.14	$20.00	$x^2(2) = 2.40$, $p = .301$
	2005	95.9%	3.1%	0.6%	0%	0.4%	0%		$116.37	$33.09	
	2006	91.8%	7.1%	0.2%	0.2%	0.6%	0%		$69.36	$20.00	
Sports Betting	2004	93.2%	4.9%	0.8%	0.7%	0.3%	0%	$x^2(2) = .13$, $p = .938$	$38.76	$25.00	$x^2(2) = .65$, $p = .723$
	2005	93.6%	4.5%	1.2%	0.8%	0%	0%		$33.02	$14.82	
	2006	93.4%	4.5%	1.1%	1.0%	0%	0%		$34.53	$20.00	
Private Games (e.g. poker)	2004	84.7%	9.3%	3.2%	1.5%	1.3%	0%	$x^2(2) = 7.21$, $p = .027$	$34.25	$20.00	$x^2(2) = 3.00$, $p = .223$
	2005	83.6%	8.6%	4.3%	2.7%	0.8%	0%		$33.53	$20.00	
	2006	80.4%	11.3%	2.9%	4.9%	0.4%	0%		$31.98	$20.00	
Internet Gambling	2004	98.5%	1.0%	0.2%	0%	0.3%	0%	$x^2(2) = 1.05$, $p = .592$	$11.08	$10.00	$x^2(2) = .23$, $p = .894$
	2005	97.7%	1.6%	0.2%	0%	0.4%	0.2%		$23.71	$1.29	
	2006	97.7%	1.1%	0.3%	0.5%	0.2%	0.2%		$27.99	$10.00	
High Risk Stocks	2004	95.8%	2.9%	0.5%	0.3%	0.3%	0.2%	$x^2(2) = 5.33$, $p = .070$	$5459	$4100	$x^2(2) = 3.07$, $p = .080$
	2005	97.1%	2.0%	0.2%	0.6%	0.2%	0%		$3490	$85.00	
	2006	94.3%	5.0%	0.1%	0.2%	0%	0.3%		$4416	$2000	

Table 5: ***Reported Gambling Behaviour Impact of the Langley Cascades Casino on City of Langley Residents***

		2005	2006
Have you ever gambled at Langley Gateway (Cascades) Casino?	Yes	39.8%	41.0%
	No	60.2%	59.0%
How many times have you gone to Langley Gateway (Cascades) Casino since it opened? (for people who have gambled there)	few days	71.6%	69.8%
	once a month or less	13.2%	18.5%
	several times a month	7.5%	7.7%
	several times a week	1.7%	3.5%
	daily	5.9%	0.5%
On average, how much do you spend per visit? (for people who have gambled there)		$36.04	$44.07
What sort of impact has this facility had on your overall gambling behaviour? (for people who have gambled there)	Increased it	17.6%	17.9%
	No change	76.9%	75.7%
	Decreased it	5.5%	6.3%
Do you spend less on other things now that you sometimes gamble at Langley Gateway (Cascades) Casino? (for people who have gambled there)	Yes	7.0%	4.4%
	No	93.0%	95.6%
Where did you used to go to play table games or slot machines before this facility was built?	did not play anywhere before	39.2%	48.3%
	Richmond – River Rock Casino Resort	3.3%	3.9%
	Las Vegas and/or Reno	20.2%	18.8%
	Coquitlam – Great Canadian Casino	11.3%	12.2%
	New Westminster – Royal City Star Riverboat Casino	9.4%	4.9%
	Burnaby – Gateway Casino	0.9%	0.5%
	Surrey – Fraser Downs Racetrack & Casino	3.9%	2.2%
	BC – Outside Lower Mainland	3.8%	4.0%
	Washington State	4.0%	1.5%
	New Westminster – Gateway Casino (Royal Towers Hotel)	1.5%	1.5%
	Cruise Ships	0.3%	0.2%
	Vancouver – Gateway Casino (Mandarin Centre)	0%	0%
	Vancouver – Grand Casino	0%	0%
	Vancouver – Great Canadian Casino (Holiday Inn)	0%	0%
	Vancouver – Hastings Racetrack	0%	0%
	Other	2.1%	1.9%

Table 6: ***Reported Gambling Patronage of City of Langley Residents***

	Where do you normally go to play slots?			What casino do you normally go to play table games?			Where do you normally go to bet on horse racing?		
	2004 (n = 138)	2005 (n = 205)	2006 (n = 162)	2004 (n = 59)	2005 (n = 62)	2006 (n = 70)	2004 (n = 49)	2005 (n = 21)	2006 (n = 42)
Richmond – River Rock Casino Resort	8.7%	2.9%	1.9%	16.9%	8.1%	1.3%			
Las Vegas and/or Reno	21.0%	7.3%	8.6%	16.9%	14.5%	9.6%	0%	0%	%
Coquitlam – Great Canadian Casino	17.4%	2.4%	1.9%	27.1%	4.8%	1.5%			
New Westminster – Royal City Star Riverboat Casino	11.6%	1.0%	1.2%	6.8%	1.6%	2.3%			
Burnaby – Gateway Casino	1.4%	0.5%	0%	0%	0%	0%			
Surrey – Fraser Downs Racetrack & Casino	13.0%	3.9%	4.3%	3.4%	0%	0%	79.6%	66.7%	57.1%
BC – Outside Lower Mainland	5.1%	3.4%	0.6%	8.5%	1.6%	2.3%	2.0%	0%	4.8%
Washington State	10.1%	1.0%	1.9%	15.3%	3.2%	2.5%			
New Westminster – Gateway Casino (Royal Towers Hotel)	1.4%	0%		1.7%	0%				
Cruise Ships	4.3%	1.5%	2.5%	1.7%	3.2%	0%			
Vancouver – Gateway Casino (Mandarin Centre)				0%					
Vancouver – Grand Casino				0%					
Vancouver – Great Canadian Casino (Holiday Inn)				0%	0%	0%			
Langley – Cascades Casino	0%	73.7%	75.3%	0%	62.9%	80.5%			
Vancouver – Edgewater Casino (Plaza of Nations)	0%	2.0%	0%		0%	0%			
Vancouver – Hastings Racetrack							14.3%	28.6%	31.0%
Other	5.8%	0.5%	1.9%	1.7%	0%	0%	4.1%	4.8%	7.2%
Chi-Squared Test	x^2 (24) = 257.0, p = .000			x^2 (20) = 103.4, p = .000			x^2 (8) = 7.71, p = .462		

Table 7: ***Gambling Attitudes of City of Langley Residents***

Question	Year	Harm far outweighs benefits	Harm somewhat outweighs benefits	Benefits and harm equal	Benefits somewhat outweigh harm	Benefits far outweigh harm	Average score (-2 to +2)	Kruskal-Wallis Test
Which best describes your belief about the benefit or harm that gambling has for society?	2004	28.1%	16.7%	31.4%	16.9%	6.9%	-.42	$x^2(2) = 16.4$ $p = .000$
	2005	29.8%	20.2%	29.6%	13.3%	7.1%	-.52	
	2006	31.3%	23.1%	30.1%	11.6%	4.0%	-.66	

Question	Year	It is morally wrong	It is somewhat morally wrong	No opinion one way or the other	It is a matter of personal choice	It is a fun, harmless thing to do	Average score (-2 to +2)	Kruskal-Wallis Test
Which best describes your attitude toward gambling?	2004	10.6%	5.8%	5.1%	71.4%	7.2%	.58	$x^2(2) = 4.26$ $p = .119$
	2005	12.3%	5.0%	5.0%	72.4%	5.4%	.54	
	2006	11.1%	7.7%	5.1%	71.7%	4.4%	.51	

Question	Year	Yes	No*	Chi-Square test
Are you aware of Gateway (Cascades) Casino scheduled to open in Langley in April 2005?	2004	95.1%	4.9%	$X^2(2) = , p = .026$
Are you aware of Gateway (Cascades) Casino that opened in Langley in May 2005?	2005	98.0%	2.0%	
Are you aware of Gateway (Cascades) Casino that opened in Langley in May 2005?	2006	96.8%	3.2%	

**People who were unfamiliar with the facility were told it was "an integrated casino, hotel and convention centre with 500 slot machines and 33 table games".*

Question	Year	Very harmful	Somewhat harmful	Neither beneficial or harmful	Somewhat beneficial	Very beneficial	Average score (-2 to +2)	Kruskal-Wallis Test
Overall, would you say the Cascades Casino is likely to be ________to the community?	2004	18.0%	21.9%	9.1%	35.2%	15.8%	.09	$X^2(2) = 1.83$ $p = .400$
	2005	17.6%	21.4%	14.1%	33.1%	13.6%	.03	
	2006	12.8%	21.4%	16.4%	38.7%	10.7%	.19	

Table 8: ***Perceived Benefits and Drawbacks of the Cascades Casino to City of Langley Residents***

		2004 (805 total responses)	2005 (670 total responses)	2006 (681 total responses)
In your own words, what would you say are the likely major benefits, if any, of this facility (Cascades Casino)? Any others? (Up to four responses accepted)	No benefits at all	10.1%	10.0%	7.6%
	Provides employment	22.0%	15.4%	14.5%
	Provides convenient source of recreation	1.9%	1.2%	1.5%
	Entertainment value	3.6%	7.2%	9.5%
	Brings $ into community	10.7%	5.5%	3.1%
	Increases local or provincial revenue	10.9%	14.3%	14.8%
	Decreases taxes	2.6%	1.3%	3.1%
	Creates positive spin-offs to other local businesses	2.6%	1.3%	1.3%
	Increases tourism	13.9%	15.1%	14.1%
	Decreases illegal gambling	0%	0%	0%
	Keeps gambling $ from leaving jurisdiction	0.7%	0.4%	1.0%
	Provides $ for good causes	11.1%	17.9%	18.2%
	Revitalizes/cleans up area	1.9%	1.6%	1.9%
	Attracts new businesses to area	0.2%	0.3%	0.4%
	The convention centre/hotel	2.1%	2.8%	3.8%
	Other	1.6%	1.0%	0.3%
	Don't know/refused	4.1%	4.5%	4.7%
		2004 (818 total responses)	**2005 (698 total responses)**	**2006 (734 total responses)**
In your own words, what would you say are the likely major drawbacks, if any, of this facility (Cascades Casino)? Any others? (Up to four responses accepted)	No drawbacks at all	7.2%	8.9%	7.1%
	Increases gambling addiction	21.1%	24.1%	25.3%
	Exposes young people to gambling	0.7%	0.4%	0.8%
	Negatively impacts people who can least afford it	12.0%	23.6%	26.0%
	Is morally corrupting	0.7%	0.0%	0.1%
	Negatively impacts local businesses	1.0%	0.1%	0.3%
	Negatively impacts other forms of gambling	0.1%	0.0%	0.1%
	Brings greater noise/congestion/traffic	15.3%	6.7%	5.3%
	Adds to crime and/or policing costs	27.1%	23.2%	23.6%
	More people will be drinking	1.1%	0.9%	0.5%
	Adds to family problems	3.4%	2.4%	1.0%
	Attracts the wrong people to the area	2.2%	1.4%	1.1%
	Negatively impacts the community image	1.3%	0.3%	0.7%
	People will waste/lose money gambling	1.0%	0.4%	0.8%
	Other	0.9%	1.4%	1.5%
	Don't know/refused	4.8%	6.0%	5.7%

***Table 9:* Prevalence of Gambling and Problem Gambling among City of Langley Residents**

	2004	2005	2006
Non Gamblers	15.8%	19.1%	12.9%
Non Problem Gamblers (CPGI 0)	74.4%	67.0%	71.8%
Low Risk Gamblers (CPGI 1-2)	7.3%	9.0%	9.2%
Moderate Problem Gamblers (CPGI 3-7)	2.0%	3.3%	5.4%
Severe Problem Gamblers (CPGI 8+)	0.5%	1.6%	0.6%
Kruskal-Wallis Test		$x^2(2) = 8.36$ $p = .015$	

CPGI refers to the Canadian Problem Gambling Index

Township of Langley

As seen in Table 10, the overall pattern of gambling behaviour in 2005 and 2006 is very similar to 2004 in terms of the relative popularity of the various forms of gambling and the relative amount of money spent on each. However, while there have not been any major changes in the general pattern of gambling frequency and expenditure, there have been some statistically significant changes within certain forms. Specifically, compared to 2004 there was significantly:

- Less frequent purchasing of instant-win tickets in 2006.
- More frequent slot machine playing in 2005 and 2006.
- Lower sports betting expenditure in 2005.
- More frequent private gambling (e.g., poker) in 2005.

Here again, some of the above changes reflect national trends (i.e., more frequent private gambling). More frequent slot machine play is consistent with the report that 16.7% of people in 2005 and 29.1% of people in 2006 who gambled at the new Langley Cascades Casino had never patronized a casino before (Table 11). A total of 29.3% of Langley Township residents indicated they have been to the Langley Cascades Casino in 2005 and 32.8% in 2006. Similar to the City of Langley, almost everyone in Langley Township is aware of the new facility (96% - 98%) (Table 13). The large majority of people (85.6% - 81.5%) who patronized the new casino reported that it had not affected their overall gambling activity (Table 11). In 2005, 11.4% indicated the new facility had increased their gambling, with 15.9% of patrons reporting this in 2006. The large majority of people (97% in 2005 and 93.9% in 2006) indicated that their spending on other things had not changed as a result of their patronage of the Langley Casino.

Tables 11 and 12 show that there were several significant changes in terms of where people gambled. Similar to the City of Langley, the new Cascades Casino became the favoured destination of most Langley Township gamblers in both 2005 and 2006. The primary decreases in patronage occurred to the Great Canadian Casino in Coquitlam, and, to a lesser extent, the Royal City Star Riverboat in New Westminster as well as Nevada.

In terms of attitudes, the existing negative beliefs about the benefits/harms of gambling were not significantly changed, with 55.9% of the populace indicating they believed gambling's harms either somewhat or far outweighed gambling's benefits in 2006 (Table 13). The majority of people (70%) continued to believe that gambling was a matter of person choice rather than being morally wrong (18.4% - 19.9%), with no change from 2004 (Table 13). Similarly, in 2006, a slight majority of people (44.0%) believed that the Cascades Casino was somewhat or very harmful to the community compared to 38.9% who believed it to be somewhat or very beneficial. These sentiments were not significantly different from 2004. Table 14 shows that the main perceived drawbacks of the new facility were: increases gambling addiction; negatively impacts people who can least afford it; and adds to crime and/or policing costs. The main perceived benefits were: provides money for good causes; increases local or provincial revenue; provides employment; and increases tourism.

With respect to gambling and problem gambling, Table 15 shows that there has not been any statistically significant change in the prevalence of non-gamblers, non-problem gamblers, low risk gamblers, moderate problem gamblers, or severe problem gamblers. The prevalence rate of problem gambling in 2005 (2.6%) and 2006 (2.9%) was the lowest of the four communities studied.

Table 10: ***General Gambling Behaviour of Township of Langley Residents***

		Past Year Frequency of Involvement							Money spent in a typical month (for people reporting any spending in a typical month)		
	Year	Not at all	Few days	Once a month or less	Several times a month	Several times a week	Daily	Kruskal-Wallis Test	Average	Median	Kruskal-Wallis Test
Raffles and Charitable Lotteries	2004	40.1%	44.0%	11.1%	3.9%	0.9%	0%		$25.70	$10.00	
	2005	40.3%	43.4%	10.8%	4.5%	0.8%	0.2%	x^2 (2) = 3.98 p = .137	$22.70	$10.00	x^2 (2) = 1.31 p = .521
	2006	45.5%	41.1%	9.4%	3.2%	0.7%	0%		$28.87	$14.63	
Other lotteries	2004	36.6%	17.4%	17.9%	19.3%	8.5%	0.3%		$18.82	$10.00	
	2005	31.4%	24.2%	19.7%	17.1%	7.2%	0.3%	x^2 (2) = 1.20 p = .549	$21.64	$10.00	x^2 (2) = 3.23 p = .199
	2006	35.8%	21.1%	20.8%	17.3%	5.0%	0%		$18.33	$10.00	
Instant Win Tickets	2004	60.0%	18.1%	9.4%	9.2%	2.9%	0.4%		$15.07	$10.00	
	2005	58.1%	21.4%	10.4%	6.9%	2.8%	0.3%	x^2 (2) = 13.1 p = .001	$13.75	$9.27	x^2 (2) = .04 p = .982
	2006	66.6%	17.8%	8.8%	6.2%	0.6%	0%		$11.39	$8.00	
Bingo	2004	95.7%	3.2%	0.7%	0.3%	0.1%	0%		$64.53	$40.00	
	2005	94.6%	2.8%	1.3%	0.8%	0.2%	0.2%	x^2 (2) = 3.36 p = .187	$52.92	$14.00	x^2 (2) = 2.43 p = .296
	2006	96.4%	2.9%	0.2%	0.5%	0%	0%		$73.58	$55.66	
Electronic Keno & Racetracks	2004	not assessed									
	2005	86.7%	9.2%	3.4%	0.2%	0.3%	0.2%	x^2 (1) = 10.88 p = .001	$35.36	$10.00	x^2 (1) = .46 p = .498
	2006	93.6%	4.4%	1.1%	0.6%	0.3%	0%		$23.19	$10.00	
Slot Machines	2004	76.7%	18.2%	2.3%	2.2%	0.3%	0.3%		$140.55	$100.00	
	2005	64.3%	23.8%	6.2%	2.0%	3.2%	0.5%	x^2 (2) = 30.2 p = .000	$123.48	$75.00	x^2 (2) = 2.29 p = .318
	2006	69.1%	23.3%	4.2%	2.3%	0.8%	0.3%		$210.20	$100.00	
Casino Table Games	2004	86.3%	10.8%	1.4%	1.2%	0%	0.3%		$101.92	$98.75	
	2005	85.3%	8.5%	5.0%	0.3%	0.8%	0%	x^2 (2) = 2.42 p = .298	$116.69	$50.00	x^2 (2) = 1.76 p = .416
	2006	89.7%	7.9%	1.7%	.04%	0.3%	0%		$95.49	$92.53	
Horse Racing	2004	93.1%	5.3%	0.4%	1.0%	0.1%	0%		$159.84	$97.50	
	2005	93.0%	5.9%	0.3%	0.7%	0%	0.2%	x^2 (2) = 1.23 p = .540	$82.97	$28.18	x^2 (2) = 1.34 p = .510
	2006	94.5%	3.8%	0.8%	0.6%	0.2%	0%		$70.62	$89.60	
Sports Betting	2004	91.8%	3.6%	0.4%	2.4%	1.7%	0%		$82.13	$50.00	
	2005	92.3%	3.9%	3.0%	0.8%	0%	0%	x^2 (2) = 2.87 p = .239	$33.91	$5.00	x^2 (2) = 16.3 p = .000
	2006	93.6%	5.3%	0.8%	0.3%	0%	0%		$1011	$34.65	
Private Games (e.g. poker)	2004	85.6%	8.3%	2.7%	2.6%	0.7%	0%		$130.32	$22.72	
	2005	77.6%	12.7%	5.2%	3.2%	1.0%	0.3%	x^2 (2) = 14.6 p = .001	$33.44	$20.00	x^2 (2) = .75 p = .689
	2006	81.7%	10.7%	5.0%	1.9%	0.2%	0.4%		$32.31	$20.00	
Internet Gambling	2004	99.0%	0.4%	0.1%	0.4%	0%	0%		$28.05	$20.00	
	2005	98.2%	0.5%	0%	1.0%	0.3%	0%	x^2 (2) = 2.18 p = .336	$111.01	$100.00	x^2 (2) = 5.02 p = .081
	2006	98.4%	0.8%	0.4%	0%	0.4%	0%		$205.82	$99.98	
High Risk Stocks	2004	94.7%	4.5%	0.6%	0.3%	0%	0%		$7467	$1000	
	2005	93.1%	4.7%	1.5%	0.2%	0%	0.5%	x^2 (2) = 1.41 p = .493	$2366	$204.60	x^2 (2) = 5.30 p = .071
	2006	95.4%	2.9%	0.8%	0%	0.4%	0.5%		$4880	$3168	

Table 11: Reported Gambling Behaviour Impact of the Langley Cascades Casino on Township of Langley Residents

		2005	2006
Have you ever gambled at Langley Gateway (Cascades) Casino?	Yes	29.3%	32.8%
	No	70.7%	67.2%
How many times have you gone to Langley Gateway (Cascades) Casino since it opened? (for people who have gambled there)	few days	70.2%	65.3%
	once a month or less	18.5%	26.2%
	several times a month	8.3%	3.4%
	several times a week	2.4%	3.4%
	daily	0.6%	1.7%
On average, how much do you spend per visit? (for people who have gambled there)		$63.25	$63.40
What sort of impact has this facility had on your overall gambling behaviour? (for people who have gambled there)	Increased it	11.4%	15.9%
	No change	85.6%	81.5%
	Decreased it	3.0%	2.6%
Do you spend less on other things now that you sometimes gamble at Langley Gateway (Cascades) Casino? (for people who have gambled there)	Yes	3.0%	6.1%
	No	97.0%	93.9%
Where did you used to go to play table games or slot machines before this facility was built?	did not play anywhere before	16.7%	29.1%
	Richmond – River Rock Casino Resort	21.5%	2.4%
	Las Vegas and/or Reno	24.7%	25.0%
	Coquitlam – Great Canadian Casino	9.9%	20.1%
	New Westminster – Royal City Star Riverboat Casino	8.0%	2.9%
	Burnaby – Gateway Casino	0.9%	1.2%
	Surrey – Fraser Downs Racetrack & Casino	5.8%	5.4%
	BC – Outside Lower Mainland	2.0%	1.1%
	Washington State	6.1%	7.1%
	New Westminster – Gateway Casino (Royal Towers Hotel)	1.7%	2.1%
	Cruise Ships	0.4%	1.8%
	Vancouver – Gateway Casino (Mandarin Centre)	0%	0%
	Vancouver – Grand Casino	0%	0%
	Vancouver – Great Canadian Casino (Holiday Inn)	0%	0%
	Vancouver – Hastings Racetrack	0%	0%
	Other	2.3%	1.7%

*Table 12: **Reported Gambling Patronage of Township of Langley Residents***

	Where do you normally go to play slots?			What casino do you normally go to play table games?			Where do you normally go to bet on horse racing?		
	2004 (n = 158)	2005 (n = 196)	2006 (n = 151)	2004 (n = 90)	2005 (n = 86)	2006 (n = 51)	2004 (n = 47)	2005 (n = 41)	2006 (n = 26)
Richmond – River Rock Casino Resort	9.5%	6.6%	3.2%	21.1%	31.5%	3.4%			
Las Vegas and/or Reno	14.6%	11.2%	13.9%	27.8%	10.7%	27.3%	0%	0%	0%
Coquitlam – Great Canadian Casino	25.9%	5.1%	2.1%	15.6%	3.7%	2.0%			
New Westminster – Royal City Star Riverboat Casino	8.2%	2.0%	2.5%	4.4%	2.1%	0%			
Burnaby – Gateway Casino	1.3%	0.5%	0%	0%	0%	0%			
Surrey – Fraser Downs Racetrack & Casino	9.5%	4.6%	5.8%	2.2%	0%	0%	59.6%	48.8%	74.9%
BC – Outside Lower Mainland	7.0%	4.1%	2.6%	8.9%	3.8%	1.5%	2.1%	2.4%	0%
Washington State	8.9%	3.6%	2.9%	1.1%	0.7%	2.1%			
New Westminster – Gateway Casino (Royal Towers Hotel)	2.5%	0.5%		3.3%	0%				
Cruise Ships	5.1%	2.0%	2.1%	3.3%	0%	0%			
Vancouver – Gateway Casino (Mandarin Centre)				0%					
Vancouver – Grand Casino				0%					
Vancouver – Great Canadian Casino (Holiday Inn)				0%	0%	0%			
Langley – Cascades Casino	0%	56.1%	60.3%	0%	44.8%	61.7%			
Vancouver – Edgewater Casino (Plaza of Nations)	0%	0%	0.8%	0%	0%	0%			
Vancouver – Hastings Racetrack							38.3%	41.5%	21.0%
Other	7.6%	3.6%	3.9%	11.2%	2.6%	2.1%	0%	7.3%	4.1%
Chi-Squared Test	$x^2(24) = 183.1, p = .000$			$x^2(22) = 116.8, p = .000$			$x^2(6) = 8.07, p = .223$		

Table 13: ***Gambling Attitudes of Township of Langley Residents***

Which best describes your belief about the benefit or harm that gambling has for society?		Harm far outweighs benefits	Harm somewhat outweighs benefits	Benefits and harm equal	Benefits somewhat outweigh harm	Benefits far outweigh harm	Average score (-2 to +2)	Kruskal-Wallis Test
	2004	30.8%	16.5%	34.0%	12.7%	6.0%	-.53	$x^2(2) = 4.71$, $p = .095$
	2005	29.1%	19.6%	32.9%	14.1%	4.3%	-.55	
	2006	33.2%	22.7%	28.2%	12.3%	3.7%	-.70	

Which best describes your attitude toward gambling?		It is morally wrong	It is somewhat morally wrong	No opinion one way or the other	It is a matter of personal choice	It is a fun, harmless thing to do	Average score (-2 to +2)	Kruskal-Wallis Test
	2004	15.9%	6.0%	5.9%	66.1%	6.0%	.40	$x^2(2) = 3.65$, $p = .161$
	2005	9.7%	8.7%	5.8%	69.9%	5.9%	.54	
	2006	10.9%	9.0%	7.4%	70.2%	2.6%	.45	

		Yes	No*	Chi-Square test
Are you aware of Gateway (Cascades) Casino scheduled to open in Langley in April 2005?	2004	88.5%	11.5%	$x^2(2) = 57.1$, $p = .000$
Are you aware of Gateway (Cascades) Casino that opened in Langley in May 2005?	2005	96.1%	3.9%	
Are you aware of Gateway (Cascades) Casino that opened in Langley in May 2005?	2006	98.3%	1.7%	

**People who were unfamiliar with the facility were told it was "an integrated casino, hotel and convention centre with 500 slot machines and 33 table games".*

Overall, would you say Gateway (Cascades) Casino is likely to be ________ to the community?		Very harmful	Somewhat harmful	Neither beneficial or harmful	Somewhat beneficial	Very beneficial	Average score (-2 to +2)	Kruskal-Wallis Test
	2004	21.0%	24.0%	15.3%	26.0%	13.7%	-.12	$x^2(2) = 5.11$, $p = .078$
	2005	14.4%	24.9%	17.1%	30.6%	13.1%	.03	
	2006	17.2%	26.8%	17.1%	31.3%	7.6%	-.15	

Table 14: Perceived Benefits and Drawbacks of the Cascades Casino to Township of Langley Residents

Question	Response	2004 (911 total responses)	2005 (795 total responses)	2006 (618 total responses)
In your own words, what would you say are the likely major benefits, if any, of this facility (Cascades Casino)? Any others? (Up to four responses accepted)	No benefits at all	12.3%	9.6%	12.1%
	Provides employment	22.4%	15.5%	14.6%
	Provides convenient source of recreation	2.2%	2.0%	2.1%
	Entertainment value	4.1%	9.1%	8.6%
	Brings $ into community	9.5%	5.5%	4.2%
	Increases local or provincial revenue	13.3%	11.2%	16.0%
	Decreases taxes	1.0%	0.1%	1.1%
	Creates positive spin-offs to other local businesses	2.9%	1.5%	0.8%
	Increases tourism	10.0%	17.1%	11.0%
	Decreases illegal gambling	0.2%	0.1%	0%
	Keeps gambling $ from leaving jurisdiction	1.8%	0.9%	0.8%
	Provides $ for good causes	12.8%	17.0%	18.4%
	Revitalizes/cleans up area	1.1%	1.5%	2.1%
	Attracts new businesses to area	0.5%	0.1%	0.3%
	The convention centre/hotel	1.6%	3.7%	1.6%
	Other	0.8%	1.1%	0.3%
	Don't know/refused	3.5%	4.0%	5.8%
		2004 (961 total responses)	**2005 (837 total responses)**	**2006 (702 total responses)**
In your own words, what would you say are the likely major drawbacks, if any, of this facility (Cascades Casino)? Any others? (Up to four responses accepted)	No drawbacks at all	8.0%	8.6%	3.3%
	Increases gambling addiction	27.1%	29.4%	34.9%
	Exposes young people to gambling	0.7%	0.4%	0.3%
	Negatively impacts people who can least afford it	16.8%	24.9%	27.4%
	Is morally corrupting	0.3%	0.4%	0.0%
	Negatively impacts local businesses	1.0%	0.2%	0.7%
	Negatively impacts other forms of gambling	0.0%	0.0%	0.1%
	Brings greater noise/congestion/traffic	11.1%	4.9%	4.7%
	Adds to crime and/or policing costs	22.8%	18.6%	20.1%
	More people will be drinking	0.6%	0.6%	0.1%
	Adds to family problems	3.9%	2.9%	0.7%
	Attracts the wrong people to the area	1.4%	1.6%	0.7%
	Negatively impacts the community image	1.5%	0.4%	1.1%
	People will waste/lose money gambling	0.7%	1.2%	0.4%
	Other	1.2%	1.9%	1.9%
	Don't know/refused	2.9%	4.2%	3.6%

Table 15: ***Prevalence of Gambling and Problem Gambling among Township of Langley Residents***

	2004	2005	2006
Non Gamblers	19.0%	15.4%	19.6%
Non Problem Gamblers (CPGI 0)	69.4%	71.5%	69.1%
Low Risk Gamblers (CPGI 1-2)	7.6%	10.4%	8.4%
Moderate Problem Gamblers (CPGI 3-7)	3.6%	1.8%	2.5%
Severe Problem Gamblers (CPGI 8+)	0.4%	0.8%	0.4%
Kruskal-Wallis Test		$x^2(2) = 3.08$ $p = .214$	

CPGI refers to the Canadian Problem Gambling Index

City of Surrey

As seen in Table 16, the overall pattern of gambling behaviour in 2005 and 2006 is very similar to 2004 in terms of the relative popularity of the various forms of gambling and the relative amount of money spent on each. There was only one statistically significant change in 2005 or 2006 compared to 2004, which is mostly attributable to national trends:

- More frequent Internet gambling in 2006.

There appear to be two primary reasons for the lack of significant changes in gambling behaviour. The first concerns the fact that Surrey experienced much less change in slot and table game availability of gambling from 2004 to 2005 and 2006 compared to the three other communities. The existing Fraser Downs Racetrack in Surrey already had 188 slot machines in April 2004 (before the beginning of the RDD Baseline assessment). The expansion was also not as large (400 slots & 3 tables); compared to 530 slots & 36 tables at Cascades and 600 slots & 51 tables at Edgewater). There were also three gaming venues already operating in the adjacent communities of New Westminster and Coquitlam in 2004.

However, the second reason for a lack of change in gambling behaviour concerns the fact that only a small percentage of Surrey residents reported gambling at the Fraser Downs Racetrack and Casino in any of these years (12.2% in 2004; 11.6% in 2005; 12.6% in 2006), with the large majority of these individuals indicating that they only did so a few days in the past year (Table 17). General awareness of the expanded facility tended to be lower than awareness of the new facilities in the other communities, and tended to be even lower in 2006 (55.7%) than in 2005 (63.1%) (Table 19). Roughly a quarter of Fraser Downs Racetrack and Casino patrons reported that they had never played slot machines prior to doing so at Fraser Downs (Table 17). Similar to the other communities, the large majority of patrons reported that the new facility had not impacted their gambling behaviour.

Unlike residents from the City of Langley and Township of Langley, Table 18 illustrates that Surrey residents have no clearly preferred venue for slot and casino table gambling. There was no significant increase in patronage of the expanded Fraser Downs facility in 2005 or 2006, and, in fact, there are 3 or 4 other facilities that attracted greater patronage in these years. While the Fraser Downs Racetrack is still the preferred venue for horse race betting, this did not increase as a result of adding slot machines to the venue. The only facility that experienced a significant increase in slot and table game patronage in 2005 and 2006 was the new Cascades Casino in Langley, presumably due to its proximity to Surrey. Significant decreases were observed at the Great Canadian Casino in Coquitlam and the Gateway Casino in Burnaby.

In terms of attitudes, Table 19 shows that the large majority of people (66.7% - 69.8%) continued to believe that gambling was a matter of personal choice, rather than being morally wrong. There was no change in this belief from 2004. The existing negative beliefs about the benefits/harms of gambling were more negative in 2005, with 58.9% of the populace in 2005 and 59.7% in 2006 indicating they believed gambling's harms either somewhat or far outweighed gambling's benefits. Consistent with this, 49.3% in 2006 believed the newly expanded Fraser Downs Racetrack and Casino was likely to be either very or somewhat harmful to the community compared to 24.4% who believed it would be somewhat or very beneficial. These sentiments were more negative than in 2004. The main perceived drawbacks were the same ones voiced by all four communities: increases gambling addiction; negatively impacts people who can least afford it; and adds to crime and/or policing costs. When asked about the likely major benefits, the most common response was "no benefits at all" followed by "provides employment;" "provides money for good causes;" and "entertainment value."

With very little change in gambling behaviour it is not surprising there were also not any statistically significant changes in the prevalence of non gamblers, non-problem gamblers, low risk gamblers, moderate problem gamblers, or severe problem gamblers (Table 21). Surrey had a problem gambling prevalence rate of 6.0% in 2005 and 5.2% in 2006.

Table 16: ***General Gambling Behaviour of City of Surrey Residents***

		Past Year Frequency of Involvement							Money spent in a typical month (for people reporting any spending in a typical month)		
	Year	Not at all	Few days	Once a month or less	Several times a month	Several times a week	Daily	Kruskal-Wallis Test	Average	Median	Kruskal-Wallis Test
Raffles and Charitable Lotteries	2004	43.7%	43.4%	9.4%	3.0%	0.5%	0%		$25.54	$10.00	
	2005	43.9%	42.7%	8.3%	2.9%	1.7%	0.4%	$x^2(2) = 7.65$ $p = .022$	$23.65	$12.52	$x^2(2) = .68$ $p = .713$
	2006	49.9%	40.5%	6.3%	1.8%	1.3%	0.2%		$5.35	$5.14	
Other lotteries	2004	32.5%	23.2%	18.5%	17.1%	8.4%	0.3%		$18.91	$10.00	
	2005	34.7%	23.6%	18.0%	16.5%	7.0%	0.2%	$x^2(2) = 1.91$ $p = .384$	$17.27	$10.00	$x^2(2) = .86$ $p = .651$
	2006	31.6%	28.2%	18.6%	15.6%	6.1%	0%		$19.12	$10.00	
Instant Win Tickets	2004	57.0%	21.2%	11.9%	7.3%	1.7%	0.9%		$17.16	$8.00	
	2005	62.7%	19.1%	9.8%	6.2%	1.5%	0.6%	$x^2(2) = 5.74$ $p = .057$	$14.05	$10.00	$x^2(2) = 1.83$ $p = .401$
	2006	60.7%	20.9%	11.0%	5.1%	1.8%	0.5%		$20.23	$10.00	
Bingo	2004	94.6%	4.0%	0.7%	0.3%	0.3%	0%		$87.45	$64.40	
	2005	95.0%	2.9%	0.4%	1.5%	0.2%	0%	$x^2(2) = 2.22$ $p = .329$	$79.16	$56.17	$x^2(2) = 3.47$ $p = .177$
	2006	96.4%	2.3%	0.7%	0.6%	0%	0%		$31.86	$16.31	
Electronic Keno & Racetracks	2004	not assessed									
	2005	92.6%	5.2%	1.4%	0.4%	0.4%	0%	$x^2(1) = 1.61$ $p = .205$	$18.22	$14.41	$x^2(1) = 2.98$ $p = .084$
	2006	89.5%	7.4%	1.6%	1.0%	0.5%	0%		$48.92	$24.05	
Slot Machines	2004	73.7%	19.1%	4.2%	1.6%	1.0%	0.2%		$274.02	$100.00	
	2005	74.1%	19.1%	5.0%	1.5%	0.2%	0%	$x^2(2) = .92$ $p = .631$	$83.35	$50.00	$x^2(2) = 2.51$ $p = .285$
	2006	70.5%	23.1%	3.8%	1.6%	0.8%	0.1%		$115.39	$59.25	
Casino Table Games	2004	88.9%	7.8%	1.7%	1.2%	0.2%	0.2%		$3982	$100.00	
	2005	88.6%	7.9%	2.9%	0.2%	0.4%	0%	$x^2(2) = 1.24$ $p = .539$	$104.48	$40.00	$x^2(2) = 8.62$ $p = .013$
	2006	87.0%	8.4%	2.8%	0.9%	1.0%	0%		$132.17	$88.50	
Horse Racing	2004	94.1%	4.9%	0.3%	0.3%	0.3%	0%		$57.31	$50.00	
	2005	94.8%	4.6%	0.2%	0.4%	0%	0%	$x^2(2) = .32$ $p = .854$	$137.28	$174.99	$x^2(2) = 2.36$ $p = .308$
	2006	94.4%	5.1%	0.1%	0%	0.1%	0%		$17.12	$11.65	
Sports Betting	2004	89.4%	7.1%	0.7%	2.4%	0.3%	0%		$196.41	$22.11	
	2005	93.8%	3.3%	2.3%	0.2%	0.2%	0.2%	$x^2(2) = 6.44$ $p = .040$	$38.08	$40.70	$x^2(2) = .91$ $p = .635$
	2006	91.0%	7.4%	1.1%	0.1%	0.3%	0%		$37.64	$30.00	
Private Games (e.g. poker)	2004	84.0%	11.0%	3.3%	0.7%	0.9%	0.2%		$36.27	$21.33	
	2005	84.9%	10.3%	2.1%	2.1%	0.4%	0.2%	$x^2(2) = 3.53$ $p = .171$	$27.88	$19.27	$x^2(2) = .37$ $p = .830$
	2006	80.1%	12.8%	2.9%	3.6%	0.2%	0.3%		$37.47	$30.00	
Internet Gambling	2004	99.3%	0.2%	0.2%	0%	0.3%	0%		$1194	$1502	
	2005	98.6%	0.8%	0%	0%	0.4%	0.2%	$x^2(2) = 25.0$ $p = .000$	$2.54	$2.68	$x^2(2) = 5.61$ $p = .060$
	2006	95.3%	1.3%	0.8%	0.9%	1.4%	0.3%		$125	$45.35	
High Risk Stocks	2004	93.5%	4.4%	1.8%	0.4%	0%	0%		$24974	$15427	
	2005	95.7%	3.7%	0.4%	0%	0%	0.2%	$x^2(2) = 3.47$ $p = .177$	$15427	$4784	$x^2(2) = 4.06$ $p = .131$
	2006	95.3%	2.5%	1.1%	1.0%	0%	0%		$1199	$450	

Table 17: ***Reported Gambling Behaviour Impact of Fraser Downs on Surrey Residents***

		2005	2006
Have you ever gambled at the Fraser Downs Racetrack & Casino?	Yes	11.0%	12.6%
	No	89.0%	87.4%
How many times have you gone to Fraser Downs Racetrack & Casino since it expanded? (for people who have gambled there)	few days	69.4%	86.4%
	once a month or less	22.2%	9.9%
	several times a month	8.3%	2.4%
	several times a week	0%	1.3%
	daily	0%	0%
On average, how much do you spend per visit? (for people who have gambled there)		$54.13	$98.42
What sort of impact has this facility had on your overall gambling behaviour? (for people who have gambled there)	Increased it	19.4%	0%
	No change	80.6%	89.8%
	Decreased it	0%	10.2%
Do you spend less on other things now that you sometimes gamble at Fraser Downs Racetrack & Casino? (for people who have gambled there)	Yes	2.7%	1.6%
	No	97.3%	98.4%
Where did you used to go to play table games or slot machines before this facility was built?	did not play anywhere before	23.5%	25.4%
	Richmond – River Rock Casino Resort	14.7%	2.9%
	Las Vegas and/or Reno	17.6%	20.4%
	Coquitlam – Great Canadian Casino	5.9%	4.1%
	New Westminster – Royal City Star Riverboat Casino	11.8%	23.5%
	Burnaby – Gateway Casino	2.9%	7.3%
	Surrey – Fraser Downs Racetrack & Casino	0%	0%
	BC – Outside Lower Mainland	2.9%	1.7%
	Washington State	8.8%	4.2%
	New Westminster – Gateway Casino (Royal Towers Hotel)	5.9%	4.1%
	Cruise Ships	0%	0%
	Langley – Cascades Casino	5.9%	5.9%
	Vancouver – Gateway Casino (Mandarin Centre)	0%	0%
	Vancouver – Grand Casino	0%	0%
	Vancouver – Great Canadian Casino (Holiday Inn)	0%	0%
	Vancouver – Hastings Racetrack	0%	0%
	Other	0%	0.5%

Table 18: ***Reported Gambling Patronage of City of Surrey Residents***

	Where do you normally go to play slots?			What casino do you normally go to play table games?			Where do you normally go to bet on horse racing?		
	2004 (n = 147)	2005 (n = 129)	2006 (n = 143)	2004 (n = 60)	2005 (n = 55)	2006 (n = 59)	2004 (n = 35)	2005 (n = 27)	2006 (n = 28)
Richmond – River Rock Casino Resort	8.2%	16.3%	14.4%	15.0%	14.5%	26.4%			
Las Vegas and/or Reno	10.9%	18.6%	12.8%	8.3%	10.9%	12.6%	2.9%	3.7%	0%
Coquitlam – Great Canadian Casino	21.8%	9.3%	9.8%	31.7%	14.5%	12.0%			
New Westminster – Royal City Star Riverboat Casino	16.3%	18.6%	11.3%	15.0%	29.1%	19.4%			
Burnaby – Gateway Casino	6.8%	1.6%	0%	6.7%	1.8%	0%			
Surrey – Fraser Downs Racetrack & Casino	12.2%	11.6%	16.8%	3.3%	3.6%	2.9%	60.0%	55.6%	48.3%
BC – Outside Lower Mainland	2.7%	3.9%	5.9%	1.7%	0%	1.7%	2.9%	0%	2.5%
Washington State	4.8%	1.6%	2.3%	5.0%	1.8%	0%			
New Westminster – Gateway Casino (Royal Towers Hotel)	4.8%	1.6%		0%	14.5%				
Cruise Ships	3.4%	1.6%	0.6%	5.0%	1.8%	0%			
Vancouver – Gateway Casino (Mandarin Centre)				0%					
Vancouver – Grand Casino				0%					
Vancouver – Great Canadian Casino (Holiday Inn)				3.3%	0%	2.9%			
Langley – Cascades Casino	0%	14.0%	20.3%	0%	5.5%	17.8%			
Vancouver – Edgewater Casino (Plaza of Nations)	0%	0.8%	4.9%	0%	0%	2.9%			
Vancouver – Hastings Racetrack							34.3%	37.0%	41.1%
Other	7.2%	0.8%	0.9%	5.0%	1.8%	1.4%	0%	3.7%	8.1%
Chi-Squared Test	$x^2(24) = 95.5, p = .000$			$x^2(26) = 62.5, p = .000$			$x^2(10) = 9.11, p = .521$		

Table 19: ***Gambling Attitudes of City of Surrey Residents***

Which best describes your belief about the benefit or harm that gambling has for society?		Harm far outweighs benefits	Harm somewhat outweighs benefits	Benefits and harm equal	Benefits somewhat outweigh harm	Benefits far outweigh harm	Average score (-2 to +2)	Kruskal-Wallis Test
	2004	31.0%	20.9%	26.6%	13.5%	8.0%	-.53	$x^2(2) = 12.3$, $p = .002$
	2005	37.8%	21.1%	24.7%	12.5%	3.9%	-.76	
	2006	33.4%	26.3%	26.1%	10.3%	3.9%	-.75	

Which best describes your attitude toward gambling?		It is morally wrong	It is somewhat morally wrong	No opinion one way or the other	It is a matter of personal choice	It is a fun, harmless thing to do	Average score (-2 to +2)	Kruskal-Wallis Test
	2004	14.5%	6.7%	6.0%	65.8%	7.1%	.44	$x^2(2) = 4.93$, $p = .085$
	2005	14.9%	6.5%	8.7%	66.7%	3.2%	.37	
	2006	9.8%	9.1%	8.2%	69.8%	3.2%	.47	

		Yes	No*	Chi-Square test
Are you aware of Fraser Downs Racetrack & Casino in Surrey with its expanded facilities slated to open in November 2004?	2004	62.0%	38.0%	$x^2(2) = 8.79$., $p = .012$
Are you aware of the Fraser Downs Racetrack & Casino with its expanded facilities that opened in June 2005?	2005	63.1%	36.9%	
Are you aware of the Fraser Downs Racetrack & Casino with its expanded facilities that opened in June 2005?	2006	55.7%	44.3%	

**People who were unfamiliar with the facility were told it was "a horse-race track and casino with 400 slot machines and 3 table games".*

Overall, would you say the expanded Fraser Downs Racetrack & Casino is likely to be ________to the community?		Very harmful	Somewhat harmful	Neither beneficial or harmful	Somewhat beneficial	Very beneficial	Average score (-2 to +2)	Kruskal-Wallis Test
	2004	16.7%	26.2%	17.1%	28.5%	11.6%	-.08	$X^2(2) = 20.9$, $p = .000$
	2005	19.1%	28.3%	16.1%	31.7%	4.9%	-.25	
	2006	19.8%	29.5%	26.0%	21.3%	3.1%	-.41	

***Table 20:* Perceived Benefits and Drawbacks of Fraser Downs to City of Surrey Residents**

Question	Response	2004 (712 total responses)	2005 (641 total responses)	2006 (605 total responses)
In your own words, what would you say are the likely major benefits, if any, of this facility (Fraser Downs Racetrack & Casino)? Any others? (Up to four responses accepted)	No benefits at all	16.7%	19.3%	21.7%
	Provides employment	21.8%	16.2%	18.3%
	Provides convenient source of recreation	1.7%	1.9%	2.3%
	Entertainment value	5.8%	9.1%	10.7%
	Brings $ into community	4.5%	5.9%	3.8%
	Increases local or provincial revenue	7.4%	10.6%	8.8%
	Decreases taxes	1.0%	0.0%	0.0%
	Creates positive spin-offs to other local businesses	1.7%	0.3%	0.8%
	Increases tourism	10.0%	9.7%	6.3%
	Decreases illegal gambling	0.0%	0.0%	0%
	Keeps gambling $ from leaving jurisdiction	0.6%	0.3%	0.3%
	Provides $ for good causes	17.4%	14.4%	15.5%
	Supports the horse racing industry	1.3%	0.0%	0.2%
	Revitalizes/cleans up area	0.3%	0.2%	0.8%
	Attracts new businesses to area	0.1%	0.6%	0%
	The convention centre/hotel	0.1%	0.3%	0%
	Other	1.1%	1.6%	1.2%
	Don't know/refused	8.6%	9.7%	9.3%
		2004 (765 total responses)	**2005 (612 total responses)**	**2006 (723 total responses)**
In your own words, what would you say are the likely major drawbacks, if any, of this facility (Fraser Downs Racetrack & Casino)? Any others? (Up to four responses accepted)	No drawbacks at all	11.1%	8.0%	4.7%
	Increases gambling addiction	28.2%	34.0%	32.1%
	Exposes young people to gambling	1.4%	1.1%	1.5%
	Negatively impacts people who can least afford it	16.7%	23.9%	25.3%
	Is morally corrupting	0.1%	0.2%	0.0%
	Negatively impacts local businesses	0.1%	0.2%	0.4%
	Negatively impacts other forms of gambling	0.0%	0.5%	0.0%
	Brings greater noise/congestion/traffic	9.3%	9.3%	4.8%
	Adds to crime and/or policing costs	15.9%	15.7%	14.8%
	More people will be drinking	0.8%	0.8%	0.6%
	Adds to family problems	3.3%	1.8%	2.1%
	Attracts the wrong people to the area	0.9%	0.5%	0.3%
	Negatively impacts the community image	0.7%	0.7%	0.6%
	People will waste/lose money gambling	0.7%	2.0%	2.1%
	Other	2.6%	1.5%	1.4%
	Don't know/refused	8.1%	0.0%	9.4%

Table 21: Prevalence of Gambling and Problem Gambling among City of Surrey Residents

	2004	2005	2006
Non Gamblers	17.7%	20.1%	14.7%
Non Problem Gamblers (CPGI 0)	67.6%	64.4%	69.0%
Low Risk Gamblers (CPGI 1-2)	9.1%	9.5%	11.1%
Moderate Problem Gamblers (CPGI 3-7)	4.0%	4.8%	3.3%
Severe Problem Gamblers (CPGI 8+)	1.6%	1.2%	1.9%
Kruskal-Wallis Test		$x^2(2) = 3.32$ $p = .190$	

CPGI refers to the Canadian Problem Gambling Index

City of Vancouver

As seen in Table 22, the overall pattern of gambling behaviour in 2005 and 2006 is very similar to 2004 in terms of the relative popularity of the various forms of gambling and the relative amount of money spent on each. However, while there have not been any major changes in the general pattern of gambling frequency and expenditure, there have been some statistically significant changes within certain forms. Specifically, compared to 2004 there was:

- Lower expenditures on raffle and charitable lottery tickets in 2006.
- Lower expenditures on lottery tickets in 2005.
- More frequent private gambling (e.g., poker) in 2005 and 2006.
- More frequent Internet gambling in 2006.

As mentioned before, these specific changes largely reflect national trends, although it is possible that the expansion of slot and table game availability may have contributed to these trends. Although there was also a trend toward more frequent slot machine gambling, it was not statistically significant at the $p < .01$ level. In general, the new Edgewater Casino appears to have had a fairly small impact on gambling behaviour for reasons probably similar to the situation in Surrey. The first reason concerns the fact that actual gambling availability did not change that from 2004 to 2005 and 2006. It is true that the Edgewater Casino was the very first Vancouver casino to ever have slot machines. However, with a population of 541,000 this increase in slot machines trepresents a fairly small change on a per capita basis compared to the City of Langley or the Township of Langley. Second, Vancouver has had casinos for many years (offering table games) prior to the Edgewater Casino opening. Third, the largest casino in British Columbia with 1,000 slot machines (River Rock) is conveniently located in Richmond and was frequently patronized by Vancouver residents prior to the Baseline RDD assessment.

The second reason for the limited impact concerns the fact that only a small minority of people reported patronizing the Edgewater Casino in 2005 (13.9%) and 2006 (9.6%) (Table 23). Furthermore, roughly 37% of Vancouver residents were still not even aware of the new facility in 2006 (Table 25). Table 25 also shows that, similar to the other communities, the large majority of people who patronized the new casino reported that it had not affected their overall gambling activity (79 – 85%). In 2006, 11.5% of people did report that they spent less money on other things because of their patronage of the Edgewater Casino, which is higher than reported in other communities for Fraser Downs or the Cascades Casino.

Table 24 shows that the River Rock Casino was, in fact, the most popular place to play slot machines or table games in all three years, with this patronage increasing for table games in 2005 and 2006. Nevada was second most popular. The Edgewater Casino was the third most popular, and it did experience a significant increase in patronage in 2005 and 2006. In general, there was somewhat less change in gambling patronage in Vancouver from 2004 to 2006 compared to the other communities studied. Some decreases were observed for the Royal City Star Riverboat in 2006, for table games in Nevada in 2006 and for table games at the Great Canadian Casino – Holiday Inn in 2006.

Vancouver had the most negative attitudes toward gambling in all three years (Table 25). A total of 56.6% of people reported that the harm of gambling either somewhat or far outweighed the benefits in 2004, which increased to 63.9% in 2006. Nonetheless, as in other communities, the large majority of people (68% - 71%) believe that gambling was a matter of personal choice, rather than being morally wrong (14.1% - 21.2%). Consistent with this negative attitude toward gambling, 53.2% of people in 2006 believed that the Edgewater Casino was likely to be either somewhat or very harmful to the community compared to 15.1% who believed it to be either very or somewhat harmful. These sentiments were more negative compared to 2004. The main perceived drawbacks were the same ones voiced by all four communities: increases gambling addiction; negatively impacts people who can least afford it; and adds to crime and/or policing costs. When asked about the likely major benefits, the most common response was "no benefits at all," followed by "provides employment;" "provides money for good causes;" "increases tourism;" and "entertainment value."

With respect to gambling and problem gambling, there were not any statistically significant changes in the prevalence of non-gamblers, non-problem gamblers, low risk gamblers, moderate problem gamblers, or severe problem gamblers from 2004 to 2005 or 2006 (Table 27). Vancouver had a problem gambling prevalence of 3.7% in 2005 and 4.1% in 2006.

Table 22: ***General Gambling Behaviour of City of Vancouver Residents***

		Past Year Frequency of Involvement							Money spent in a typical month (for people reporting any spending in a typical month)		
	Year	Not at all	Few days	Once a month or less	Several times a month	Several times a week	Daily	Kruskal-Wallis Test	Average	Median	Kruskal-Wallis Test
Raffles and Charitable Lotteries	2004	50.9%	39.6%	6.3%	1.7%	1.4%	0.2%		$26.05	$14.00	
	2005	52.2%	39.5%	5.5%	2.2%	0.4%	0.1%	$x^2(2) = 4.71$, $p = .095$	$14.14	$10.00	$x^2(2) = 8.55$, $p = .012$
	2006	55.0%	36.5%	6.8%	1.5%	0.3%	0%		26.36	$10.00	
Other lotteries	2004	36.9%	22.2%	17.9%	16.9%	5.9%	0.2%		$16.75	$10.00	
	2005	39.8%	24.9%	15.9%	12.4%	6.5%	0.4%	$x^2(2) = 7.43$, $p = .024$	$16.43	$10.00	$x^2(2) = 15.5$, $p = .000$
	2006	34.1%	28.2%	18.9%	13.8%	4.3%	0.7%		$14.66	$8.00	
Instant Win	2004	74.6%	15.8%	5.6%	3.1%	0.9%	0%		$11.27	$5.00	
	2005	72.9%	15.3%	6.9%	3.1%	1.5%	0.2%	$x^2(2) = 3.75$, $p = .153$	$9.48	$5.00	$x^2(2) = .86$, $p = .649$
	2006	73.7%	16.4%	5.8%	2.5%	1.6%	0.1%		$14.63	$8.00	
Bingo	2004	97.2%	1.9%	0.5%	0.1%	0.3%	0%		$65.13	$20.50	
	2005	97.3%	1.8%	0.4%	0.4%	0.1%	0%	$x^2(2) = 2.04$, $p = .361$	$48.97	$8.10	$x^2(2) = 4.34$, $p = .114$
	2006	97.9%	1.8%	0.1%	0.1%	0.1%	0%		$128.01	$100.88	
Electronic Keno & Racetracks	2004	Not assessed									
	2005	93.8%	4.8%	0.7%	0.6%	0.1%	0%	$x^2(1) = .32$, $p = .569$	$19.80	$10.00	$x^2(2) = .20$, $p = .655$
	2006	94.2%	4.7%	0.5%	0.6%	0%	0%		$25.69	$11.12	
Slot Machines	2004	81.5%	15.6%	2.2%	0.7%	0.1%	0%		$183.31	$100.00	
	2005	77.8%	17.9%	3.4%	0.8%	0.1%	0%	$x^2(2) = 7.16$, $p = .028$	$91.11	$51.93	$x^2(2) = 3.23$, $p = .199$
	2006	81.8%	13.9%	2.4%	1.6%	0.2%	0%		$165.24	$100.00	
Casino Table Games	2004	89.1%	8.6%	1.4%	0.8%	0.3%	0%		$242.19	$126.00	
	2005	86.6%	9.6%	2.3%	1.2%	0.1%	0.1%	$x^2(2) = 3.96$, $p = .138$	$105.95	$60.00	$x^2(2) = 7.94$, $p = .019$
	2006	88.0%	8.0%	2.8%	1.1%	0.1%	0%		$232.90	$100.00	
Horse Racing	2004	92.7%	5.7%	0.9%	0.5%	0.2%	0%		$605.62	$77.80	
	2005	94.1%	4.7%	0.2%	0.7%	0.1%	0.2%	$x^2(2) = 2.08$, $p = .354$	$129.31	$93.50	$x^2(2) = 4.40$, $p = .111$
	2006	94.6%	4.5%	0.5%	0.4%	0%	0%		$36.24	$44.14	
Sports Betting	2004	92.5%	4.7%	1.6%	0.8%	0.3%	0.1%		$758.83	$23.02	
	2005	93.0%	4.0%	1.1%	1.0%	0.9%	0%	$x^2(2) = .34$, $p = .843$	$46.09	$44.68	$x^2(2) = 1.46$, $p = .481$
	2006	92.1%	6.1%	0.8%	0.7%	0.2%	0.1%		$53.44	$20.00	
Private Games (e.g. poker)	2004	87.7%	7.2%	2.7%	1.5%	0.8%	0.1%		$321.31	$20.80	
	2005	79.9%	11.6%	4.9%	2.6%	1.0%	0%	$x^2(2) = 33.3$, $p = .000$	$50.11	$20.00	$x^2(2) = 7.56$, $p = .023$
	2006	81.7%	10.0%	4.9%	2.4%	0.8%	0.3%		$5.68	$6.00	
Internet Gambling	2004	98.8%	0.5%	0.3%	0.3%	0.1%	0.1%		$3824	$193.75	
	2005	98.5%	0.7%	0.3%	0.3%	0.2%	0%	$x^2(2) = 21.0$, $p = .000$	$79.53	$25.55	$x^2(2) = 4.71$, $p = .095$
	2006	96.4%	1.5%	0.4%	1.0%	0.6%	0.1%		$127.15	$27.80	
High Risk Stocks	2004	90.5%	5.7%	2.1%	1.3%	0.1%	0.3%		$8515	$3000	
	2005	92.9%	5.5%	0.4%	0.4%	0.4%	0.4%	$x^2(2) = 6.42$, $p = .040$	$5387	$1617	$x^2(2) = 1.22$, $p = .544$
	2006	92.3%	5.4%	1.1%	0.4%	0.7%	0.1%		$9482	$2000	

Table 23: ***Reported Gambling Behaviour Impact of the Edgewater Casino on City of Vancouver Residents***

		2005	2006
Have you ever gambled at Edgewater Casino at the Plaza of Nations?	Yes	13.9%	9.6%
	No	86.1%	90.4%
How many times have you gone to Edgewater Casino since it opened? (for people who have gambled there)	few days	75.9%	85.8%
	once a month or less	10.3%	10.8%
	several times a month	8.0%	3.3%
	several times a week	3.4%	0%
	daily	2.3%	0%
On average, how much do you spend per visit? (for people who have gambled there)		$64.52	$86.75
What sort of impact has this facility had on your overall gambling behaviour? (for people who have gambled there)	Increased it	14.9%	8.8%
	No change	79.3%	84.9%
	Decreased it	5.7%	6.4%
Do you spend less on other things now that you sometimes gamble at Edgewater Casino? (for people who have gambled there)	Yes	4.7%	11.5%
	No	95.3%	88.5%
Where did you used to go to play table games or slot machines before this facility was built?	Did not play anywhere before	15.7%	29.9%
	Richmond – River Rock Casino Resort	31.3%	28.2%
	Las Vegas and/or Reno	12.0%	12.0%
	Coquitlam – Great Canadian Casino	3.6%	2.3%
	New Westminster – Royal City Star Riverboat Casino	2.4%	1.8%
	Burnaby – Gateway Casino	21.7%	6.5%
	Surrey – Fraser Downs Racetrack & Casino	0%	0%
	BC – Outside Lower Mainland	2.4%	0%
	Washington State	0%	1.8%
	New Westminster – Gateway Casino (Royal Towers Hotel)	0%	2.8%
	Cruise Ships	2.4%	0%
	Vancouver – Gateway Casino (Mandarin Centre)	0%	0%
	Vancouver – Grand Casino	0%	2.4%
	Vancouver – Great Canadian Casino (Holiday Inn)	7.2%	4.6%
	Vancouver – Hastings Racetrack	0%	0%
	Other	1.2%	7.6%

***Table 24:* Reported Gambling Patronage of City of Vancouver Residents**

	Where do you normally go to play slots?			What casino do you normally go to play table games?			Where do you normally go to bet on horse racing?		
	2004 (n =209)	2005 (n = 211)	2006 (n = 180)	2004 (n = 120)	2005 (n = 125)	2006 (n = 111)	2004 (n = 85)	2005 (n = 56)	2006 (n = 53)
Richmond – River Rock Casino Resort	31.1%	38.4%	39.3%	24.2%	42.4%	47.2%			
Las Vegas and/or Reno	23.9%	19.4%	18.0%	23.3%	12.8%	19.3%	0%	0%	0%
Coquitlam – Great Canadian Casino	4.8%	3.8%	2.1%	3.3%	4.0%	1.7%			
New Westminster – Royal City Star Riverboat Casino	8.1%	3.3%	1.9%	8.3%	3.2%	0.5%			
Burnaby – Gateway Casino	11.0%	6.6%	8.1%	10.0%	9.6%	7.2%			
Surrey – Fraser Downs Racetrack & Casino	0%	1.4%	1.8%	2.5%	0%	0%	4.7%	7.1%	5.6%
BC – Outside Lower Mainland	6.2%	3.8%	2.3%	5.0%	3.2%	3.3%	0%	3.6%	0%
Washington State	2.4%	0.9%	2.9%	2.5%	0%	0.6%			
New Westminster – Gateway Casino (Royal Towers Hotel)	3.3%	2.4%		1.7%	2.4%				
Cruise Ships	2.4%	1.9%	2.1%	0.8%	0.8%	1.7%			
Vancouver – Gateway Casino (Mandarin Centre)				1.7%					
Vancouver – Grand Casino				0%					
Vancouver – Great Canadian Casino (Holiday Inn)				12.5%	7.2%	3.3%			
Langley – Cascades Casino	0%	4.3%	1.4%	0%	0%	0.7%			
Vancouver – Edgewater Casino (Plaza of Nations)	0%	10.0%	10.6%	0%	12.8%	7.4%			
Vancouver – Hastings Racetrack							88.2%	87.5%	87.1%
Other	6.8%	3.8%	9.6%	3.3%	1.6%	7.1%	7.1%	1.8%	7.3%
Chi-Squared Test	$x^2(28) = 75.3, p = .000$			$x^2(32) = 64.0, p = .001$			$x^2(6) = 7.40, p = .286$		

Table 25: ***Gambling Attitudes of City of Vancouver Residents***

		Harm far outweighs benefits	Harm somewhat outweighs benefits	Benefits and harm equal	Benefits somewhat outweigh harm	Benefits far outweigh harm	Average score (-2 to +2)	Kruskal-Wallis Test
Which best describes your belief about the benefit or harm that gambling has for society?	2004	31.6%	25.0%	27.3%	11.8%	4.3%	-.68	$x^2(2) = 13.4$, $p = .001$
	2005	34.2%	23.2%	29.9%	9.9%	2.9%	-.76	
	2006	35.8%	28.1%	24.6%	9.5%	1.9%	-.86	

		It is morally wrong	It is somewhat morally wrong	No opinion one way or the other	It is a matter of personal choice	It is a fun, harmless thing to do	Average score (-2 to +2)	Kruskal-Wallis Test
Which best describes your attitude toward gambling?	2004	10.5%	9.0%	7.1%	68.5%	4.9%	.48	$x^2(2) = 21.0$, $p = .000$
	2005	8.8%	5.3%	9.3%	70.8%	5.9%	.60	
	2006	10.9%	9.2%	9.7%	67.6%	2.5%	.42	

		Yes	No*	Chi-Square test
Are you aware of Edgewater Casino in the Plaza of Nations slated to open in Vancouver in November 2004?	2004	38.8%	61.2%	$x^2(2) = 189.1$, $p = .000$
Are you aware of Edgewater Casino that opened in Vancouver in February 2005?	2005	62.5%	37.5%	
Are you aware of Edgewater Casino that opened in Vancouver in February 2005?	2006	62.6%	37.4%	

**People who were unfamiliar with the facility were told it was "a casino with 600 slot machines and 51 table games".*

		Very harmful	Somewhat harmful	Neither beneficial or harmful	Somewhat beneficial	Very beneficial	Average score (-2 to +2)	Kruskal-Wallis Test
Overall, would you say Edgewater Casino is likely to be ________ to the community?	2004	21.0%	31.2%	21.7%	21.1%	4.9%	-.42	$x^2(2) = 9.31$, $p = .010$
	2005	18.0%	32.5%	25.1%	21.8%	2.6%	-.41	
	2006	19.1%	34.1%	31.6%	13.4%	1.7%	-.55	

***Table 26:* Perceived Benefits and Drawbacks of the Edgewater Casino to City of Vancouver Residents**

Question	Response	2004 (1468 total responses)	2005 (1236 total responses)	2006 (1202 total responses)
In your own words, what would you say are the likely major benefits, if any, of this facility (Edgewater Casino)? Any others? (Up to four responses accepted)	No benefits at all	19.5%	15.3%	20.3%
	Provides employment	15.9%	16.9%	14.8%
	Provides convenient source of recreation	0.2%	2.2%	1.3%
	Entertainment value	9.7%	7.7%	10.1%
	Brings $ into community	3.2%	2.9%	0.9%
	Increases local or provincial revenue	9.5%	11.0%	10.0%
	Decreases taxes	0.4%	0.2%	0.1%
	Creates positive spin-offs to other local businesses	1.8%	0.3%	0.6%
	Increases tourism	12.4%	14.0%	11.6%
	Decreases illegal gambling	0.0%	0.2%	0.1%
	Keeps gambling $ from leaving jurisdiction	1.0%	1.0%	0.7%
	Provides $ for good causes	17.0%	16.3%	19.2%
	Revitalizes/cleans up area	0.6%	0.5%	0.3%
	Attracts new businesses to area	0.3%	0.0%	0.2%
	The convention centre/hotel	0.0%	0.2%	0%
	Other	1.4%	2.5%	0.7%
	Don't know/refused	7.0%	8.9%	9.0%
		2004 (1616 total responses)	**2005 (1348 total responses)**	**2006 (1511 total responses)**
In your own words, what would you say are the likely major drawbacks, if any, of this facility (Edgewater Casino)? Any others? (Up to four responses accepted)	No drawbacks at all	7.0%	5.8%	4.7%
	Increases gambling addiction	31.6%	32.5%	35.2%
	Exposes young people to gambling	1.1%	0.8%	0.3%
	Negatively impacts people who can least afford it	18.3%	23.7%	23.0%
	Is morally corrupting	0.2%	0.3%	0.1%
	Negatively impacts local businesses	0.1%	0.2%	0.1%
	Negatively impacts other forms of gambling	0.0%	0.0%	0.0%
	Brings greater noise/congestion/traffic	5.8%	4.5%	5.7%
	Adds to crime and/or policing costs	16.7%	13.6%	17.5%
	More people will be drinking	1.2%	0.5%	0.2%
	Adds to family problems	3.3%	2.6%	2.0%
	Attracts the wrong people to the area	0.8%	0.6%	0.5%
	Negatively impacts the community image	1.2%	0.7%	0.9%
	People will waste/lose money gambling	1.5%	1.1%	1.1%
	Other	3.6%	4.1%	2.1%
	Don't know/refused	7.7%	9.2%	6.6%
	No drawbacks at all	7.0%	5.8%	4.7%

Table 27: ***Prevalence of Gambling and Problem Gambling among City of Vancouver Residents***

	2004	2005	2006
Non Gamblers	20.2%	20.9%	18.4%
Non Problem Gamblers (CPGI 0)	64.7%	64.3%	69.9%
Low Risk Gamblers (CPGI 1-2)	9.1%	11.1%	7.5%
Moderate Problem Gamblers (CPGI 3-7)	4.5%	3.3%	2.5%
Severe Problem Gamblers (CPGI 8+)	1.5%	0.4%	1.6%
Kruskal-Wallis Test		$x^2(2) = .71$ $p = .702$	

CPGI refers to the Canadian Problem Gambling Index

All Four Communities Combined

As illustrated in Figure 6 and Table 28, the overall pattern of gambling behaviour in 2005 and 2006 is quite similar to 2004 in terms of the relative popularity of the various forms of gambling and the relative amount of money spent on each when data is weighted and combined. However, while there have not been any major changes in the general pattern of gambling frequency and expenditure, there have been some statistically significant changes within certain forms. Specifically, compared to 2004 there was significantly:

- Less frequent purchases of raffle and charitable lottery tickets in 2006.
- Lower lottery expenditures in 2005.
- More frequent slot machine play and lower slot expenditures in 2005.
- More frequent private gambling (e.g., poker) in 2005 and 2006.
- Lower casino table game expenditures in 2005.
- Lower horse racing expenditures in 2006.
- More frequent Internet gambling in 2006 and lower Internet gambling expenditures in 2005 and 2006.

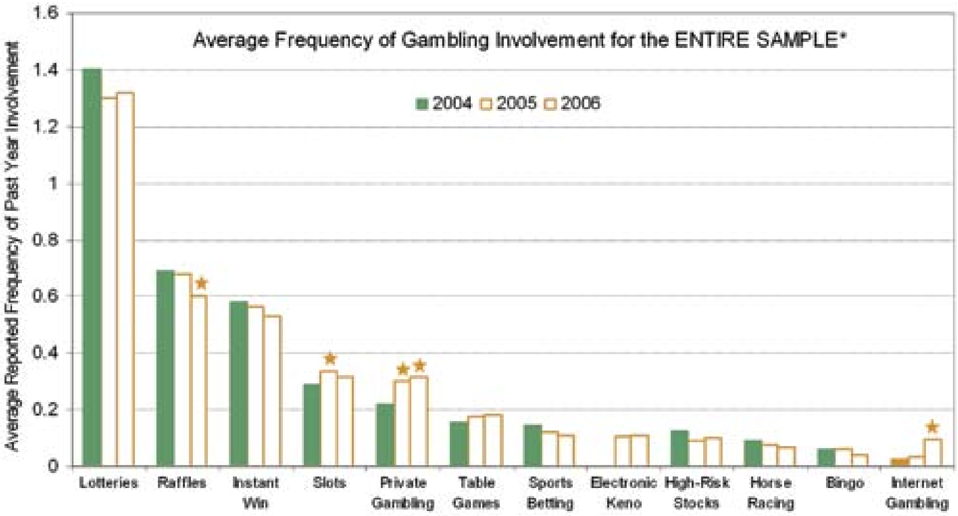
Many of these changes are part of national trends (i.e., lower lottery expenditures, increased poker, lower horse racing expenditures, more frequent Internet gambling). However, because the introduction of new forms of gambling often supplants older forms, it is quite possible that the introduction of the new gaming venues and expanded slot machine opportunities may have accelerated the declines in lotteries, raffles, and horse racing. A much stronger causal attribution can be made about the increase in slot machine play in 2005 relative to 2004, which seems likely attributable to the significantly greater availability of slot machines in the Lower Mainland in 2005. However, the magnitude of this increase was relatively small, and did not persist into 2006. The decreased expenditure on slots in 2005 and Internet gambling (2005 & 2006) are coincident with increased participation in each of these activities. What appears to be happening is an influx of new people engaging in these forms of gambling that are spending more modest amounts on these activities relative to the patronage in 2004.

There were several significant changes in where people gambled (Table 29). Specifically, there was a significant sustained increase in patronage of three new venues: Richmond – River Rock Casino; Langley – Gateway Casino; and Vancouver – Edgewater Casino. There was a significant decrease in patronage of certain existing venues/locations: Coquitlam - Great Canadian Casino; Burnaby - Gateway Casino; New Westminster - Royal City Star Riverboat (slots in 2006); and Washington State. Overall, the primary impact of the expansion of casino gambling opportunities in the Lower Mainland appears to be a redirection of the money among Lower Mainland venues/communities. It has had a fairly minor impact on retaining gambling dollars that were previously going out of the area. Gambling in Las Vegas and/or Reno continues to be the second most popular destination for casino gambling, with no significant changes in patronage in 2005 or 2006. Patronage of Washington State slots and tables is significantly lower, but this was not a common destination to begin with, and the magnitude of the decrease is fairly small.

In terms of attitudes toward gambling (Table 30), the existing negative beliefs about the benefits/harms of gambling in 2004 have became increasingly more negative in 2005 and 2006, with 56.9% of the populace in 2005 and 61.7% in 2006 now indicating they believed gambling's harms either somewhat or far outweighed gambling's benefits. The small percentage of people who believe gambling to be a fun, harmless thing to do is also significantly lower in 2006. However, there has been no change in the fact that the majority of people (67% - 69%) continued to prefer the statement that gambling is a matter of personal choice, over the statement that gambling is morally wrong (17% - 20%).

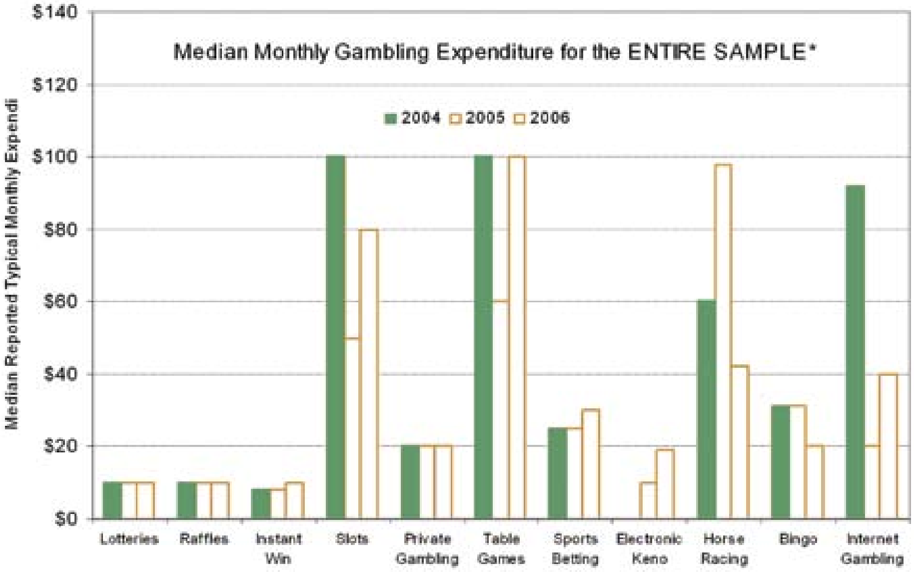
With respect to gambling and problem gambling, for all four communities combined, there has not been any statistically significant change in the prevalence of non-gamblers, non-problem gamblers, low risk gamblers, moderate problem gamblers, or severe problem gamblers. The combined prevalence rate of problem gambling for these communities, as measured by the Canadian Problem Gambling Index (CPGI) in 2004, was 5.6%, compared to 4.4% in 2005 and 4.5% in 2006. For historical comparison, in 2002 Ipsos-Reid and Gemini Research obtained a problem gambling prevalence rate of 4.7% for the BC Lower Mainland (n = 1125; CPGI; 4.3% moderate, 0.4% severe).

Figure 6: ***General Gambling Behaviour of all Four Communities Combined***



Note: Y axis: 0 = not at all; 1 = only a few days; 2 = once a month or less; 3 = several times a month; 4 = several times a week; 5 – daily

Note: Star indicates significant change from 2004.



Note: High-risk stocks not included.

**Weighted by community population size relative to total population: City of Langley = .025 weight; Township of Langley = .065 weight; City of Surrey = .357 weight; City of Vancouver = .554 weight.*

Table 28: ***General Gambling Behaviour of all Four Communities Combined***

		Past Year Frequency of Involvement							Money spent in a typical month (for people reporting any spending in a typical month)		
	Year	Not at all	Few days	Once a month or less	Several times a month	Several times a week	Daily	Kruskal-Wallis Test	Average	Median	Kruskal-Wallis Test
Raffles and Charitable Lotteries	2004	47.4%	41.3%	7.9%	2.4%	1.0%	0.1%	$x^2(2) = 19.7$ $p = .000$	$25.72	$10.00	$x^2(2) = 1.5$ $p = .464$
	2005	48.2%	40.9%	7.1%	2.7%	1.0%	0.2%		$19.71	$10.00	
	2006	52.5%	38.3%	6.8%	1.7%	0.7%	0.1%		$27.50	$10.00	
Other lotteries	2004	35.2%	22.0%	18.1%	17.3%	7.1%	0.3%	$x^2(2) = 4.93$ $p = .085$	$17.88	$10.00	$x^2(2) = 15.7$ $p = .000$
	2005	37.2%	24.2%	17.1%	14.3%	6.7%	0.4%		$17.33	$10.00	
	2006	33.2%	27.7%	19.0%	14.7%	5.0%	0.4%		$16.65	$10.00	
Instant Win Tickets	2004	66.8%	18.0%	8.1%	5.3%	1.4%	0.4%	$x^2(2) = .86$ $p = .651$	$14.77	$8.00	$x^2(2) = 2.19$ $p = .334$
	2005	67.7%	17.2%	8.4%	4.7%	1.7%	0.3%		$12.03	$8.00	
	2006	68.2%	18.1%	7.9%	3.9%	1.6%	0.2%		$17.35	$10.00	
Bingo	2004	96.0%	2.9%	0.6%	0.2%	0.3%	0%	$x^2(2) = 3.58$ $p = .171$	$72.78	$31.47	$x^2(2) = 1.36$ $p = .506$
	2005	96.2%	2.4%	0.5%	0.8%	0.1%	0%		$65.17	$30.97	
	2006	97.2%	2.1%	0.3%	0.3%	0.1%	0%		$61.75	$20.00	
Electronic Keno & Racetracks	2004	not assessed									
	2005	92.6%	5.4%	1.2%	0.5%	0.3%	0%	$x^2(1) = .04$ $p = .971$	$23.55	$10.00	$x^2(1) = 1.72$ $p = .085$
	2006	92.3%	5.7%	1.0%	0.7%	0.2%	0%		$38.82	$19.18	
Slot Machines	2004	78.4%	17.1%	2.9%	1.1%	0.4%	0.1%	$x^2(2) = 7.83$ $p = .010$	$223.34	$100.00	$x^2(2) = 9.49$ $p = .009$
	2005	74.9%	19.1%	4.3%	1.2%	0.4%	0.1%		$93.85	$50.00	
	2006	76.6%	18.1%	3.1%	1.7%	0.5%	0%		$144.94	$80.00	
Casino Table Games	2004	88.9%	8.5%	1.5%	0.9%	0.2%	0.1%	$x^2(2) = 3.51$ $p = .173$	$1775.21	$100.00	$x^2(2) = 18.0$ $p = .000$
	2005	87.3%	8.9%	2.7%	0.8%	0.2%	0.1%		$109.34	$60.00	
	2006	87.7%	8.1%	2.7%	1.0%	0.5%	0%		$184.72	$100.00	
Horse Racing	2004	93.2%	5.4%	0.7%	0.5%	0.3%	0%	$x^2(2) = 3.47$ $p = .176$	$401.24	$60.00	$x^2(2) = 11.1$ $p = .004$
	2005	94.3%	4.7%	0.2%	0.5%	0.1%	0.1%		$125.31	$98.29	
	2006	94.5%	4.8%	0.5%	0.2%	0.1%	0%		$39.19	$41.85	
Sports Betting	2004	91.3%	5.4%	1.2%	1.6%	0.5%	0%	$x^2(2) = 6.63$ $p = .036$	$463.84	$25.00	$x^2(2) = 2.03$ $p = .363$
	2005	93.2%	3.8%	1.7%	0.7%	0.6%	0.1%		$41.95	$25.00	
	2006	91.9%	6.5%	0.9%	0.5%	0.2%	0%		$86.99	$30.00	
Private Games (e.g. poker)	2004	86.2%	8.6%	2.9%	1.3%	0.8%	0.1%	$x^2(2) = 26.1$ $p = .000$	$194.25	$20.00	$x^2(2) = 4.66$ $p = .097$
	2005	81.5%	11.1%	4.0%	2.5%	0.8%	0.1%		$42.66	$20.00	
	2006	81.1%	11.1%	4.1%	2.9%	0.5%	0.3%		$35.82	$20.00	
Internet Gambling	2004	99.0%	0.4%	0.2%	0.2%	0.2%	0%	$x^2(2) = 55.1$ $p = .000$	$2682	$91.74	$x^2(2) = 9.92$ $p = .007$
	2005	98.5%	0.7%	0.1%	0.3%	0.3%	0.1%		$68.31	$20.00	
	2006	96.1%	1.4%	0.5%	0.9%	0.9%	0.2%		$126.60	$40.00	
High Risk Stocks	2004	92.0%	5.1%	1.8%	0.9%	0.1%	0.1%	$\chi2(2) = 8.92$ $p = .012$	$11687	$2195	$x^2(2) = 1.10$ $p = .576$
	2005	94.0%	4.7%	0.5%	0.3%	0.2%	0.4%		$6670	$2000	
	2006	93.7%	4.2%	1.1%	0.6%	0.4%	0.1%		$6766	$1389	

** Weighted by community population size relative to total population: City of Langley = .025 weight; Township of Langley = .065 weight; City of Surrey = .357 weight; City of Vancouver = .554 weight.*

Table 29: ***Reported Gambling Patronage of all Four Communities Combined***

	Where do you normally go to play slots?			What casino do you normally go to play table games?			Where do you normally go to bet on horse racing?		
	2004 (n = 627)	2005 (n = 620)	2006 (n = 574)	2004 (n = 316)	2005 (n = 307)	2006 (n = 285)	2004 (n = 204)	2005 (n = 144)	2006 (n = 137)
Richmond – River Rock Casino Resort	19.0%	25.3%	23.9%	20.6%	32.2%	35.6%			
Las Vegas and/or Reno	17.6%	17.7%	15.0%	17.0%	13.6%	17.0%	0.5%	0.7%	0%
Coquitlam – Great Canadian Casino	14.2%	6.0%	5.5%	15.8%	6.0%	5.6%			
New Westminster – Royal City Star Riverboat Casino	11.7%	8.5%	6.1%	10.5%	11.1%	7.6%			
Burnaby – Gateway Casino	8.1%	3.6%	3.5%	7.5%	5.8%	3.9%			
Surrey – Fraser Downs Racetrack & Casino	6.3%	5.5%	8.9%	3.0%	0.9%	1.1%	28.9%	28.5%	27.5%
BC – Outside Lower Mainland	4.8%	4.0%	3.9%	4.1%	2.3%	2.5%	0.9%	2.8%	1.1%
Washington State	4.2%	1.6%	2.6%	3.7%	0.7%	0.5%			
New Westminster – Gateway Casino (Royal Towers Hotel)	3.7%	1.6%		1.2%	5.9%				
Cruise Ships	3.1%	1.7%	1.4%	2.4%	0.8%	0.9%			
Vancouver – Gateway Casino (Mandarin Centre)				1.1%					
Vancouver – Grand Casino				0.2%					
Vancouver – Great Canadian Casino (Holiday Inn)				7.5%	3.9%	2.8%			
Langley – Cascades Casino	0%	15.8%	17.4%	0%	8.3%	12.9%			
Vancouver – Edgewater Casino (Plaza of Nations)	0%	5.0%	6.9%	0%	5.4%	4.9%			
Vancouver – Hastings Racetrack							65.7%	65.5%	64.1%
Other	6.7%	2.5%	5.0%	3.7%	3.2%	4.7%	4.1%	1.7%	7.4%

Table 30: ***Gambling Attitudes of all Four Communities Combined***

Which best describes your belief about the benefit or harm that gambling has for society?		Harm far outweighs benefits	Harm somewhat outweighs benefits	Benefits and harm equal	Benefits somewhat outweigh harm	Benefits far outweigh harm	Average score (-2 to +2)	Kruskal-Wallis Test
	2004	31.3%	22.7%	27.7%	12.5%	5.8%	-.61	
	2005	34.8%	22.1%	28.4%	11.2%	3.4%	-.74	$x^2(2) = 27.6$ $p = .000$
	2006	34.7%	27.0%	25.5%	10.0%	2.8%	-.81	

Which best describes your attitude toward gambling?		It is morally wrong	It is somewhat morally wrong	No opinion one way or the other	It is a matter of personal choice	It is a fun, harmless thing to do	Average score (-2 to +2)	Kruskal-Wallis Test
	2004	12.3%	7.9%	6.5%	67.4%	5.8%	.47	
	2005	11.0%	6.0%	8.6%	69.4%	4.9%	.51	$x^2(2) = 9.55$ $p = .008$
	2006	10.5%	9.1%	8.9%	68.6%	2.8%	.44	

** Weighted by community population size relative to total population: City of Langley = .025 weight; Township of Langley = .065 weight; City of Surrey = .357 weight; City of Vancouver = .554 weight.*

Table 31: ***Prevalence of Gambling and Problem Gambling in all Four Communities Combined***

	2004	2005	2006
Non Gamblers	19.1%	20.1%	17.0%
Non Problem Gamblers (CPGI 0)	66.3%	65.0%	69.6%
Low Risk Gamblers (CPGI 1-2)	8.9%	10.5%	8.9%
Moderate Problem Gamblers (CPGI 3-7)	4.2%	3.7%	2.9%
Severe Problem Gamblers (CPGI 8+)	1.4%	0.7%	1.6%
Kruskal-Wallis Test		$x^2(2) = .25$ $p = .881$	

CPGI refers to the Canadian Problem Gambling Index

** Weighted by community population size relative to total population: City of Langley = .025 weight; Township of Langley = .065 weight; City of Surrey = .357 weight; City of Vancouver = .554 weight.*

CHANGES IN ECONOMIC AND SOCIAL INDICATORS

EMPLOYMENT IMPACTS

Studies suggest that there are often employment gains from the introduction of new gambling venues (Garrett, 2004; KPMG, 1995; NORC, 1999; Snyder, 1999; Stevens & Williams, 2004). These include employment for the construction of the venue; new employment at the gaming venue itself; employment for ongoing maintenance of the facility; employment in industries servicing the new venue (e.g., gaming equipment providers; food and drink); and indirect employment in complimentary sectors such as hotels, restaurants, etc. Banks (2002) and others (Garrett, 2003; Grinols, 1994; 1996; 2004) have pointed out that gambling often does not create new jobs. Existing jobs in retail, entertainment and the food service sectors are often displaced or "cannibalized" by the gambling industry as spending patterns shift to casino gambling. Furthermore, these new casino jobs are typically low skilled and low paid compared to some of the jobs they are displacing (McMillen, 2000; Marshall, 2001). On the other hand, job losses in one sector may sometimes be offset by gains in industries such as construction, tourism, transportation, and public utilities (Browne & Kubasek, 1997; National Institute of Economic and Industry Research, 1997). The few studies that have focused on the employment impact of adding slot machines to racetracks have found that they produce few new jobs, but do stave off significant job loss in the horse racing and supporting agricultural sector that would have occurred if slot machines had not been introduced (Brinkman & Weersink, 2004; Econometric Research, 2005).

Estimating the Gaming Employment Multiplier

There are various ways of assessing the magnitude of the employment impact in the present study. One is by trying to infer the contribution of the new venue to total employment in the community by taking everything else into account. Statistically, this can be done through multiple regression, where total employment at any given time is seen as a function of previous total employment numbers, plus known employment changes in other major industries, plus known time trends, plus the unknown contribution of the new gaming venue. Mathematically, this is expressed as follows:

$$\text{Total Employment}_{i,t} = \beta 0 + \beta 1 \text{ Total Employment}_{i,t} + \beta 2 \text{ Time Trend}_{i,t} + \beta 3 \text{ Employment Shock}_{i,t} + \beta 4 \text{ Casino Employment}_{i,t-4} + \text{Error}_{i,t}$$

---

i represents each of the three study communities (Langley, Surrey, Vancouver).

t represents 14 time periods (January 2002 through June 2006).

β0 is a constant (the intercept).

β1 is the coefficient for the lagged dependent variable representing persistence in total employment over time.

β2 is the linear time trend.

β3 is the coefficient for employment shocks associated with industries that experience change during the time period (e.g., other large businesses opening up or shutting down).

β4 is the casino employment coefficient ("multiplier") associated with the new gaming venue. An obtained casino employment coefficient ("multiplier") of greater than 1 would indicate that each new gaming venue job creates additional indirect employment in the community (e.g., a coefficient of 2 would indicate that for every 1 job at the new venue another job is indirectly created in the community).

Error represents all variation in employment not accounted for in the model.

British Columbia Employment Insurance data was used to estimate each community's total employment. The model used quarter-year time periods from January 2002 to June 2006, as this was the reporting frequency of Employment Insurance data at the municipal level. No significant employment shocks were reported in Langley or Surrey during the time period covered. One employment shock was reported for Vancouver in November 2003 due to a business closure. SAS® (Statistical Analysis System) REG was the statistical software used for the analysis. The model estimates for each community are reported in Table 32 below:

Table 32: ***Multiple Regression Coefficients Predicting Total Community Employment***

Langley					
Variable	**Coefficient**	**t value**	**p**	**95% Confidence Intervals**	
Constant	25918	3.01	.01	6756	45080
Total Employment Lag	0.09	-.24	.81	-.89	.72
Time Trend	107.2	3.74	.004	43.3	171.1
Casino Employment	.19	0.62	.55	-.50	0.89

Adjusted R^2 = .90

Surrey					
Variable	**Coefficient**	**t value**	**p**	**95% Confidence Intervals**	
Constant	-4269	-.09	.93	-112772	104234
Total Employment Lag	1.02	7.51	<.0001	.72	1.33
Time Trend	-60.0	-.17	.87	-829	709
Casino Employment	18.9	1.51	.16	-8.9	46.7p

Adjusted R^2 = .99

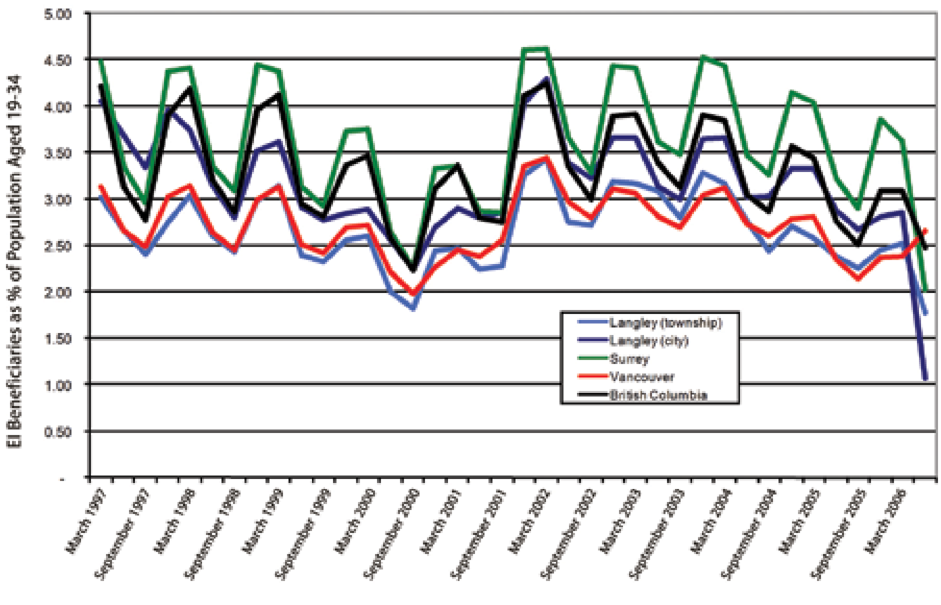
Vancouver					
Variable	**Coefficient**	**t value**	**p**	**95% Confidence Intervals**	
Constant	275037	1.71	.12	-89572	639647
Total Employment Lag	.51	1.75	.11	-.15	1.17
Time Trend	424.0	1.05	.32	-490.6	1338.6
Employment Shock	27.6	.67	.52	-66.3	121.5
Casino Employment	6.12	1.58	.15	-2.64	14.88

Adjusted R^2 = .95

The adjusted R^2 for each of the municipalities is close to 1, indicating that almost all the variability in Total Employment is explained by variables in the model. Unfortunately, the model does not have much statistical power due to the low number of observation periods, particularly post-gaming facility introduction. Low statistical power makes it very difficult to achieve coefficient estimates that are statistically significant (i.e., $p < .05$). Consequently, none of the casino employment coefficients are significant in any of the three analyses. Without statistically significant results, we can draw no conclusions regarding the magnitude of the effect of gaming facility introduction/ expansion on total employment within the municipalities.

What these results do illustrate is how difficult it is to detect relatively small effects on total employment at a community-wide level. Although these facilities may be creating many new jobs, the magnitude of this effect will typically be fairly small in large municipalities. Figure 7 shows the natural fluctuation in the percentage of unemployment beneficiaries over the past 10 years. In Surrey, the 2% fluctuation over the past two years is roughly equivalent to 4,000 to 8,000 people. Even if 200 new jobs were created with the new gaming venue, it would be a) very difficult to detect this change, and b) to attribute it to the gaming venue when fluctuations 20 to 40 times in magnitude are commonly occurring based on normal economic fluctuations in the business cycle.

Figure 7: Employment Insurance Beneficiaries in Study Communities



Source: Human Resources Development Canada Administrative Files and BC STATS Population Estimates. Prepared by: BC STATS. January 9, 2006.

Employee Surveys at the New Venues

Employee Surveys provide a finer-grained approach to quantifying the employment impact of new gaming facilities (although they do not address the indirect jobs created). Employee surveys were completed at Edgewater Casino in Vancouver during the first week of June 2005 and at Cascades Casino in Langley City and at Fraser Downs in Surrey in December 2005. The survey focused on getting a better understanding of the employment history, comparative wage rate, and residency location of each employee (Appendix B). All employees registered with the Gaming Policy Enforcement Branch (GPEB) were asked to fill out a survey, representing 560 respondents. The results of this survey are reported below in Table 33. Note that in 2007 there were a total of 585 employees at the Cascades Casino, 563 at the Edgewater, and 161 at Fraser Downs (personal communication, Darryl Schiewe, Director, Casino Operations, BCLC, March 19, 2007). A few hundred of the Edgewater jobs represented transfer of employment from the Grand Casino and Royal Diamond Casino. Similarly, there were existing jobs at Fraser Downs associated with horse racing.

Table 33: Gaming Venue Employee Survey

	Edgewater	Cascades	Fraser Downs Gaming Centre	All Venues
% People registered with GPEB	100% (n = 286)	98.3% (n = 174)	99% (n = 100)	99.3% (n = 560)
Average number of hours working per week	37.25	38.97	35.43	37.46
Prior Employment Status				
Unemployed	8.4% (n = 24)	6.3% (n = 11)	18.0% (n = 8)	7.7% (n = 43)
Part-Time	20.3% (n = 58)	78.7% (n = 137)	58.0% (n = 58)	45.2% (n = 253)
Full-time	71.3% (n = 204)	14.4% (n = 25)	35.0% (n = 32)	46.6% (n = 261)
Industry Previously Employed In				
Accommodation/Food Service	10.8% (n = 31)	14.4% (n = 25)	27.0% (n = 27)	14.8% (n = 83)
Entertainment	24.5% (n = 70)	20.7% (n = 36)	11.0% (n = 11)	20.9% (n = 117)
Other	59.4% (n = 170)	57.5% (n = 100)	49.0% (n = 49)	57.0% (n = 319)
Unknown/Invalid	5.2% (n = 15)	7.5% (n = 13)	14.0% (n = 13)	7.3% (n = 41)
Current Pay Compared to Previous				
Pays More	31.1% (n = 89)	52.3% (n = 91)	11.0% (n = 11)	34.1% (n = 191)
Pays Less	43.7% (n = 125)	16.1% (n = 28)	50.0% (n = 50)	36.3% (n = 203)
Pays the Same	19.6% (n = 56)	23.6% (n = 41)	30.0% (n = 30)	22.7% (n = 127)
Unknown/Invalid	5.6% (n = 16)	8.1% (n = 14)	9.0% (n = 9)	7.0% (n = 39)
% More/Less Current Job Pays Compared to Previous				
For those reporting current job pays less	24.4%	51.4%	24.3%	27.9%
For those reporting current job pays more	30.8%	34.9%	27.7%	31.6%
% Who Moved from Different Municipality for this Employment	19.2% (n = 55)	36.8% (n = 64)	13.0% (n = 13)	23.6% (n = 132)
% Who live in the Same Municipality as the Gaming Venue	57.0% (n = 163)	36.2% (n = 63)	63.0% (n = 63)	51.6% (n = 289)

The following salient results can be derived from these employee surveys:

- The average hours worked indicates that most employees are employed full time.
- Prior to their present employment, slightly more than half of the employees were either unemployed (7.7%) or had part-time employment (45.2%).
- While most people experienced a wage increase or decrease with their new gaming employment, overall, wages were roughly comparable to their previous employment.
- About 23.6% of employees moved to the municipality to work at the venue.
- Only about half of casino employees live in the municipality in which they work.

Industry Impacts

New gaming venues typically have both positive and negative effects on other business sectors. Casino spending on gambling and their associated amenities (e.g., restaurants) are in potential competition for the consumer dollar with other forms of gambling, hospitality, and retail businesses located in the vicinity. One of the most consistent impacts is a negative impact on the revenues and employment of other forms of gambling such as horse racing and bingo (McMillen, 1998; 2000; National Institute of Economic and Industry Research, 1997; NORC, 1999; Murray, 1996). The exception to this is when slot machines are added to racetracks or bingo where the slot revenue is often able to help sustain these forms of gambling which would have otherwise faltered (Brinkman & Weersink, 2004; Campbell & Wynne, 2004; Econometric Research, 2005). Grinols & Ormorov (1996) found that casino introduction in Illinois was associated with a drop in general merchandise and miscellaneous retail and wholesale trade within 10 miles of the venue. In contrast, automotive and filling-station sales showed a significant gain, with mixed results in other sectors. A Minnesota study found that business volume fell at restaurants located within a 30 mile radius of casinos with food service (Anders, 1998). A Missouri study provides evidence of substitution between gambling and other businesses but only in the entertainment and amusement sector (Siegel & Anders, 1999). Other studies (Teske & Sur, 1991; Blevins & Jensen, 1998) have also reported the number of retail businesses in both large and small communities had declined significantly after casinos were opened. Grinols (2004) estimates that revenue fall by 30-35% when the distance from the casino is doubled.

However, this type of displacement or cannibalization is not necessarily a bad thing. It is a normal feature of a flexible economy that is responsive to the changing desires of consumers. A shift from less to more preferred goods and services can contribute to economic growth as resources flow to their highest-valued uses (Walker, 1998). Economic development occurs if the new activity results in something of greater value than what it is replacing (e.g., higher profits, higher wages, higher property values) (Grinols, 2004).

While casinos can negatively impact certain businesses, they may also benefit others. These include tourist-oriented businesses (e.g., sightseeing tours), transportation (e.g., taxi, car rental), the hospitality industry (hotels, restaurants, lounges), and the construction industry (KPMG 2002; NORC, 1999; McMillen, 1998; 2000). If a casino is placed in an underserved area without a lot of competing businesses (e.g., Aboriginal reserve) then this initiative may spur the creation of complementary services. Hashimoto and Fenich (2003) found that revenue in local restaurants in Mississippi actually increased after the introduction of casinos. In Windsor, Ontario downtown retail businesses reported an increase in sales one year after the casino was opened (KPMG, 1995).

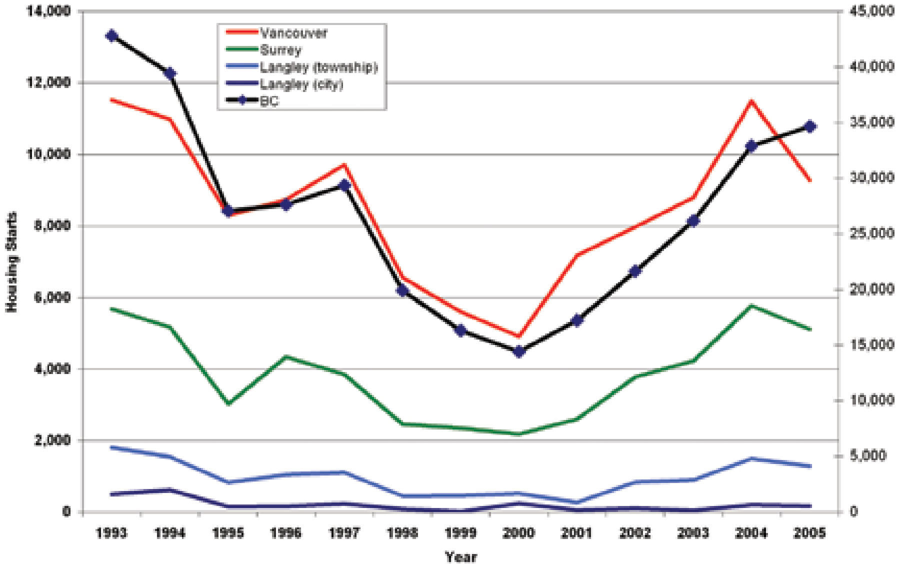
It is also very important to understand the origin of gambling establishment patronage. Gambling establishments that draw their patronage from outside the jurisdiction are drawing new money and wealth to the community rather than redirecting money from other local businesses (Grinols, 2004; McMillen, 1998; 2000; KPMG, 1995). The other major benefit of "outside" money to the local community is that the social problems created by gambling go home with the tourist, rather than impacting the local social service and health care system. High rates of non-resident patronage are characteristic of Las Vegas casinos as well as certain Native-owned casinos in the United States. It is also important to note that new gambling establishments that entice local gamblers to spend their money in a local casino rather than a casino outside the jurisdiction are retaining "new" money. This is not always a straightforward relationship, however. A study by Hunsaker (2001) found that consumers who gambled at local riverboat casinos were also found to be more likely to visit actual destination casino resorts in the future.

The cost and origin of supplies is also important. Gambling establishments spend significant amounts of money on food, liquor, entertainment, furniture and gambling supplies. Gambling machines themselves cost tens of thousands of dollars each and are typically replaced every few years. Supplies that are purchased locally are beneficial to the local economy. Supplies that are purchased outside the jurisdiction result in a net outflow of money (McMillen, 2000).

Annual Housing Starts

The number of annual housing starts is often a good general measure of economic activity in a community. The following trends indicate there is considerable variation over time and over municipalities that appears unrelated to the expansion of gambling opportunities in 2004 and 2005 (Figure 8). Unfortunately, 2005 data is the most recent data available at the time of the report due to lengthy data lags at BC Stats.

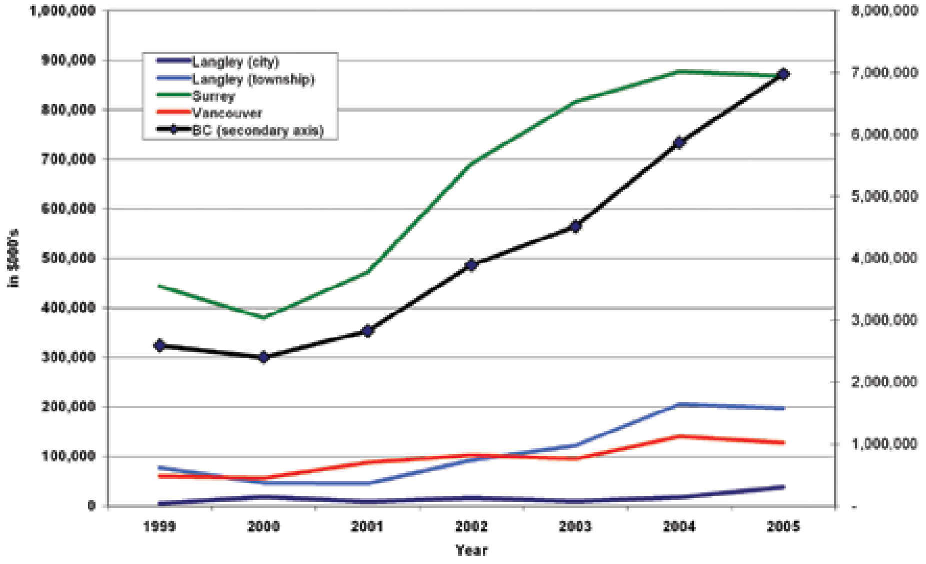
***Figure 8:* Annual Housing Starts 1993 – 2005**



Value of Residential Construction

Another similar factor that can be used to measure economic activity or decline, and which indicates a willingness to spend in the community, is the dollar trend of all residential construction. Here again, while there has been a general upward trend, it is not clearly related to the expansion of gambling opportunities in 2004 and 2005. Unfortunately, 2005 data is the most recent data available at the time of the report due to lengthy data lags at BC Stats.

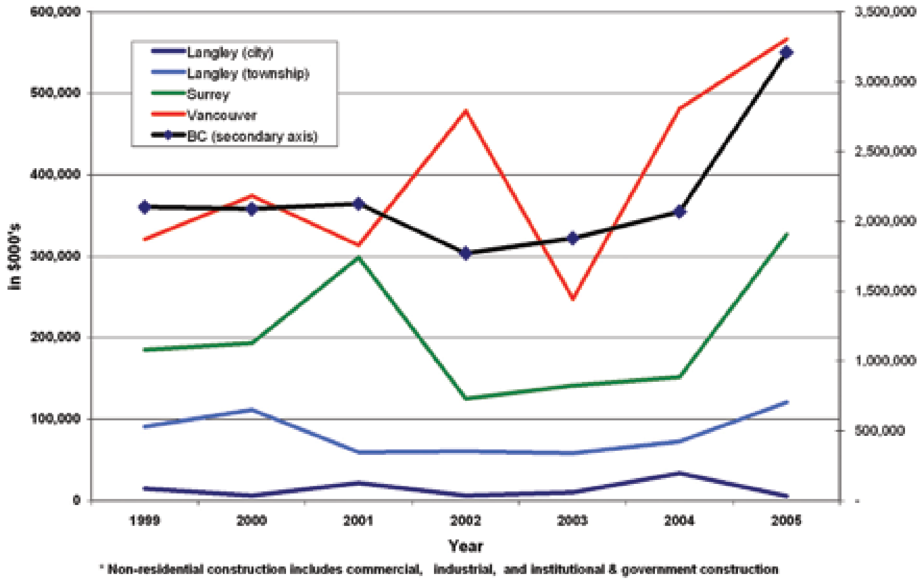
*Figure 9: **Estimated Value of Non-Residential Construction 1999 – 2005***



Value of Non-Residential Construction

Finally, a factor that can be used to measure economic activity or decline, and which indicates a willingness to invest in the municipality, is the dollar trend of all non-residential construction. The upward trend in 2005 appears to be a British Columbia wide trend, and cannot be attributed to the introduction of new gambling establishments. Unfortunately, 2005 data is the most recent data available at the time of the report due to lengthy data lags at BC Stats.

Figure 10: Estimated Value of Non-Residential Construction 1999 – 2005



Revenue Change in Industries most Typically Affected by Introduction of Gambling Establishments

These industries include: restaurants, hotels, bars, bingo, horse racing, automotive service, automotive filling-stations, car rental, pawnshops, cheque cashing stores, general retail, construction industry, other entertainment, and tourism oriented businesses. Note: data for food services, entertainment industries, pawnshops and cheque-cashing stores was not available in time for this report.

The following table documents hotel and motel revenue for the greater Vancouver area from 2002 to 2006. Information specific to Langley, Surrey, and the City of Vancouver was not available. Although there is a general increase in revenue coincident with the 2004/2005 gambling expansion, the Patron Survey (discussed in the next session), suggests this is very unlikely attributable to gambling patrons.

Table 34: Hotel and Motel Revenue ($ in Thousands)

	2002	2003	2004	2005	2006 [1]
Greater Vancouver Regional District	$606,108	$576,632	$635,347	$688,741	$604,483
Province	$1,506,188	$1,486,681	$1,592.176	$1,690,093	$1,481,232

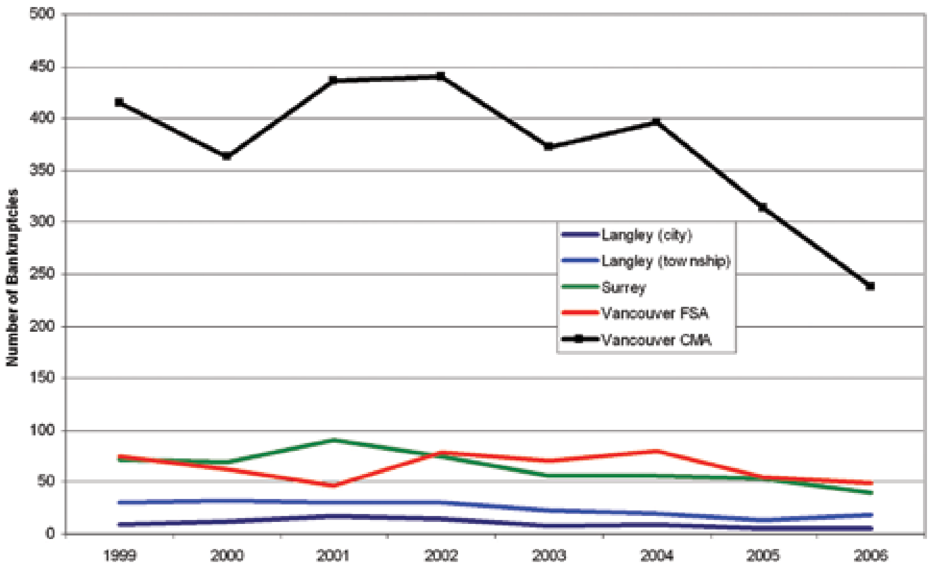
BC Stats. (2007). Quarterly Regional Statistics, Fourth Quarter 2006: Greater Vancouver Regional District. Available through purchase at http://www.bcstats.gov.bc.ca/ordrform.asp

1 To third quarter only.

Commercial Bankruptcy Rates

As can be seen in Figure 11, there has been no significant increase in commercial bankruptcy rates in any of the four communities subsequent to gambling expansion in 2005 or in comparison to the greater Vancouver CMA.

Figure 11: Annual Number of Commercial Bankruptcies



For Vancouver CMA: BC Stats. (2007). British Columbia bankruptcies by major urban centre. Retrieved March 15, 2007, from http://www.bcstats.gov.bc.ca/data/dd/handout/BANKURB.pdf
For all other areas: BC Stats. (2007). British Columbia bankruptcies by postal code forward sortation area, British Columbia. Retrieved March 15, 2007, from http://www.bcstats.gov.bc.ca/data/dd/handout/BANKFSA.pdf

Direct Gaming Revenue and its Distribution

The failure to find community-wide changes in major economic indicators suggests that the relative overall economic impact of these new venues is not large. Similar to the situation with employment changes, to gauge the actual impact it is necessary to take a more "micro" view by looking at actual revenue gains at the new gaming venues and how these revenues are distributed.

Table 35 below shows gross casino revenues in the Lower Mainland from fiscal year 1999/2000 to 2005/2006. Table 36 highlights the specific revenues of the three venues of interest and the estimated proportion received by the Casino Service Provider and the BCLC. Fraser Downs's gaming revenue (not including horse racing) was $38.9 million in 2004/05 (with expanded slots only for the last 5 months) and $46.8 million in 2005/06. The Cascades Casino revenue was $89.0 million in 2005/06 (with 11 months of operation). Edgewater Casino gross revenues were $10.6 million in 2004/05 (with 2 months of operation) and $73.1 million in 2005/06.

Revenues for the Cascades Casino have exceeded projections due to higher than anticipated slot revenues. In contrast, overall revenues for the Edgewater Casino are significantly lower than anticipated, resulting in the company seeking bankruptcy protection in May 2006 (reporting losses of $157,000 a week). The company attributed these losses to parking problems, the absence of a liquor license for the gambling floor, city bylaws that restrict sign advertising, and a collective agreement that made it difficult to reduce staff. In September 2006 it was sold to Las Vegas based Paragon Gaming for $42 million. Fraser Downs also changed ownership in March 2005 when the Great Canadian Gaming Corporation acquired Orangeville Raceway Ltd (Fraser Downs) for a total purchase price of $40,305,000 plus the assumption of existing debt of $6,099,000.

Table 35: Casino Revenue in the British Columbia Lower Mainland

Casino	Service Provider	City	Casino Revenue Fiscal 1999/00	Casino Revenue Fiscal 2000/01	Casino Revenue Fiscal 2001/02	Casino Revenue Fiscal 2002/03	Casino Revenue Fiscal 2003/04	Casino Revenue Fiscal 2004/05	Casino Revenue Fiscal 2005/06
Gateway Casino Mandarin Centre	Gateway Casinos Inc.	Vancouver	$14,835,778	$14,933,429	$16,070,761	$18,155,967	$17,936,554	$16,157,506	$979,250
Grand Casino	Grand Casino Equipment & Management Ltd.	Vancouver	$19,029,432	$18,470,139	$20,224,446	$20,995,602	$23,158,497	$12,141,494	----
Great Canadian Casinos Renaissance	Great Canadian Casinos Inc.	Vancouver	$11,692,260	$9,969,276	$11,046,720	$11,664,714	$7,690,853	$1,240,557	----
Great Canadian Casinos Holiday Inn Vancouver	Great Canadian Casinos Inc.	Vancouver	$23,014,761	$20,288,363	$27,880,291	$30,606,016	$31,969,533	$26,294,954	$24,095,629
Royal Diamond Casino	Royal Diamond Casinos Inc.	Vancouver	$15,457,568	$12,657,789	$3,314,491	----	----	----	----
Edgewater Casino	**Edgewater Casinos Inc *(sold to Paragon Gaming in Sept 2006)***	**Vancouver**	----	----	----	----	----	**$10,616,212**	**$73,144,611**
Great Canadian Casino Newton	Great Canadian Casinos Inc.	Surrey	$16,852,008	$18,987,341	$11,767,822	----	----	----	----
Fraser Downs Racetrack and Casino	**Orangeville Raceway Ltd *(purchased by Great Canadian Gaming Corporation in Mar 2005)***	**Surrey**	----	----	----	----	----	**$38,900,965**	**$46,821,283**
Cascades Casino	**Gateway Langley Holdings Ltd**	**Langley**	----	----	----	----	----	----	**$88,970,001**
Gateway Casino Burnaby	Gateway Casinos Limited Partnership	Burnaby	$86,044,925	$103,641,160	$112,237,286	$104,388,171	$129,850,974	$132,275,957	$151,792,978
Great Canadian Casino Coquitlam	Great Canadian Casinos Inc.	Coquitlam	----	----	$41,382,597	$89,229,023	$118,459,826	$119,456,554	$129,306,168
River Rock Casino Resort	Great Canadian Casinos Inc.	Richmond	$36,452,613	$40,548,104	$42,286,443	$44,810,593	$56,279,467	$188,097,549	$215,179,444
Gateway Casino Royal Towers	Gateway Casinos Inc.	New Westminster	$43,031,201	$36,730,878	$33,592,714	$33,531,029	$35,952,975	$28,629,046	$13,543,966
Royal City Star Casino	Star of Fortune Gaming Management Corp.	New Westminster	$18,867,558	$43,490,697	$50,263,244	$46,391,544	$49,178,389	$35,016,477	$27,150,693
TOTAL			**$285,278,104**	**$319,717,176**	**$370,066,815**	**$399,772,659**	**$470,477,068**	**$608,827,271**	**$770,984,023**

Note. This is gross revenue before operating expenses and before allocation to casino operators, municipal governments, federal government, etc. All data is derived from the British Columbia Lottery Corporation Annual Reports.

Table 36: Revenue Allocations for the Three Specific Venues being Studied

Fiscal 2004/2005	Slot Machine Revenue	Table Game Revenue	Gross Casino Revenue Fiscal	Amount to Casino Service Provider[1]	Amount to Provincial Government [1]
Edgewater Casino	$5,780,476	$4,835,736	$10,616,212	~$3,650,000	~$6,960,000
Fraser Downs Racetrack and Casino	$38,037,176	$863,789	$38,900,965	~$13,380,000	~$25,520,000
Cascades Casino	----	----	----	----	----
Total	**$43,817,652**	**$5,699,525**	**$49,517,177**	**~$17,030,000**	**~$32,480,000**
Fiscal 2005/2006	**Slot Machine Revenue**	**Table Game Revenue**	**Gross Casino Revenue Fiscal**	**Amount to Casino Service Provider[1]**	**Amount to Provincial Government[1]**
Edgewater Casino	$37,019,652	$36,124,959	$73,144,611	~$24,940,000	~$48,200,000
Fraser Downs Racetrack and Casino	$46,821,283	0	$46,821,283	~$15,970,000	~$30,860,000
Cascades Casino	$66,226,405	$22,743,596	$88,970,001	~$30,340,000	~$58,630,000
Total	**$150,067,340**	**$58,868,555**	**$208,935,895**	**~$71,250,000**	**~$137,690,000**

1. Estimated amounts based on a 34.1% average allocation of gross revenues to all Casino Service Providers in 2006 and a 34.4% allocation in 2005. The BCLC receives 75% of slot and electronic table games profits (80% at racetrack slots), 60% of standard table games, and 25% from poker and craps, in its operating agreement with the Casino Service Providers.

Note. All data is derived from the British Columbia Lottery Corporation Annual Reports

Note. Casino Service Providers have secondary revenue streams from food and beverage, parking, foreign exchange, and automatic teller machines.

The disposition of these revenues is a very important consideration. Governments typically redirect a large portion of gambling revenue back to the public in the form of government services (health care, education, etc.). However, if gambling revenues are primarily collected provincially and redistributed provincially, then the possibility exists for a net outflow of money from the local community. There are direct and indirect costs, as well as direct and indirect revenues to government. Some examples of direct revenues associated with a gaming venue include earned revenue, sales tax revenue, and income tax revenue, while indirect revenue would include the multiplier effect of new jobs and increased customer traffic for local businesses. Examples of direct costs include costs for advertising and licensing.

Casino Service Provider Allocation of this Revenue

Operating expenses typically consume the majority of Casino Service Provider revenue. The main expense is staff salaries, which usually accounts for over half of operating expenses. Other operating expenses are a) provision and maintenance of the facility and fixtures; b) provision of food and beverages; c) marketing; and, d) administration. The large majority of these operating expenses are monies spent in the local community, except in situations where a significant percentage of employees reside outside the community.

Gateway Casinos, owners of the Cascades, reports that 61.9% of total revenue in 2006 and 58.3% in 2005 was consumed by operating expenses across its seven casinos in Western Canada. It is unclear what proportion of the remaining ~40% is reinvested locally. Operating expenses have consumed a much higher proportion of total revenue for the Edgewater Casino, as evidenced by its seeking bankruptcy protection. Great Canadian Gaming Corporation, owners of Fraser Downs, also report a higher percentage of revenues going to operating expenses across its various gaming venues in Canada in 2005 (~83%).

Provincial Government Allocation of this Revenue

The provincial government (BCLC) retains approximately 66% of overall casino revenue. The overall allocation of BCLC revenue from all gaming operations in fiscal 2004/05 and 2005/06 is reported below:

Table 37: Allocation of Provincial Government Revenue from all Gaming Operations

	2004/2005	2005/2006
Consolidated Revenue	$479,900,000 (57.5%)	$556,400,000 (66.6%)
Health Special Account	$147,300,000 (17.6%)	$147,300,000 (17.6%)
Charitable and Community Organizations	$134,600,000 Overall (16.1%) $3,043,639 Langley $6,680,291 Surrey $27,778,260 Vancouver	$137,700,000 Overall (16.5%) $2,696,975 Langley $7,317,544 Surrey $28,445,605 Vancouver
Host Municipal Governments	$53,000,000 Overall (6.3%) $0 Langley $2,524,492 Surrey Fraser Downs $3,224,751 Vancouver's Casinos	$65,000,000 Overall (7.8%) $5,001,607 Langley Cascades $2,977,272 Surrey Fraser Downs $4,990,898 Vancouver's Casinos
Government of Canada	$8,032,000 (1.0%)	$8,287,000 (1.0%)
Horse Racing Purse Enhancements	$4,200,000 (0.5%)	$4,600,000 (0.6%)
Development Assistance Compensation	$8,100,000 (1.0%)	$3,400,000 (0.4%)
TOTAL	**$835,132,000 (100%)**	**$922,687,000 (100%)**

Consolidated Revenue is an allocation to general provincial government revenue, which is used to support government programs in all areas, primarily health, education, and social services (74% in 2005/2006). The Problem Gambling Program is also paid from Consolidated Revenue. In fiscal 2005/06, expenditures on the Problem Gambling Program totalled $4.5 million.

The **Health Special Account** is for the administration, operation and delivery of health care, health research and promotion, and health education services.

Capital Expenditures are primarily for equipment and systems that support gambling operations.

Charitable and Community Organizations in British Columbia are eligible to apply for grants. In 2005/2006, nearly 6,000 charitable and community organizations in British Columbia received grants from this allocation. In 2005/2006, 39.4% of these grants went to Bingo-affiliated organizations.

Host Municipal Governments where a casino is located receive a 10% share of the net income generated from both slot machines and table games. In the case of a community gaming centre or racetrack gaming centre, the host local government receives a 10% share of the net income generated from slot machines. Host local governments where destination casinos are located receive a one-sixth share of the net income on the first 300 slot machines and 10% on any additional machines, and a one-sixth share of the net income from table games. All the casinos in the Lower Mainland are "community casinos" except for the Royal City Star Casino in New Westminster.

The **Government of Canada** receives an inflation-adjusted payment from the Interprovincial Lottery Corporation (ILC) as compensation for the federal government's withdrawal from the operation of lotteries. This amount represents British Columbia's contribution to this payment.

Horse Racing Purse Enhancements are made as part of the province's commitment to stabilize and rejuvenate the horse racing industry. This amount is equally divided between the thoroughbred and standard bred sectors.

Development Assistance Compensation represents compensation available to destination casino proponents for approved economic development projects.

The estimated allocation of provincial government (BCLC) revenue in fiscal 2004/05 and 2005/06 from the Cascades Casino, Fraser Downs Gaming Centre, and Edgewater Casino is reported below:

Survey of Municipal Government Perception of Costs and Benefits

New gaming venues typically require approval from the local municipal government where they are to be based. This is partly because these new venues can create infrastructure costs such as the need for improved roads, traffic lights, utilities, fire services, and police protection. Areas most vulnerable to the infrastructure requirements of casinos are small towns, whose roads, public services and parking facilities are usually not capable of meeting the demands that these venues place on them (Browne & Kubasek, 1997; Snyder, 1999). Infrastructure costs tend to be very difficult to estimate since it is problematic to determine what proportion of expenditures actually results from the presence of the new gambling venue (Gazel, 1998). It is also important to realize that not all increased infrastructure costs are negative, as much of this increased infrastructure provides additional utility to the community (McMillen, 2000). In calculating infrastructure costs it is again important to understand how these costs are paid for. If these costs are financed through municipal taxation then it is a local cost (Azmier et al, 2001). However, if they are financed provincially, federally, or by the casino provider then it is an economic gain. Ongoing infrastructure maintenance is another cost that must be attributed to a source. As compensation for potential infrastructure costs, it is fairly common to provide municipalities with grants from gaming revenues to offset these costs (as has been done with these municipalities).

Municipal representatives from Langley, Surrey, and Vancouver were interviewed between September and November 2005 concerning how the casino development projects had impacted the economic situation of their respective communities. The following summarizes their comments:

City of Langley

The City of Langley indicated that it invited proposals for casino and venue development with the intent that it would not be a free-standing casino. Gateway Casino's proposal won the bid, offering a casino with attached convention centre and hotel. The total value of the investment package was $45 million. The municipality owned the venue land, which it sold to the developer in return for a Convention Centre valued at $7 million. The city owns the Conference Centre, but it is managed by Gateway Casinos. Indicating the success of the venue, the developer (Gateway Casinos) has requested to build a 4 story on-site parkade expansion. This will add 450 to 500 parking spots in addition to the 1,000 already existing. The process has been described as a public-private partnership.

BENEFITS

- Annual revenue for being the host community ($5,001,607 in 2005/2006).
- One-time revenue of $7 million from the sale of land to Gateway Casinos.
- $24.5 million of the $45 million project cost went to the city for building permits.
- $20.5 million in construction and furnishing costs, some of which was spent on local trades and materials.
- Increased local employment.
- The City of Langley receives a number of days in which they can use the conference facility at no cost.

- A 450 seat "Summit Theatre," which supports entertainment and community events that would not otherwise be available in Langley and which has been well received by the community.
- The attached hotel and conference centre, which attract business and business functions.
- Gateway Casino's sponsorship of community events.

COSTS

- No infrastructure upgrades were needed, but utilities were re-aligned to support the venue.
- Cost of processing permits (unknown at this time).

City of Surrey

- The City of Surrey reported that it issued a development permit on March 22, 2004 for an addition and exterior upgrade to the existing Fraser Downs facility and parking area. The total value of construction was $36.1 million. The development involved:
- An Electronic Gaming Area – 300 slot machines with a potential for an additional 100 slot machines at a later date.
- A Dining/Show Lounge to be integrated into the gaming area.
- Meeting rooms to accommodate large or small groups, available for rent to external groups for special occasions or to greet tour groups and host special customer events.
- Upgrades to the horse racing grandstands area, to be integrated with the slot machines operations area.

BENEFITS

- Annual revenue for being the host community ($2,977,272 in 2005/2006).
- Land lease revenues (unknown at this time).
- $308,712 in building permit revenue.
- A service agreement for the project had a letter of credit amount of just over $457,000 for improvements to infrastructure in and around the casino.
- Increase in the number of full time jobs from 106 to 204 and an increase in annual payroll from $3.4 M to $6.6 M.
- Potential revitalization of the current site and development of an attractive tourism and entertainment venue for Surrey residents and regional visitors.
- Potential for keeping local gaming dollars in the community to benefit Surrey residents.

COSTS

- Cost of processing permits (estimated at the price paid ($308,712)).
- Cost of infrastructure upgrades (estimated at $457,000).

City of Vancouver

The Edgewater Casino, located in building "C" at the Plaza of Nations (building "C" is also known as the "Enterprise Hall"), opened its doors on February 4, 2005 with 600 slot machines and 48 tables (60 tables were approved). The Edgewater Casino was the result of the amalgamation of two casinos that already existed in Vancouver, namely the Grand Casino, which was located at 725 East Marine Drive, and the Royal Diamond Casino, which was located in building "B" at the Plaza of Nations. The present location for Edgewater Casino is only temporary. The facility is expected to be occupied for three years with a possible one-year extension. A permanent facility at a location to be determined will be built after that.

The total floor area of the building is 6,377 m^2 (68,639 sq. ft). The floor space allocated for the slot machines, gaming tables and related circulation is 3,387 m^2 (36,468 sq. ft.). The main floor contains slot machines, gaming tables, a café, a lounge and a back-of-house space. The second floor contains slot machines, gaming tables and a theatre (not in use at this point). The third floor contains staff facilities.

BENEFITS

- Annual revenue for being the host community ($3,799,992 in 2005/2006).
- The total amount spent by the casino operators was $18 million. This amount includes all of the renovations to the building, infrastructure upgrades, access road improvements, professional fees (architects, engineers, lawyers, communications consultants) and payment of all relevant permits. In addition, the BC Lottery Corporation installed 600 slot machines at an estimated cost of $9 million.
- There are 660 individuals employed by Edgewater Casino. Not all of these jobs are new jobs in Vancouver. At the time of the amalgamation of the Grand Casino and Royal Diamond Casino (which had been closed down for the previous three years), there were 230 casino jobs associated with these facilities. Edgewater Casino has an annual payroll of $16 million.
- Municipality of Vancouver has an agreement with Edgewater Casino investors that 15% of employees will be hired out of Vancouver East Side residents.
- Fulfilling a condition of the rezoning, Edgewater Casino signed an agreement with the City to hire locally for both the construction phase of the project as well as for ongoing operations. The intent of the agreement was to improve job opportunities for unemployed, underemployed and challenged residents of the City of Vancouver, with an emphasis on residents of the Downtown Eastside area. No targets were set for the construction phase, but a minimum of 10% of new hires was targeted for operations jobs. The casino operator has surpassed this requirement.
- The exterior of the building has remained unchanged except for new decorative banners, lighting of portions of the building face, a covered walkway and the entry vestibule. A landscape plan for the area surrounding the casino was implemented by the casino operators.

COSTS

- The cost of processing permits and infrastructure upgrades were reimbursed by the casino developer.

Problem Gambling Indices

The main concern with increased gambling availability is usually the concern that it will lead to increased rates of problem gambling. This was also the main concern expressed by people in the present four study communities. In general, the scientific evidence does suggest the existence of a relationship. First, there is a strong within-country association between the availability of gambling and the prevalence of problem gambling (Lester, 1994; National Gambling Impact Study Commission [NGISC], 1999; Productivity Commission, 1999; Shaffer, LaBrie, & LaPlante, 2004; Welte, Wieczorek, Barnes, Tidwell, & Hoffman, 2004). Moreover, the expansion of legalized gambling in the 1980s and 1990s was followed by significant increases in problem gambling in the United States (National Research Council [NRC], 1999; Shaffer, Hall, & VanderBilt, 1997). However, it also seems clear that a) there are many other important factors that also determine a jurisdiction's problem gambling prevalence rate (Williams, West, & Simpson, 2007), and b) the relationship between gambling availability and problem gambling is not a linear one; jurisdictions may show increased rates of problem gambling initially, followed by stable or decreased rates after time (Shaffer et al., 2004).

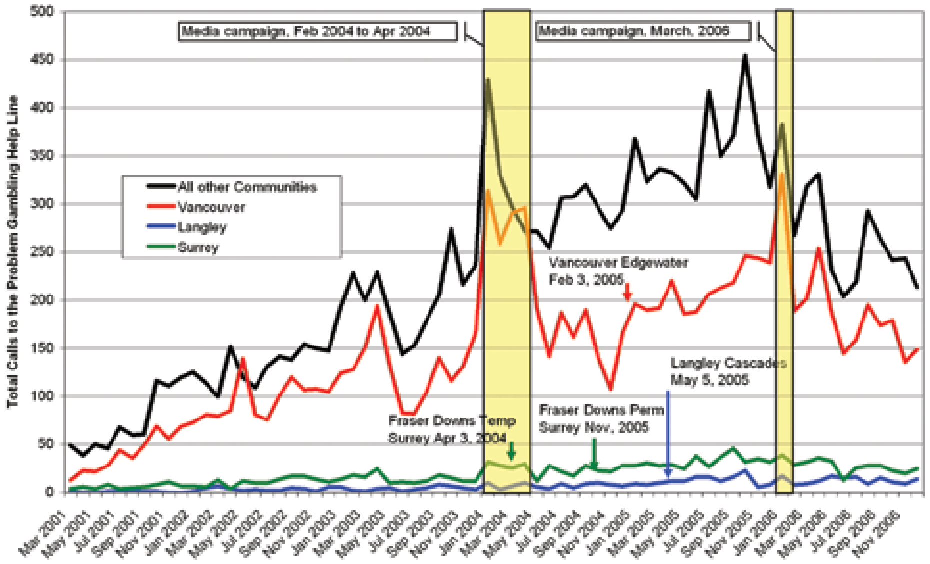
The earlier RDD results documented a significant increase in problem gambling prevalence rates in the City of Langley, but not any of the other communities. In this section we examine several other indices of problem gambling to help corroborate these results. Note: divorce data is not presented as it is only available at a provincial level.

Problem Gambling Help Line

The Province provides $4 million (2005/06[1]) in funding for problem gambling prevention and treatment services. Part of this services is a toll-free, 24/7 Help Line providing information about problem gambling, as well as referrals for treatment, and brief crisis intervention counselling. As can been seen in Figure 12, calls to the Problem Gambling Help Line increased steadily for all of British Columbia from 2001 to 2005. This is partly due to increased awareness and promotion. In 2001 the Help Line number began appearing on all lottery tickets, and the spike in January 2004 to March 2004 coincides with the first provincial media campaign that ran from February to April. (It is also interesting to note that calls have decreased significantly subsequent to October 2005.)

1 *Ministry of Solicitor General and Public Safety: Problem Gambling Program Annual Report, 2006/06*

Figure 12:* *Total Calls per Month to the Problem Gambling Help Line



Note: arrows are placed slightly before the month points because points represent months in which the casino was fully in place.

The relationship between the opening of the new venues and Help Line calls was examined statistically through a regression model for each community. The Langley model is as follows:

Total Calls$_t$ = Constant + β_1 (Time Trend) + β_2 (Cascades Opening$_t$) + Other Variables$_t$ + error

Total Calls$_t$ represents the volume of phone calls to the problem gambling help line in a given year / month.

Constant is the y-axis intercept in the linear regression.

β_1 (Time Trend) represents the rate of increase in calls over time.

β_2 (Cascades Opening$_t$) is the variable of interest, estimating the increase or decrease in monthly calls subsequent to the opening of the Cascades venue.

Error represents all variation in calls not accounted for in the model.

In addition to these explicitly determined variables, the statistical software (SAS® Statistical Analysis System) was programmed to estimate under an autoregressive scheme, which adjusts for lagged dependent variables up to 12 lags. For each lag that is estimated to have a significant effect, SAS® incorporates the lagged dependent variable into its set of explanatory variables. For brevity, these parameter estimates are not presented here.

The results of this analysis are contained below, in Table 38. Estimates indicate that, in the period the Cascades Casino was operating, the Problem Gambling Help Line received significantly more calls per month from people in Langley (an average of 4.93 more calls per month with a 95% confidence interval of 2.85 to 7.01).

Table 38: Cascades Statistical Inference for Help Line Calls

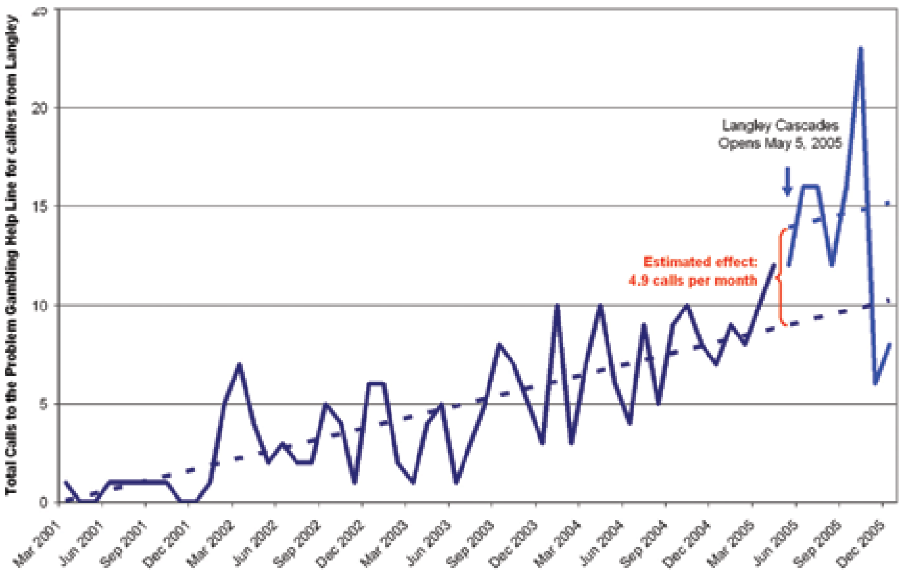
Variable	Coefficient	t value	p	95% Confidence Intervals	
Constant	-0.09	-0.19	0.8488	-1.02	0.83
Time Trend	0.18	10.29	<.0001	0.14	0.21
Cascades Opening	4.93	4.65	<.0001	2.85	7.01

Note: Blue Shading indicates statistically significant increases in variables of interest. Red shading indicates statistically significant decreases in variables of interest.

With any statistical model, assumptions are made that may or may not hold true. One assumption that will be explored and potentially revised is the assumption of normal distribution in the random error term. This is virtually never exactly true but generally represents an accepted, common assumption. The subject of regression modeling and statistical methodology is well documented outside of this study and will not be re-produced here.

The fitted multiple regression model that is estimated above is illustrated graphically below:

Figure 13: Total Calls per Month to the Problem Gambling Help Line



The same analyses were conducted for Langley and the other communities while also examining the influence of the Feb to Apr 2004 problem gambling media campaign. The results of these analyses are contained below, in Table 39.

Table 39: Regression Model Estimates for Calls per Month to Help Line

Langley					
Variable	**Coefficient**	**t value**	**p**	**95% Confidence Intervals**	
Constant	-20.91	-4.95	<.0001	-29.19	-12.63
Time Trend	0.16	5.92	<.0001	0.11	0.21
Cascades Opening	3.26	2.48	0.0163	0.68	5.84
Problem Gambling Media Campaign	0.97	0.72	0.4742	-1.68	3.63

Total $R^2 = .80$

Surrey					
Variable	**Coefficient**	**t value**	**p**	**95% Confidence Intervals**	
Constant	-26.71	-2.14	0.0362	-51.20	-2.23
Time Trend	0.25	3.09	0.0029	0.09	0.41
Fraser Downs Temporary Facility	4.24	1.4	0.1659	-1.69	10.16
Fraser Downs Permanent Facility	3.43	1.17	0.2471	-2.33	9.19
Problem Gambling Media Campaign	8.05	2.51	0.0145	1.77	14.33

Total $R^2 = .70$

Vancouver					
Variable	**Coefficient**	**t value**	**p**	**95% Confidence Intervals**	
Constant	-377.27	-2.36	0.0221	-691.05	-63.48
Time Trend	3.15	3.13	0.0028	1.17	5.12
Edgewater Opening	-32.31	-0.88	0.3841	-104.48	39.85
Problem Gambling Media Campaign	41.47	1.74	0.0877	-5.26	88.19

Total $R^2 = .77$

Note: Blue Shading indicates statistically significant increases in variables of interest. Red shading indicates statistically significant decreases in variables of interest.

Note: Where maximum likelihood estimation does not converge, ordinary least squares was used.

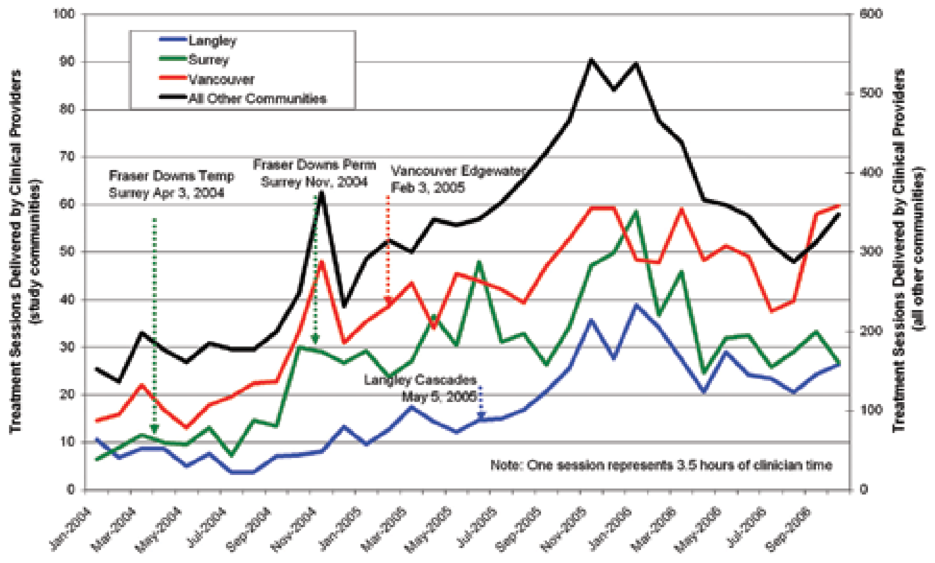
As can been seen, there continues to be a statistically significant increase (the green shaded lines have a p value or probability, less that 0.05 which means that there is a less than 5% chance that there was no increase as measured by the coefficient) in calls to the Problem Gambling Help Line by Langley residents (p value = 0.0163, coefficient=3.26) in the period since the Cascades casino opened, even when accounting for the media campaign. The 2006 media campaign had little exposure in Langley or the Township of Langley. A significant increase in Help Line calls was not observed in either Surrey or Vancouver subsequent to their venues opening. However, Surrey did experience a significant increase in calls coincident with the Problem Gambling Media Campaign (p value = 0.0145, coefficient=8.05).

Problem Gambling Treatment Sessions

The Province provides problem gambling treatment via reimbursement of 40 counsellors distributed throughout the province. The activities invoiced are tracked in a confidential database REGIS (Responsible Gambling Information System) with monthly reports run for each service provider to generate payment. The Freedom of Information and Protection of Privacy Act ensures that clients' private information cannot be viewed by government.

Figure 14 illustrates how problem gambling treatment volumes have increased steadily since the inception of the REGIS case management system in November 2003.

Figure 14: Total Treatment Sessions Delivered by Clinical Providers by Year/Month.



Note: Clinical providers are reimbursed based on a 3.5 hour session but this does not imply that each client receives 3.5 hours of treatment.

The following section tests whether a measurable difference was observed in the volume of treatment sessions delivered to people residing in the vicinity of a new gaming venue. As can be seen in Table 40, both Surrey and Vancouver experienced statistically significant increases (the blue shaded lines have a p value or probability, less that 0.05 which means that there is a less than 5% chance that there was no increase as measured by the coefficient. Fraser Downs Permanent Facility has a p value of 0.0035 and coefficient of 17.14 and Edgewater has a p value of 0.0009 and a coefficient of 14.89) in problem gambling treatment sessions delivered, but Langley did not. It is interesting to note that Figure 14 also shows a surge in treatment sessions for "All Other Communities" in 2004, which is coincident with the major increase in slot machine availability in the Lower Mainland. Similar to Help Line calls, there is a decrease in treatment sessions beginning in 2006.

Table 40: Regression Model Estimates for Total Treatment Sessions Delivered

Langley					
Variable	**Coefficient**	**t value**	**p**	**95% Confidence Intervals**	
Constant	-86.41	-2.58	0.0147	-151.97	-20.85
Time Trend	0.54	2.85	0.0078	0.17	0.91
Cascades Opening	5.87	1.56	0.280	-1.48	13.22

Total $R^2 = .69$

Surrey					
Variable	**Coefficient**	**t value**	**p**	**95% Confidence Intervals**	
Constant	-23.57	-0.54	0.5898	-108.36	61.22
Time Trend	0.1915	0.76	0.4546	-0.30	0.68
Fraser Downs Temporary Facility	4.04	0.66	0.5148	-7.96	16.04
Fraser Downs Permanent Facility	17.14	3.17	0.0035	6.54	27.74

Total $R^2 = .98$

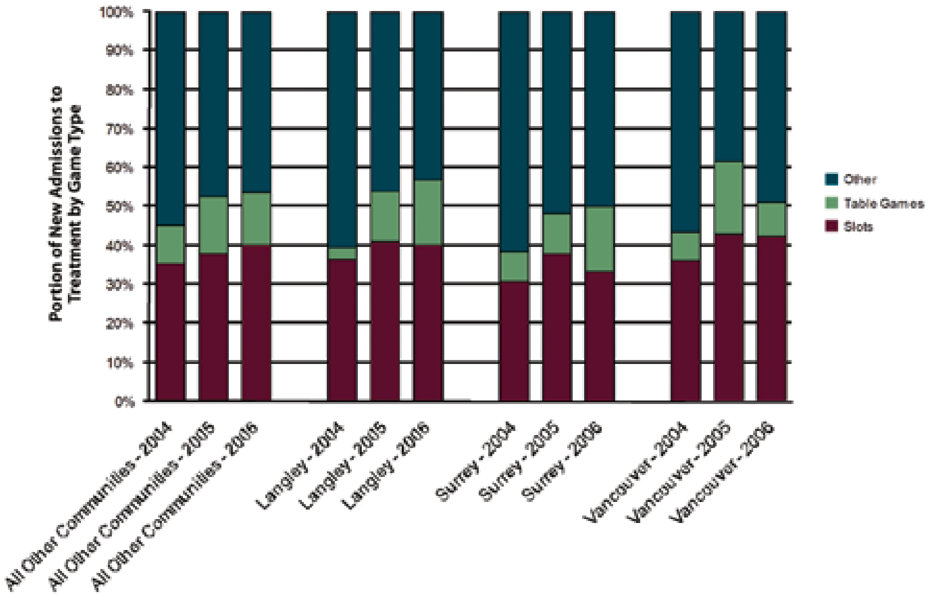
Vancouver					
Variable	**Coefficient**	**t value**	**p**	**95% Confidence Intervals**	
Constant	-102.22	-3.13	0.0038	-166.31	-38.13
Time Trend	0.70	3.74	0.0008	0.33	1.07
Edgewater Opening	14.89	3.68	0.0009	6.95	22.83

Total $R^2 = .81$

Proportion of Problem Gamblers with Problems related to Casino Gambling

The comprehensive assessment conducted upon admission to treatment looks at the specific gambling activity with which the client has developed a problem. This information is recorded in REGIS and run in aggregate reports that demonstrate client demographics while protecting the individual's private information. The following graph (Figure 15) illustrates that casino-related problem gambling represents an increasing portion of problem gambling admissions comparing 2005 and 2006 to 2004. This portion is consistent across the study communities and all other BC communities.

Figure 15: Portion of New Admissions to Treatment by Game Types: 2004 to 2006



** Note: 2006 contains data only until October, 2006*

Rate of New Admissions to Problem Gambling Treatment

The following graph (Figure 16) shows new admissions to treatment services in 2004 to 2006. The graph illustrates that new admissions for problem gambling treatment (about 50 per cent of which is casino-related) is somewhat flat over time, but highly volatile.

Figure 16:* *Total New Admissions to Treatment in BC by Year and Month

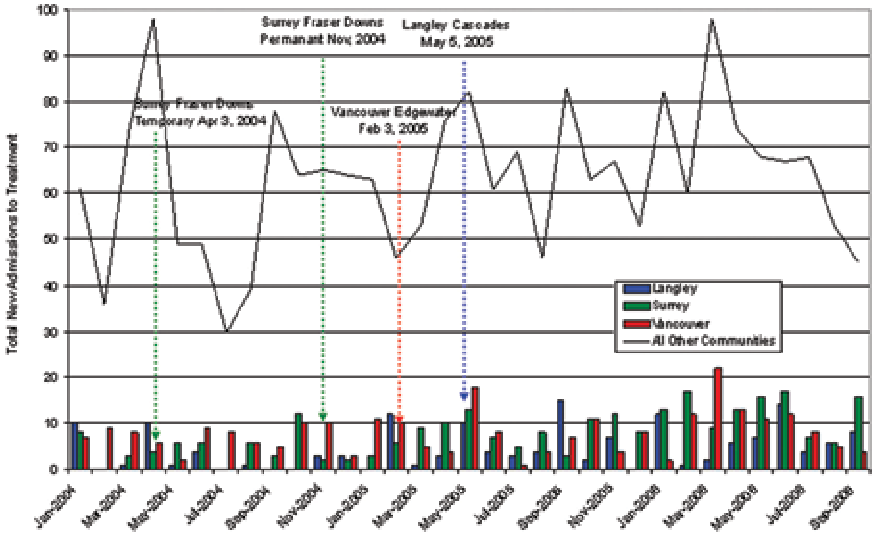


Table 41 illustrates that there were no statistically significant changes in the rates of new admissions to problem gambling treatment in any of the study communities. Surrey actually had a statistically significant drop (the red shaded line has a p value or probability 0.0039, less than 0.05 which means that there is a less than 5% chance that there was no decline as indicated by the coefficient -1.41) in the number of new admissions for problem gambling treatment after the permanent facility was opened in November 2004. As with other problem gambling indicators, new admissions have dropped over the course of 2006. Note that Table 41 includes only new admissions to problem gambling treatment when slots or table games were reported as the main problem.

Table 41: Regression Model Estimates: New Admissions for Problem Gambling Treatment

Langley					
Variable	**Coefficient**	**t value**	**p**	**95% Confidence Intervals**	
Constant	-7.68	-0.46	0.6526	-40.57	25.21
Time Trend	0.06	0.61	0.5505	-0.14	0.26
Cascades Opening	2.39	1.45	0.1651	-0.84	5.62
Total R^2 = .70					

Surrey					
Variable	**Coefficient**	**t value**	**p**	**95% Confidence Intervals**	
Constant	-73.18	-22.60	<.0001	-79.53	-66.83
Time Trend	0.4452	28.56	<.0001	0.41	0.48
Fraser Downs Temporary Facility	-0.3195	-0.20	0.8427	-3.43	2.79
Fraser Downs Permanent Facility	-1.41	-3.33	0.0039	-2.23	-0.59
Total R^2 = .81					

Vancouver					
Variable	**Coefficient**	**t value**	**p**	**95% Confidence Intervals**	
Constant	-21.42	-2.04	0.0561	-41.98	-0.86
Time Trend	0.17	2.70	0.0146	0.05	0.29
Edgewater Opening	-1.89	-1.46	0.1616	-4.44	0.66
Total R^2 = .54					

Gamblers Anonymous

Gamblers Anonymous (GA) does not keep any regular or permanent records of attendance or number of chapters. Thus, the following information consists of anecdotal information obtained from three representatives of GA in December 14, 2005 and one representative in March 14, 2007. Meeting information was retrieved via the public GA telephone number. Due to the anonymous nature of GA chapters it is very difficult to get accurate numbers or verify attendance. The main value of this information is that it provides a picture of problem gambling prior to official provincial government records being kept. As seen in Table 42, this anecdotal information suggests there have been 14 GA chapters in the Lower Mainland. A few of these began in the 1970s and 1980s; however, most began in the 1990s. Five have also opened in 2000 or subsequent (including a new chapter in Surrey and Chilliwack in the past year), but two others have closed (in Richmond and New Westminster). It is not clear whether overall GA attendance was higher in 2005 relative to 2004. However, there is some suggestion that attendance in 2007 is down from 2005.

Table 42: Gamblers Anonymous Chapters in the Lower Mainland

GA Chapters	Start Date	2004 Attendance	2005 Attendance	2007 Attendance
Vancouver Maritime Labour Center	~ 1972	3 in 1972 8-10 in 1990	Over 40	20-25
Vancouver Recovery Center	Early '90's	8-10 originally	Up to 20	Usually 10-12 but up to 20
Vancouver Kitsilano Neighbourhood House	~ 1999	?	?	?
Surrey open meeting at Memorial Hospital	~1993	?	?	?
Surrey Northwoods United Church	~1998	~15	35	20-25
Surrey Step Meeting	Jan 2007	8-9	?	8-9
Richmond	~1999	5 originally	5	Closed 2006
New Westminster location 1	~1990	?	?	Closed
New Westminster open meeting at Olivette Baptist Church	~1999	?	?	?
Burnaby	1990s original chapter; 2004	?	?	?
White Rock	2000	?	?	?
Abbotsford	1980s 1994	20 originally or 5-10	7-8 or 15-30	12
Maple Ridge	2003	10 originally	2-3	7
Chilliwack	Oct 2006	5-6	N/A	Usually 5-6 but up to 12

Note. Most chapters appear to have closed and re-opened over time. Given the difficulties of identifying start/end dates and estimating attendance for chapters which close and re-open over time, the included numbers are those which contacts felt confident in providing.

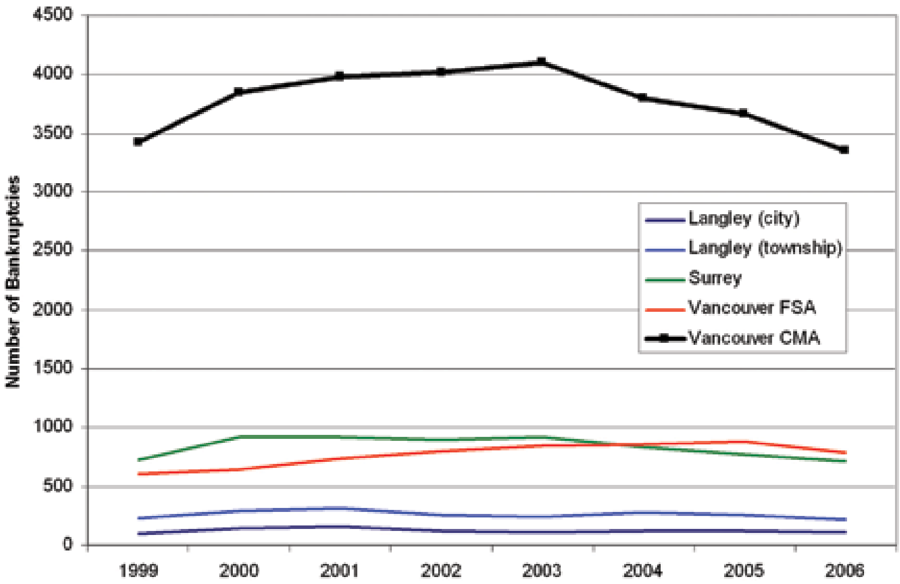
Attendance data: personal communications, anonymous GA contacts, December 14, 2005, and March 14, 2007.

Recorded meeting information, Vancouver and surrounding area: (604) 878-6535.

Personal Bankruptcy Rates

As can be seen in Figure 17, there has been no significant increase in personal bankruptcy rates subsequent to the expansion of gaming opportunities in 2004 and 2005 or in comparison to the greater Vancouver CMA.

Figure 17: Annual Number of Consumer Bankruptcies



For Vancouver CMA: BC Stats. (2007). British Columbia bankruptcies by major urban centre. Retrieved March 15, 2007, from http://www.bcstats.gov.bc.ca/data/dd/handout/BANKURB.pdf
For all other areas: BC Stats. (2007). British Columbia bankruptcies by postal code forward sortation area (FSA), British Columbia. Retrieved March 15, 2007, from http://www.bcstats.gov.bc.ca/data/dd/handout/BANKFSA.pdf

Suicides

Complete data is not available for 2006 and BC coroners do not attribute a cause to suicides. Nonetheless, there does not appear to be any correspondence between venue introduction and number of suicides in any of these three communities. This is consistent with another study conducted for five cities in the United States that found no evidence of an effect of gambling on suicide rates in metropolitan areas after comparing rates before and after the introduction of casinos (McCleary et al, 2002).

*Table 43: **Annual Number of Suicides by Local Health Area (LHA)***

	1999	2000	2001	2002	2003	2004	2005	2006[1] (6 months)
Langley[2]	10	6	3	3	11	17	7	(4)
Surrey[3]	37	25	19	28	30	30	34	(16)
Vancouver (city)[4]	62	37	39	58	60	68	44	(29)
Lower Mainland[5]	205	131	142	190	219	220	188	(109)
British Columbia	421	344	315	396	424	436	403	(174)

BC Vital Statistics Agency. (2007). Selected Vital Statistics and Health Status Indicators: Annual Reports, 1999-2005. Retrieved March 14, 2007, from http://www.vs.gov.bc.ca/stats/annual/index.html

BC Vital Statistics Agency. (2007). External Causes of Death by Local Health Area: Second Quarter Report to June 30, 2006 http://www.vs.gov.bc.ca/stats/quarter/q2_06/tab3ab.html

Individual Annual Report links:
http://www.vs.gov.bc.ca/stats/annual/2005/index.html
http://www.vs.gov.bc.ca/stats/annual/2004/index.html
http://www.vs.gov.bc.ca/stats/annual/2003/index.html
http://www.vs.gov.bc.ca/stats/annual/2002/index.html
http://www.vs.gov.bc.ca/stats/annual/2001/index.html
http://www.vs.gov.bc.ca/stats/annual/2000/index.html
http://www.vs.gov.bc.ca/stats/annual/1999/index.html

Note. Suicides in British Columbia are tracked by Local Health Area and not by standard geographical area. Data accuracy disclaimers: 1) "current year counts and rates for deaths due to external causes underestimate the actual figures due to known delays in determining causes of death" (Vital Statistics Agency, 2005, p. 82); 2) "because these deaths are investigated by coroners and the investigation process can take some time, there is a lag time for all suicides being reported to Vital Stats" (personal communication, S. Redekop, Informatics, Ministry of Health, March 14, 2007).

1 2006 data is available only to June 30, 2006. All other years consist of 12-month data.
2 Langley LHA includes Langley Township. Langley Township consists of the City of Langley, Fort Langley, Walnut Grove, and Aldergrove; data could not be found specific to the latter 3 towns.
3 In 2002, Surrey LHA consisted of Surrey and Surrey South/Whiterock; in 2003 the areas were divided into 2 separate LHAs.
4 Local Health Areas considered to lie within the City of Vancouver are City Centre, Downtown Eastside, North East, Westside, Midtown, and South.
5 Local Health Areas considered to lie within the Lower Mainland area are Hope, Chilliwack, Abbotsford, Langley, Delta, Surrey, South Surrey/White Rock, Richmond, New Westminster, Burnaby, Maple Ridge, Coquitlam, North Vancouver, West Vancouver, Mission, Agassiz-Harrison, and the 6 City of Vancouver areas.

Crime

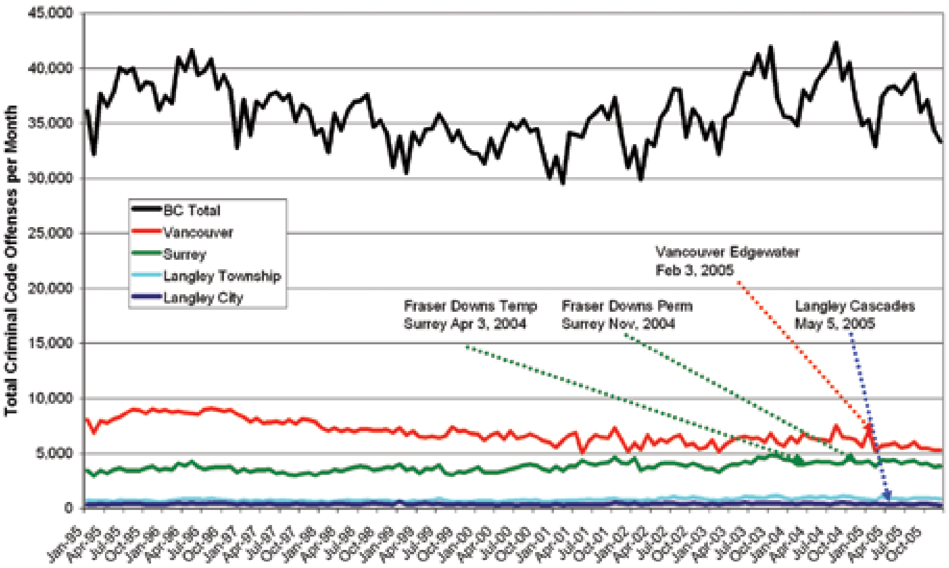
It has been reported that casinos and horse racing tracks are susceptible to crime occurrences such as counterfeit currency, credit card crimes, thefts, assaults and disruptive behavior, and money laundering (Smith et al., 2003). An increase in such crimes could lead to impacts on policing, legal, and incarceration costs for communities (Walker & Barnett, 1999). A major problem with the reported statistics on crime and gambling is how they are calculated. Tracking systems generally do not collect data on the specific causes of these incidents. Such ambiguity makes arriving at a conclusion on whether casinos cause crime virtually impossible (Browne & Kubasek, 1997; Smith & Wynne, 1999).

Current evidence from the literature suggests that presence of legalized casino-style gambling in a community does not inevitably increase crime rates upon its introduction (Curran & Scarpitti, 1991; Miller & Schwartz, 1998; Stitt et al, 2003; Wilson, 2001) but this relationship is still poorly understood. Several studies (Friedman et al, 1989; Gazel et al, 2001) found that crime levels were higher in casino communities and surrounding jurisdictions. Others report that they were lower and public safety actually improved in some places (KPMG, 1995, 2002; McMillen, 1998). The casino impact studies in Ontario (Nuffield & Hann, 2006) failed to find any change in crime rates. In cases where crime does increase it is often unclear whether casino gambling behaviour produces increases in crime or whether crime increases are simply the product of huge increases in tourist visits (Stokowski, 1996). The significant growth in crime rates in Tunica, Mississippi was thought be at least partially a result of the growth of transient casino visitors (Snyder, 1999).

In their analysis of crime and gambling, Smith and Wynne (1999) determined that the expansion of legalized gambling had a dampening effect on certain illegal gambling formats, a negligible influence on others, and occasionally stimulated the growth of illegal gambling. In a study of the two New Zealand casinos, their opening led to the closure of illegal card games and underground casinos (McMillen, 1998).

Figure 18 below shows the number of total criminal code offenses each month from January 1995 to October 1995. Consistent with much of the evidence presented above, this chart does not show any obvious change in criminal charges subsequent to venue introduction.

Figure 18: Criminal Code Offences



There was a statistically significant reduction in criminal charges in Langley Township subsequent to venue introduction as shown in Table 44 (the red shaded lines have a p value or probability less that 0.05 which means that there is a less than 5% chance that there was no decline as measured by the coefficient. In this case the p-value for Langley Township of 0.0219 with a coefficient of -133.45). There were no statistically significant changes found for the Cities of Vancouver or Langley. Surrey had mixed results with a non-significant increase after the introduction of the temporary facility and a significant decrease (p value of 0.0177 and a coefficient of -462.35) after the introduction of the permanent facility.

Table 44: Regression Model for Criminal Code Offences

Langley					
Variable	**Coefficient**	**t value**	**p**	**95% Confidence Intervals**	
Constant	369.67	25.23	<.0001	340.96	419.12
Time Trend	0.20	1.64	0.1026	-0.04	3.41
Cascades Opening	-33.22	-1.62	0.1085	-73.54	-36.40
Total R^2 = .03					

Langley Township					
Variable	**Coefficient**	**t value**	**p**	**95% Confidence Intervals**	
Constant	526.65	4.96	<.0001	318.71	526.65
Time Trend	2.29	2.72	0.0074	0.64	2.29
Cascades Opening	-133.45	-2.32	0.0219	-246.19	-133.45
Total R^2 = .70					

Surrey					
Variable	**Coefficient**	**t value**	**p**	**95% Confidence Intervals**	
Constant	2934	14.42	<.0001	2,535.10	2,962.26
Time Trend	6.85	3.95	0.0001	3.46	14.59
Fraser Downs Temporary Facility	287.63	1.52	0.1316	-83.85	290.61
Fraser Downs Permanent Facility	-462.35	-2.40	0.0177	-839.59	-467.05
Total R^2 = .73					

Vancouver					
Variable	**Coefficient**	**t value**	**p**	**95% Confidence Intervals**	
Constant	9118	14.56	<.0001	7,890.49	9,118.00
Time Trend	-17.60	-3.54	0.0006	-27.36	-17.60
Edgewater Opening	-291.65	-0.86	0.3938	-959.74	-291.65
Total R^2 = .84					

Patron Survey

The Patron Survey (Appendix C) was designed to solicit information about the demographic profile, geographic residence, gambling behaviours and spending patterns of venue patronage.

For the Patron Survey, the collection team was instructed to solicit completion of the survey by patrons coming into or leaving the venues until they reached a minimum sample of 200 persons per venue. In 2005, patrons were sampled on Fridays and Saturdays in November 2005, with the bulk of the interviews conducted between 3pm and 10pm. A total of 636 patrons were surveyed (n = 216 Cascades; 205 Edgewater; 215 Fraser Downs). In 2006, patrons at the Edgewater Casino were sampled on Saturday October 21st and Sunday 22nd. Patrons at Fraser Downs were sampled on Friday October 27th and Saturday 28th. Patrons at the Cascades Casino were sampled on Friday November 3rd and Saturday November 4th. A total of 627 patrons were surveyed. Knowing that a much higher number of patrons of Edgewater Casino in Vancouver are of Chinese ethnicity, we included in the collection team a Mandarin and Cantonese translator and used a Chinese version of the survey.

Surveys of people at the venue itself will always oversample regular patrons, and therefore, provide a picture of "patronage", rather than "patrons". Appendix E contains a simulation based on sample.

Demographic Profile

Table 45 to Table 51 provide the demographic profile of patrons in the three venues in 2005 and 2006 as compared to the Greater Vancouver Census Metropolitan Area (CMA) in 2001 as reported by Statistics Canada. The Vancouver CMA includes Surrey, Langley, the Township of Langley, as well as several other Lower Mainland communities. As can be seen, overall, patrons have roughly an equal gender ratio quite similar to the equal gender ration in the Vancouver CMA. There is some difference between venues, with the Fraser Downs facility attracting more females. This is likely due to the presence of casino table games at the other venues, which tend to attract more males.

Table 45: ***Patron Gender***

2005	Cascades		Edgewater		Fraser Downs		All Venues		Vancouver CMA 2001 (age 20+)
Female	101	(48.10%)	88	(44.67%)	118	(55.92%)	307	(49.68%)	51.82%
Male	109	(51.90%)	109	(55.33%)	93	(44.08%)	311	(50.32%)	48.18%
Total	210	(100.00%)	197	(100.00%)	211	(100.00%)	618	(100.00%)	100.00%
2006	**Cascades**		**Edgewater**		**Fraser Downs**		**All Venues**		**Vancouver CMA 2001 (age 20+)**
Female	111	(54.95%)	107	(48.86%)	129	(62.62%)	347	(55.34%)	51.82%
Male	91	(45.05%)	112	(51.14%)	77	(37.38%)	280	(44.66%)	48.18%
Total	202	(100.00%)	219	(100.00%)	206	(100.00%)	627	(100.00%)	100.00%

Age is the demographic characteristic most divergent from the Vancouver CMA. Although all age ranges are represented, people age 25-44 are considerably under-represented and people age 55 – 74 are considerably over-represented relative to their prevalence in the general population. There are also some significant differences between venues with the Cascades attracting a much higher rate of young people age 19 – 24 and Fraser Downs attracting a higher rate of older people age 65 – 74.

Table 46: ***Patron Age***

2005	All Venues	Vancouver CMA 2001 (age 20+)
19-34	109 (18%)	72.00%
35-54	227 (38%)	
55+	266 (44%)	28.00%
Total	**602 (100%)**	**100.00%**

2006	Cascades		Edgewater		Fraser Downs		All Venues		Vancouver CMA 2001 (age 20+)
19-24	32	16.33%	10	4.81%	3	1.49%	45	7.44%	8.99%
25-44	32	16.33%	50	24.04%	27	13.43%	109	18.02%	42.83%
45-54	42	21.43%	38	18.27%	46	22.89%	126	20.83%	20.18%
55-64	58	29.59%	45	21.63%	55	27.36%	158	26.12%	11.94%
65-74	25	12.76%	37	17.79%	45	22.39%	107	17.69%	8.57%
75-84	6	3.06%	25	12.02%	21	10.45%	52	8.60%	5.59%
85+	1	0.51%	3	1.44%	4	1.99%	8	1.32%	1.90%
Total	**196**	**(100.00%)**	**208**	**(100.00%)**	**201**	**(100.00%)**	**605**	**(100.00%)**	**100.00%**

Most patrons are married or living common-law. This is a higher rate than in the general Vancouver CMA, likely attributable to the older average age of the patron group. There are no marked differences between the venues with the exception of a higher rate of never married people who patronize the Edgewater, which may be due to this venue having more 25 – 44 year olds compared to the other venues.

Table 47: ***Patron Highest Level of Education***

2005	Cascades		Edgewater		Fraser Downs		All Venues		Vancouver CMA 2001 (age 20+)
Married/Common Law	139	(66.19%)	122	(62.24%)	157	(74.06%)	418	(67.64%)	50.10%
Widowed	14	(6.67%)	4	(2.04%)	14	(6.60%)	32	(5.18%)	5.66%
Divorced	21	(10.00%)	14	(7.14%)	16	(7.55%)	51	(8.25%)	7.31%
Separated	10	(4.76%)	10	(5.10%)	7	(3.30%)	27	(4.37%)	3.05%
Never married	26	(12.38%)	46	(23.47%)	18	(8.49%)	90	(14.56%)	33.88%
Total	**210**	**(100.00%)**	**196**	**(100.00%)**	**212**	**(100.00%)**	**618**	**(100.00%)**	**100.00%**
2006	**Cascades**		**Edgewater**		**Fraser Downs**		**All Venues**		**Vancouver CMA 2001 (age 20+)**
Married/Common Law	131	(64.5%)	113	(51.60%)	137	(67.49%)	381	(60.96%)	50.10%
Widowed	11	(5.42%)	16	(7.31%)	22	(10.84%)	49	(7.84%)	5.66%
Divorced	22	(10.84%)	19	(8.68%)	10	(4.93%)	51	(8.16%)	7.31%
Separated	8	(3.94%)	11	(5.02%)	15	(7.39%)	34	(5.44%)	3.05%
Never married	31	(15.27%)	60	(27.40%)	19	(9.36%)	110	(17.60%)	33.88%
Total	**203**	**(100.00%)**	**219**	**(100.00%)**	**203**	**(100.00%)**	**625**	**(100.00%)**	**100.00%**

Patrons have a wide distribution of educational attainment. However, on average, educational attainment tends to be slightly lower than found in the general population. The Edgewater Casino tends to have patrons with higher rates of educational attainment compared to Fraser Downs and Cascades.

*Table 48: **Patron Highest Level of Education***

2005	Cascades		Edgewater		Fraser Downs		All Venues		Vancouver CMA 2001 (age 15+)
Grade school/some high school	26	(12.62%)	19	(10.16%)	31	(14.69%)	76	(12.58%)	40.56%
Completed high school	61	(29.61%)	41	(21.93%)	67	(31.75%)	169	(27.98%)	
Post secondary technical school	20	(9.71%)	20	(10.70%)	23	(10.90%)	63	(10.43%)	43.32%
Some college or university	46	(22.33%)	39	(20.86%)	43	(20.38%)	128	(21.19%)	
Completed college diploma	23	(11.17%)	26	(13.90%)	29	(13.74%)	78	(12.91%)	
Completed university degree	23	(11.17%)	33	(17.65%)	12	(5.69%)	68	(11.26%)	16.12%
Post-grad	7	(3.40%)	9	(4.81%)	6	(2.84%)	22	(3.64%)	
Total	**206**	**(100.00%)**	**187**	**(100.00%)**	**211**	**(100.00%)**	**604**	**(100.00%)**	**100.00%**
2006	**Cascades**		**Edgewater**		**Fraser Downs**		**All Venues**		**Vancouver CMA 2001 (age 15+)**
Grade/some high school	39	(19.21%)	29	(13.49%)	31	(15.35%)	99	(15.97%)	40.56%
Completed high school	64	(31.53%)	61	(28.37%)	71	(35.15%)	196	(31.61%)	
Post secondary technical school	17	(8.37%)	20	(9.30%)	15	(7.43%)	52	(8.39%)	43.32%
Some college/university	46	(22.66%)	31	(14.42%)	37	(18.32%)	114	(18.39%)	
Completed college diploma	19	(9.36%)	22	(10.23%)	17	(8.42%)	58	(9.35%)	
Completed university degree	16	(7.88%)	40	(18.60%)	24	(11.88%)	80	(12.90%)	16.12%
Post-grad	2	(0.99%)	12	(5.58%)	7	(3.47%)	21	(3.39%)	
Total	**203**	**(100.00%)**	**215**	**(100.00%)**	**202**	**(100.00%)**	**620**	**(100.00%)**	**100.00%**

Patrons also have a wide distribution of family income. The median family income appears to be similar to the median family income in the Vancouver CMA. The Cascades tends to have patrons with higher family incomes compared to patrons at Fraser Downs and the Edgewater.

*Table 49: **Patron Family Income***

2005	Cascades		Edgewater		Fraser Downs		All Venues		Vancouver CMA Median family income 2000
Under $30,000	35	(18.82%)	39	(21.20%)	42	(21.65%)	116	(20.57%)	
$30,000 - $59,999	60	(32.26%)	73	(39.67%)	77	(39.69%)	210	(37.23%)	$57,926
$60,000 - $99,000	60	(32.26%)	46	(25.00%)	51	(26.29%)	157	(27.84%)	
$100,000 or more	31	(16.67%)	26	(14.13%)	24	(12.37%)	81	(14.36%)	
Total	**186**	**(100.00%)**	**184**	**(100.00%)**	**194**	**(100.00%)**	**564**	**(100.00%)**	
2006	**Cascades**		**Edgewater**		**Fraser Downs**		**All Venues**		**Vancouver CMA Median family income 2000**
Under $30,000	52	(27.51%)	80	(39.41%)	49	(28.00%)	181	(31.92%)	
$30,000 - $59,999	62	(32.80%)	64	(31.53%)	53	(30.29%)	179	(31.57%)	$57,926
$60,000 - $99,000	41	(21.69%)	38	(18.72%)	51	(29.14%)	130	(22.93%)	
Over $100,000	34	(17.99%)	21	(10.34%)	22	(12.57%)	77	(13.58%)	
Total	**189**	**(100.00%)**	**203**	**(100.00%)**	**175**	**(100.00%)**	**567**	**(100.00%)**	

Because patrons could list up to three ethnic backgrounds, it is difficult to characterize the ethnic mix in the sample, therefore, the data obtained is only useful to draw a gross picture. Table 50 lists the specific ethnic backgrounds with which patrons identified, in order of descending frequency. The top five single ethnicities listed by patrons are English, Chinese, Scottish, Aboriginal, and French, although no single ethnicity was named by more than 16% of patrons. Almost all patrons identifying themselves as Chinese were at Edgewater Casino. However, this is the venue where we sought a quota and where a translator and a Chinese version of the survey were available.

*Table50: **Patron Ethnicity***

2005	Cascades	Edgewater	Fraser Downs	All Venues
Canadian	122	51	129	302
English	26	34	35	95
Scottish	14	17	13	44
Chinese	3	25	5	33
Irish	13	14	6	33
Aboriginal	8	16	3	27
French	10	7	9	26
German	12	7	6	25
Ukrainian	3	13	5	21
Filipino	2	12	6	20
Italian	4	5	5	14
American	3	6	4	13
East Indian	7	2	2	11
Scandinavian	4	4	3	11
Dutch	2	4	4	10
Polish	1	5	3	9
Japanese	0	6	2	8
Jewish	1	4	0	5
French Canadian	1	2	2	5
Korean	3	1	0	4
Austrian	0	1	2	3
Hungarian	0	3	0	3
Jamaican	0	1	2	3
Spanish	1	1	1	3

2006	Cascades	Edgewater	Fraser Downs	All Venues
Canadian	126	24	108	258
English	27	36	38	101
Chinese	0	72	2	74
Scottish	9	10	18	37
Aboriginal	9	12	7	28
French	12	8	8	28
German	10	8	7	25
Irish	9	4	9	22
Filipino	5	11	3	19
East Indian	6	3	6	15
Italian	4	5	6	15
Ukrainian	5	5	4	14
American	4	4	4	12
Dutch	5	3	2	10
Polish	3	3	3	9
Japanese	0	4	1	5
Norwegian	1	1	3	5
Spanish	2	3	0	5
Korean	0	4	0	4
Other	2	4	7	13
Finnish	0	1	2	3
Greek	0	0	3	3
Portuguese	1	2	0	3
Croatian	0	1	2	3

Note: This table only includes ethnicities reported by more than two patrons.

Perhaps the most important patron characteristic is residential origin, as this speaks to a) whether the revenues for the venue are being drawn from the local community (and therefore potentially represent a recirculation of money) or from nonresidents (and therefore represent an influx of new money to the community); and b) whether the "harms" caused by the venue are impacting local residents (and local social service agencies) or nonresidents, who take these problems back to their home community. As can be seen, the patronage for these venues is distinctively local. For all three venues only about 3% of patrons were from outside of British Columbia, and almost all the British Columbian patrons were from the Lower Mainland. The 2006 data show that the large majority of patrons for all three venues reside within 20 km of the venue, with this 20 km radius accounting for 85.9% of the Edgewater patrons; 85.9% of the Fraser Downs patrons; and 65.4% of the Cascades patrons. For all three venues the primary patron draw is from the community in which the venue is actually located: 69.4% of Edgewater patrons are from Vancouver; 55.1% of Fraser Downs patrons are from Surrey; and 38.6% of Cascades Casino patrons are from Langley. The Cascades Casino is notable because the majority of revenue is not drawn from Langley residents. This venue draws a significant portion of revenue from Surrey (23.8%) because of its proximity, and also from further upstream along the Fraser Valley (Abbotsford, Chilliwack, Mission) (18.7%), likely because this represents the closest venue for residents of these communities.

Table 51: ***Patron Residence***

2005	**95.8% report British Columbia to be their residence. These data are congruent with license plate counts done at the venues during data collection periods**

2006	**Cascades in Langley**		**Edgewater in Vancouver**		**Fraser Downs in Surrey**		**All Venues**	
Abbotsford	24	(11.88%)	2	(0.91%)	4	(1.95%)	30	(4.79%)
Aldergrove	1	**(0.50%)**	0	(0.00%)	2	**(0.98%)**	3	(0.48%)
Burnaby	1	(0.50%)	18	**(8.22%)**	3	(1.46%)	22	(3.51%)
Chilliwack	12	(5.94%)	1	(0.46%)	0	(0.00%)	13	(2.08%)
Coquitlam	2	(0.99%)	3	(1.37%)	2	(0.98%)	7	(1.12%)
Delta	2	(0.99%)	3	**(1.37%)**	11	**(5.37%)**	16	(2.56%)
Langley	78	**(38.61%)**	2	(0.91%)	34	**(16.59%)**	114	(18.21%)
Maple Ridge	2	**(0.99%)**	2	(0.91%)	3	(1.46%)	7	(1.12%)
Mission	2	(0.99%)	0	(0.00%)	0	(0.00%)	2	(0.32%)
New Westminster	1	(0.50%)	1	**(0.46%)**	0	(0.00%)	2	(0.32%)
North Vancouver	1	(0.50%)	6	**(2.74%)**	2	(0.98%)	9	(1.44%)
Pitt Meadows	0	(0.00%)	0	(0.00%)	1	**(0.49%)**	1	(0.16%)
Port Coquitlam	1	**(0.50%)**	0	(0.00%)	2	**(0.98%)**	3	(0.48%)
Richmond	0	(0.00%)	6	**(2.74%)**	2	(0.98%)	8	(1.28%)
Surrey	48	**(23.76%)**	9	(4.11%)	113	(55.12%)	170	(27.16%)
Vancouver	3	(1.49%)	152	**(69.41%)**	4	(1.95%)	159	(25.40%)
West Vancouver	0	(0.00%)	2	**(0.91%)**	0	(0.00%)	2	(0.32%)
White Rock	2	**(0.99%)**	0	(0.00%)	8	**(3.90%)**	10	(1.60%)
BC	17	(8.42%)	5	(2.28%)	8	(4.00%)	30	(4.79%)
Canada	4	(1.98%)	2	(0.91%)	2	(0.98%)	8	(1.28%)
US	1	(0.50%)	3	(1.37%)	4	(1.95%)	8	(1.28%)
International	0	(0.00%)	2	(0.91%)	0	(0.00%)	2	(0.32%)
Total	202	(100.00%)	219	(100.00%)	205	(100.00%)	626	(100.00%)

Note: Bolded percentages represent communities within 20 km of the gaming venue.

Behavioural Profile

Frequency of Coming to the Venue and Spending on Gambling

Patron's reported frequency of coming to the venue corresponds well to the predicted rates from the RDD survey (and the sampling bias explained at the beginning of this section). Compared to the two other venues, the Edgewater Casino appears to have a higher percentage of patrons who come several times a week or more.

Table 52: ***Reported Frequency of Coming to the Venue***

2005	Cascades		Edgewater		Fraser Downs		All Venues	
Daily	5	(2.33%)	13	(6.34%)	8	(3.83%)	26	(4.13%)
Several times a week	32	(14.88%)	38	(18.54%)	34	(16.27%)	104	(16.53%)
Several times a month	71	(33.02%)	67	(32.68%)	71	(33.97%)	209	(33.23%)
Once a month or less	51	(23.72%)	29	(14.15%)	34	(16.27%)	114	(18.12%)
Only been here a couple of times	36	(16.74%)	29	(14.15%)	31	(14.83%)	96	(15.26%)
This is my first visit	20	(9.30%)	29	(14.15%)	31	(14.83%)	80	(12.72%)
Total	**215**	**(100.00%)**	**205**	**(100.00%)**	**209**	**(100.00%)**	**629**	**(100.00%)**

2006	Cascades		Edgewater		Fraser Downs		All Venues	
Daily	4	(1.93%)	26	(11.61%)	2	(0.97%)	32	(5.02%)
Several times a week	32	(15.46%)	63	(28.13%)	47	(22.82%)	142	(22.29%)
Several times a month	79	(38.16%)	63	(28.13%)	79	(38.35%)	221	(34.69%)
Once a month or less	52	(25.12%)	34	(15.18%)	39	(18.93%)	125	(19.62%)
Only been here a couple of times	31	(14.98%)	18	(8.04%)	27	(13.11%)	76	(11.93%)
This is my first visit	9	(4.35%)	20	(8.93%)	12	(5.83%)	41	(6.44%)
Total	**207**	**(100.00%)**	**224**	**(100.00%)**	**206**	**(100.00%)**	**637**	**(100.00%)**

The majority of patrons (56.1%) reported that the opening of the venue did not change their gambling frequency. However, a significant minority (38.6%) did report that the venue contributed to increased personal gambling. There were no major differences in these responses between the venues.

Table 53: ***Reported Change in Gambling After the Venue Opened***

2006	Cascades		Edgewater		Fraser Downs		All Venues	
Gamble Less	9	(4.41%)	13	(5.99%)	11	(5.47%)	33	(5.31%)
Same	106	(51.96%)	135	(62.21%)	108	(53.73%)	349	(56.11%)
Gamble More	89	(43.63%)	69	(31.80%)	82	(40.80%)	240	(38.59%)
Total	**204**	**(100.00%)**	**217**	**(100.00%)**	**201**	**(100.00%)**	**622**	**(100.00%)**

The average amount of money patrons reported spending on gambling averaged out to $117 in 2005 and $155 in 2006, depending on the type of gambler and the particular venue. Of course, these are reported rather than actual expenditures, so may be somewhat overestimated or underestimated. (However, it should also be noted that the particular wordings used to assess expenditure have been documented to provide the most valid estimates of actual expenditures, Wood & Williams (2007)). The same question was asked in the RDD survey which allows for some corroboration of these figures. Factoring in the true prevalence of each frequency of gambler, the amounts in the Patron survey are 1.47 times higher than in the RDD survey (across all frequency of gamblers).

There is a relationship with frequency of attendance and amount spent, with reported expenditures tending to increase with increasing attendance. This makes sense in that occasional patrons are more likely to be "social gamblers," whereas people who come daily or several times a week are potentially more likely to be "problem gamblers" who may have difficulties controlling their expenditures. Support for this is found in the RDD survey, which found that the problem gambling rate to be 67% for the 12 daily slot players; 38% for the 47 people who reported playing slots several times a week; and 35% for the 134 people who reported playing slots several times a month. The problem gambling rate was consistently less for the casinos covered by the patron survey. (The RDD survey also established that 58% of people (15/25 unweighted) who reported spending $500 or more a month on slots were problem gamblers.) It is also apparent that regular patrons account for the large majority of overall venue patronage, as well as a substantial portion of the casino venue's overall revenue. Multiplying the average expenditure for each type of gambler by their prevalence among patrons shows that the proportion of daily, monthly, or yearly revenue derived from each type is as follows: 8.0% to 8.3% from daily gamblers; 28.2% to 29.6% from several times a week gamblers; 33.2% to 40.7% from several times a month gamblers; 11.2% to 16.0% from once a month or less gamblers; and 10.2% to 14.6% from gamblers who only visit a few times each year. (See Appendix F)

Table 54: ***Average per Visit Spending on Gambling by Frequency of Gambling***

2005	Cascades	Edgewater	Fraser Downs	All Venues
Daily	$375.00	$144.58	$58.75	$154.38
Several times a week	$246.95	$122.91	$115.38	$159.39
Several times a month	$127.39	$174.30	$68.43	$122.65
Once a month or less	$81.57	$95.00	$89.85	$87.46
Only been here a couple of times	$100.28	$99.14	$65.33	$88.89
This is my first visit	$96.88	$144.64	$90.74	$113.38
Total	**$132.27**	**$136.27**	**$82.05**	**$117.09**
2006	**Cascades**	**Edgewater**	**Fraser Downs**	**All Venues**
Daily	$537.50	$209.33	$285.00	$258.13
Several times a week	$163.75	$178.35	$166.67	$171.31
Several times a month	$283.94	$127.30	$112.87	$178.85
Once a month or less	$126.35	$148.60	$170.13	$145.87
Only been here a couple of times	$97.08	$78.33	$52.22	$76.43
This is my first visit	$19.17	$94.50	$42.92	$66.32
Total	**$194.04**	**$146.85**	**$125.25**	**$155.14**

Patron Spending on Other Things

Food and drink are the main things patrons spend money on other than gambling, with most people spending about $15 - $20.

Table 55: ***Average Expenditure on Food and Drink per Visit***

2005	Cascades	Edgewater	Fraser Downs	All Venues
Mean	$16.26	$18.66	$17.88	$17.58
2006	Cascades	Edgewater	Fraser Downs	All Venues
Mean	$25.63	$15.29	$17.88	$19.58

Very few patrons reported spending anything on accommodation (n = 36; 5.6% in 2006), reflecting the fact that most patrons are local. In 2006, Edgewater accounted for 26 of the 36 people who did spend money on accommodation. Edgewater is the closest venue to the Vancouver Downtown core, where many tourists stay while visiting the area.

Table 56: ***Average Expenditure on Accommodation per Visit***

2005	Most patrons indicated making no expenditures on accommodation.			
2006	**Cascades**	**Edgewater**	**Fraser Downs**	**All Venues**
Mean	$ 566.38 (n = 8)	$ 203.08 (n = 26)	$ 350.00 (n = 2)	$ 291.97 (n = 36)

Note. Responses of "zero" removed.

A relatively small portion of patrons reported that they spend money on things other than food, drink or accommodation (1/6 in 2005 and 1/5 in 2006).

Table 57: ***Average Expenditure on Other Things per Visit***

2005	About 1/6 patrons reported spending money on something else.							
2006	**Cascades**		**Edgewater**		**Fraser Downs**		**All Venues**	
No	156	(87.15%)	159	(73.27%)	133	(81.10%)	448	(80.00%)
Yes	23	(12.85%)	58	(26.73%)	31	(18.90%)	112	(20.00%)
Total	179	(100.00%)	217	(100.00%)	164	(100.00%)	560	(100.00%)

The large majority of patrons reported that their gambling expenditures at the venue had not impacted their spending on other things. However, 12 – 16% did report they spent less on other things. Less spending on clothes and food were the things cited most often by these people.

Table 58: ***Impact the Venue has had on Spending on Other Things***

2005	Cascades		Edgewater		Fraser Downs		All Venues	
Spending less on other things	24	(13.04%)	28	(16.86%)	31	(17.31%)	83	(15.69%)
No change in spending	158	(85.87%)	131	(78.91%)	143	(79.89%)	432	(81.67%)
Spending more on other things	2	(1.08%)	7	(4.21%)	5	(2.79%)	14	(2.64%)
Total	**184**	**(100.00%)**	**166**	**(100.00%)**	**179**	**(100.00%)**	**529**	**(100.00%)**
2006	**Cascades**		**Edgewater**		**Fraser Downs**		**All Venues**	
Spending less on other things	19	(10.05%)	29	(14.72%)	21	(10.82%)	69	(11.90%)
No change in spending	150	(79.37%)	162	(82.23%)	166	(85.57%)	478	(82.41%)
Spending more on other things	20	(10.58%)	6	(3.05%)	7	(3.61%)	33	(5.69%)
Total	**189**	**(100.00%)**	**197**	**(100.00%)**	**194**	**(100.00%)**	**580**	**(100.00%)**

FAVOURITE PLACE TO GAMBLE BEFORE AND AFTER VENUE OPENED

As seen in Table 59, it is common for people to have multiple "favourite" places to gamble, and a significant number of people simply added these new venues to their range of gambling options. The most important data from this table concerns potential repatriation of gambling dollars from other jurisdictions. There is a small degree of repatriation from out-of-province casinos. In 2006, prior to the opening of the new venues a total of 135 out of 645 people (21%) reported their favourite place to gamble was in some other province or state, with Nevada and Washington State being the prime destinations. Since the opening of the new venues 60 of those 135 individuals surveyed now report that one of these new venues is their favourite place to gamble, with repatriation from Washington State (23 after versus 46 before), being somewhat higher than Nevada (28 after versus 75 before). However, this is offset to some extent by 27 individuals who now report that their current favourite place to gamble is in another province or state, whereas British Columbia was their preferred jurisdiction before. Thus, the total repatriation is (135 – 60 + 27)/645 = 5.1%. A more significant impact concerns the changing pattern of patronage among Lower Mainland venues. In 2006, prior to the opening of the new venues a total of 233 out of 645 people reported that their favourite place to gamble was at another British Columbia casino. Since the opening of the venues, 140 out of 233 of these individuals now prefer gambling at one of the new venues.

Table 59: ***Favourite Place to Gamble Before and After Venue Opened***

Favourite After (2005)	Favourite Before: A Casino in BC	A Casino in Washington State	A Casino in Las Vegas or Reno	Other	Did not gamble before	Total
New Casinos	128	21	36	14	39	238
Another Casino in BC	60	1	5	1	5	72
A Casino in Washington State	2	20	1	0	0	23
A Casino in Las Vegas or Reno	11	1	29	1	3	45
Other	0	0	1	7	2	10
Total	201	43	72	23	49	388

Favourite After (2006)	Favourite Before: A Casino in BC	A Casino in Washington State	A Casino in Las Vegas or Reno	Other	Did not gamble before	Total
New Casinos	165	23	28	20	48	284
Another Casino in BC	56	1	9	0	3	69
A Casino in Washington State	4	14	1	0	0	19
A Casino in Las Vegas or Reno	9	2	24	0	0	35
Other	4	1	1	5	0	11
Total	238	41	63	25	51	418

If patrons selected their favourite casino before the casino opened as being the casino where they completed the survey, that response was coded as invalid. Invalid and multiple responses are not included in these tables.

Qualitative Interviews

Semi-structured qualitative interviews were conducted with key informants in each of the four communities ascertain their perception of what, if any, impacts have occurred as a result of the opening of the new gaming venue. Appendix D contains the "guides" used for these interviews. All notes from interviews conducted in the qualitative assessment were reviewed, with trends/ patterns being noted in the findings.

The following people were interviewed:

- **Commercial Merchants:** Managers or knowledgeable staff of businesses in the immediate vicinity of the Cascades Langley Casino and the Fraser Downs Gaming Centre (n=12; n=10). Commercial merchants were not interviewed for the Edgewater Casino in the Plaza of Nations, as it is isolated from other commercial interests.
- **City Planners:** A City Planner in each of the four communities knowledgeable about the accommodations and impact that occurred as a result of the creation of the venue (n=4).
- **Police:** The person "who would be responsible for or knowledgeable of use of police resources in response to the venue" in the department or precinct surrounding the venue (n=4).
- **Problem Gambling Counsellors:** Counsellors from the list of Ministry contracted counsellors in the Lower Mainland (n=7).

Merchants

The three figures below illustrate where businesses are located relative to each casino. In these maps, area coloured red contains mostly commercial/retail businesses; purple industrial land; green parks, schools and other community spaces; and yellow residences. Blue represents the water of False Creek near Edgewater Casino.

***Figure 19:* Businesses Around Cascades Casino in Langley**

Figure 20: ***Businesses Around Fraser Downs Casino in Surrey***

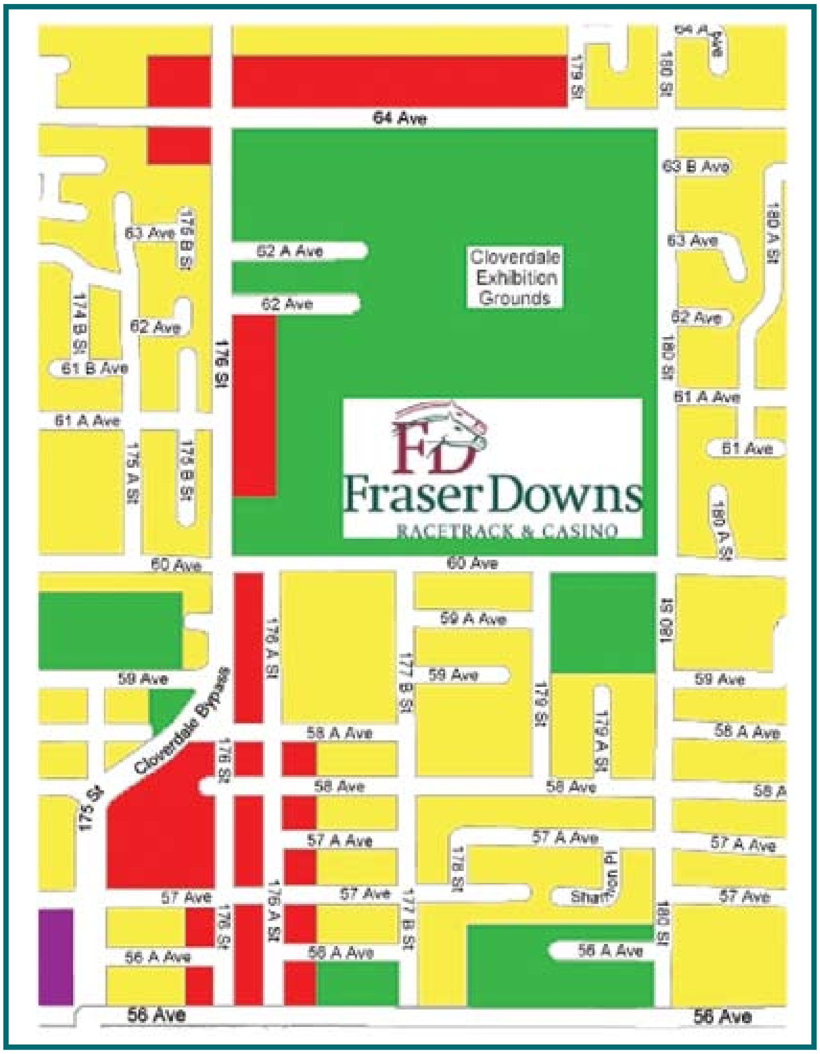


Figure 21: Businesses Around Edgewater Casino in Vancouver

2005

We conducted walk-in interviews with businesses in the immediate area of Cascades Langley Casino and Fraser Downs Gaming Centre to determine perceived positive or negative impacts of the venues on local commerce.

Drop-in interviews were conducted with representatives of 26 businesses in the three neighbourhoods. All businesses surveyed were open before the casino opened and 25 out of 26 were aware of the new venue in their neighbourhood.

The majority of businesses surveyed reported no change in their commerce as a result of the new gaming venue. Several did note changes in commerce but attributed those changes to other factors, such as trends in the industry specific business cycle, closure of a competing business in the area, the NHL hockey lock-out, new shopping developments in the area, and/or on-going road construction.

Three of the businesses noted a decrease in business due to the casino. The reasons given included 1) the fact that patrons didn't need to buy anything outside the casino, and 2) that the casino attracted "undesirables." Five of the business representatives interviewed said they had noticed an increase in customers from outside the community since the new venue opened. This trend, if it holds, constitutes a positive economic impact.

Over half of the businesses noted an increase in "busyness" (defined as traffic congestion and confusion) since the casino opened. This was the case especially near Cascades Casino, where 10 of 14 businesses noted an increase in busyness. Near Fraser Downs, four respondents noted an increase in busyness in their neighbourhood attributed to the casino; two noted an increase but didn't feel that it was related to the casino; and 3 thought congestion in the area had remained about the same. No respondent from any venue reported a decrease in busyness since the venue opened.

The majority of business (22 out of 25) reported no other problems than busyness associated with the nearby casino. Two businesses mentioned an increase in counterfeit bills since the casino opened and one of these also attributed vandalism and graffiti to the casino. And, one business manager complained that his employees now go to the casino during business hours and that he did not like it.

When asked how the casino would affect their businesses, 10 of the 26 respondents thought the casino would be "neither positive nor negative." Eight business representatives thought the new casino would have a positive effect on their business in the future, making such comments as "it's another attraction", "any business is positive" and "it does attract people from other parts of the city." Several managers reported believing that while the casino had not yet had a positive impact, eventually the increase of people in the area would improve their business. Five business representatives gave a mixed reaction – that the casino would have both positive and negative impacts. Their comments include that the casino "brings in good and bad customers" that "more people come down," and that "the casino might take away some business."

Three business managers believed that the casino would have an overall negative affect on their business, naming concerns about crime or poverty they believed would stem from the casino.

While these comments are somewhat subjective, they describe how businesses at "ground zero" feel about the venues. However, given that two of the venues were quite new at the time of the interviews, it is still early to measure the impacts of the casinos.

2006

Langley Cascades Casino

Cascades Langley Casino sits adjacent to the "old" downtown core. A part of the rationale for building the hotel, casino and convention center was to help revitalize that area.

We interviewed representatives of twelve businesses including a pawnshop, three coffee shops, two hotels, three restaurants and three retail businesses on November 17, 2006. Increased traffic was the negative impact most often mentioned. The principal complaint reported was that Casino guests took up already limited parking. The merchants noted some increased problems with public disorder mainly in the form of drunkenness. It is very difficult however to attribute either of these observations to the Casino alone; the venue also includes a hotel and convention centre. Some of the merchants complained that the new venue "changed the character" of the area from one of small family businesses to a busy commercial area. Some felt that people were spending all their money on gambling and so not spending money on other things.

The main positive impact noted was from the hoteliers, who reported an increase in business due to guests "being sent their way" by the hotel at Langley Cascades.

Fraser Downs Gaming Centre

Ten businesses were interviewed in the vicinity of Fraser Downs Gaming Centre on November 15, 2006. The facility sits adjacent to Fraser Downs Racetrack, and as such has created a lesser change in the commercial mix of the area.

We interviewed 10 merchants representing two gas stations, five retail shops, a pawnshop, and two restaurants. Perceived impacts were less negative than for the Cascades Casino in Langley. Merchants reported few problems with traffic or public order. Most of the merchants felt their businesses had either benefited or not been hurt by the new venue.

City Planners

2005

One city planner from each of the four communities participated in a group interview to determine the impacts of the casinos on the communities from the perspective of local government. The comments of city planners are provided as one in order to increase confidentiality.

- All communities except The Township of Langley receive compensating monies from the Casino operation and this is viewed as very positive. Edgewater Casino has not met revenue expectations.
- The projects involved a long and difficult process involving a divided public, requiring considerable public meetings, and careful planning, especially in Vancouver, However, at Cascades competition between communities led to a rapid bidding and development process.
- The process of planning for the casinos involved a learning curve for city staff.

- Planning started a number of years before construction.
- Consideration to build a casino is often a time sensitive opportunity.
- Pre-operational agreements are complex and require considerable human resources.
- Publicly expressed opinion of citizens remains somewhat negative toward casinos. This was very evident in Langley but was also true in Surrey and Vancouver. In some cases organized opposition led to legal costs.
- In the case of Fraser Downs, the Gaming Centre was viewed as a way to reinvigorate the racetrack, and it has done so.
- In all cases, few if any negative social impacts were noted.
- Planners noted that the market is over-saturated especially in and near Vancouver City, and so new venues are not doing as well there.
- Cascades is running 40% above revenue estimates and Fraser Downs in "on track."
- Since gaming is so highly regulated, no corruption has been noted.

Most of the comments of city planners related to matters that at first glance would be primarily economic. However, planners connected the desire to increase business and revenue with subsequent improvement of community services and employment. Principal trends in responses of city planners included a sense of current or pending over-saturation of the market, a high level of competition between municipalities to attract venues, leading to expedited planning processes and considerable public commentary and concern from conception to post-completion.

2006

City planners in the four communities were contacted by email in November and December 2006 for commentary on perceived impacts of the venues on city planning and services. Response was universally positive from Vancouver, Langley City and Surrey. The Township of Langley was contacted several times but did not respond.

Each municipality reported significant income from the Casinos, in the low millions of dollars.

Langley City reported that significant infrastructure improvements constitute the main expenditure of Casino profits, making possible a number of road expansion/ bridge projects that otherwise would have not been possible without tax increases. The City also reported a smooth transition of ownership of the Casino and a good relationship with the owners. No problems were reported relating to decreased business, increased police requirements, crime, or public order.

Edgewater Casino has experienced disappointing levels of business, but revenues are contributing, for example, to Vancouver's Social Responsibility fund, and have generated new employment, with a percentage of employment within the venue being "local hires" from Vancouver's East Side. In Vancouver, unexpected planning needs have included

"a) Planning and legal work related to the change of ownership of the casino which among other things required a time extension of the permit to operate at Plaza of Nations (including a report to City Council to this effect); b) initiation of a public hearing process to amend the relevant by-law to change the mix of tables and slot machines at the casino."

Vancouver City also reported:

"A positive effect arising from the economic spin-offs of a payroll involving more than 600 employees as well as the contributions of $4 million of net profits provided to the municipality which in turn uses it to fund City programs. The venue has had little impact on the quality of life of the Vancouver community. Some negative impacts arise from the fact that problem gamblers have easier access to a local gambling venue, and positive impacts relate to the economic spin-offs."

Surrey Municipality reported that:

"As a result of casino revenue which flows to the City, Surrey is exploring plans to construct a multi-purpose recreational facility incorporating a new Seniors' centre as well as possibly a Trade and Exhibition Centre at the Cloverdale Fairgrounds."

In terms of impacts on traffic and policing, Surrey reported that they required traffic improvements as part of the approval for the venue. And, the relatively low volumes and off-peak travel times have not created perceptible problems in the area. Surrey reported that the RCMP has indicated few problems with the facility. Police calls reported to the City were associated to theft from autos, recovered stolen quotes, disturbances, some related to liquor (intoxicated individuals) and general assistance. The RCMP advises that they have an excellent working relationship with the Casino Security.

Surrey reports 283 employees at Fraser Downs, and city officials feel the facility has enabled the retention of horse racing and supported the existing horse community, which "had started to languish (many of the owners had taken their horses to Alberta or Ontario)."

Finally, Surrey officials note Casino Management are very involved in the community, regularly attending Chamber of Commerce meetings, supporting service clubs in the area, and participating in community events in Cloverdale such as the Santa Claus Parade and the Blueberry Festival.

Police

2005

The Vancouver Police Department, and Langley and Surrey RCMP, were contacted in November 2005 and a representative from each was identified as a key spokesperson to speak to impacts, if any, of each respective venue. In all three cases, the informants reported that from a police perspective, little or no problems have arisen from the venues. Comments included, "No, the casino hasn't caused any problems;" "We get calls very rarely from them;" "The casino security is very good and they can handle most problems themselves;" "The casino has been very low level for us;" and "We did anticipate some problems and they simply have not materialized."

In the case of Edgewater, a neighbouring nightclub does receive considerable police attention, but as yet the police have noted no impact of the casino itself in exacerbating problems in the area.

As of 2005, the venues have not appeared substantially on the police "radar," suggesting that they are creating little direct and visible disturbance or crime at a level noticeable to police.

2006

We conducted phone interviews with police representatives in each of the immediate areas of the venues in December 2006 and January 2007. As in the case of 2005, police reported very few problems incident to the venues. The most assertive comment made in the case of all three venues was that Casino Security was competent and had a good working relationship with the police.

Little or no traffic issues were noted in the case of any of the venues. Any increase in traffic was reported as well handled within existing time and resources.

Police did not perceive any substantive effect on public order by the venues.

The only crime mentioned relative to the venues was to do with the fact that each venue has a large parking lot. In the case of Langley Cascades and Fraser Downs Gaming Centre, these parking lots are open and easily accessible. Police noted some reported theft of cars or their contents from these lots. This however would be true of any open parking lot in the Lower Mainland and police did not note any overall increase in such theft, nor property crime in general that could be attributed to the venues.

The infiltration of organized crime in the form of loan sharks became a media item during the latter half of 2006. Much of this discussion concentrated on the River Rock Casino in Richmond. The scope of our study did not allow deep analysis of organized crime, but police we interviewed did not report it as a problem unique to the venues studied.

Problem Gambling Counsellors

2005

To provide one means of determining the possible impacts of the new venues on the most vulnerable group – persons prone to develop or already coping with a gambling problem - a group interview was held with nine of the contracted problem gambling counsellors in the Lower Mainland, representing various catchment areas and cultural groups.

The counsellors commented on impacts of the new venues from direct experience with clients. Visible impacts were limited to single cases because the venues are new and their clients were already in trouble well before these facilities opened. Impacts that were noted by the group included:

- A perceived increase in persons seeking mental health services in Langley due to the casino. Reasons given include the ready accessibility of the venue to nearby residential areas, especially low-income housing with persons without ready transportation, and the fact that the casino is convenient and without nearby competition.
- Pressure brought about by the increased density of casinos and increased availability and visibility of venues that, for problem gamblers, create enormous temptations.

2006

We solicited email comments from seven problem gambling counselors concerning their perceptions of any changes in their number of clients, and any problems they were finding with clients that might be related to the new venues.

Some counsellors noted an increased number of clients over the past year. Counsellors attributed this increase mainly to:

- Gaming Policy Enforcement Branch problem gambling awareness messages in the media.
- Other media coverage of problem gambling.
- Increased coordination of services with other community services such as Mental Health.
- Increased referrals from bankruptcy services.

In terms of problems noted with clients unique to the new venues, the only comment, made by some but not all of the counsellors, was that some clients felt the venues made gambling more convenient by being closer to their home or place of work, and thus exacerbated their problem. Gambling became possible "while out running errands or whatever" instead of requiring a significant drive in the car. This would be true of any new facility.

Counsellors noted the apparent ease their clients report with breaching casino self-exclusion contracts. Apparently clients find it relatively easy to get into casinos after entering this program. While the venues were named as locations where this was possible to do, they were not the only venues named. It was mentioned more as a broad problem among most of the casinos in the Lower Mainland.

CONCLUSIONS

The purpose of this study was to determine what social and economic impacts have occurred in four designated Lower Mainland communities as a result of the introduction of three new gaming venues. There are several things that make this, or any socioeconomic analysis of gambling, a very difficult and complex undertaking (Stevens & Williams, 2004; Williams & Stevens, 2006). One concerns the difficulties in isolating and disentangling the contributions of these new venues from the contributions of a myriad of other social and economic forces at play. Another concerns the difficulty in making causal attributions for changes that are found. A third concerns the appropriate length of time to gauge all the impacts. We feel that reasonable solutions and approaches have been found for most of these issues and that some well supported conclusions can be arrived at. Even so, it must be stated that not all of the economic and social data indicators that we would have wished for were available in 2006, and that there is always value to examining impacts over longer periods of time. It must also be stated that present findings are probably somewhat unique to this particular geographic region, in this particular time period, with these specific venues.

The detailed findings of this study (presented in the Executive Summary) are quite complex, and depend on the specific municipality, the specific sector within this municipality, the specific venue, and the specific social or economic impact being examined. However, the purpose of the present section is not to dwell on specifics, but rather, to derive some general conclusions about this complex pattern of results.

One of the main conclusions and generalizations that can be made concerns the fact that no impacts were found for most variables, and the impacts that did occur tended to be modest in magnitude. The reality is that these three new venues have neither caused widespread economic rejuvenation, nor have they created major new social problems.

That is not to say that there have not been some costs and benefits. One of the clearer economic benefits has been the creation of new ongoing employment for perhaps 1,000 people, along with the attendant social benefits of this employment and the indirect economic spin-offs that these wages have. It is also clear that the tens of millions of dollars the Casino Service Providers spent building these venues represents a significant economic gain for the municipalities and businesses in Vancouver, Surrey, and Langley. Furthermore, the direct ongoing revenue that each host municipality receives from these venues contributes to significant ongoing enhancement of local infrastructure and community development. These new venues have resulted in a significant amount of local repatriation of gambling dollars from neighbouring Lower Mainland venues, particularly for Langley and Langley Township. By comparison, the amount of repatriation from out-of-province venues is quite small. It must also be appreciated that because only 3% of the patronage of these new venues is from out-of-province, the $209 million in revenue these three venues earned in fiscal 2005/2006 represents a redirection of wealth within the Lower Mainland, rather than an influx of wealth. This redirection is primarily repatriation from other Lower Mainland casinos, secondarily from other forms of gambling (i.e., charity raffle tickets, lotteries, horse racing), and thirdly from spending on other forms of entertainment and general retail purchases. The magnitude of the impact on the latter appears to be fairly small, however.

While gambling almost always constitutes a transfer rather than a creation of wealth, it is a transfer that has the potential to create social problems. However, for the most part, the introduction of these new venues does not seem to have exacerbated existing social problems, as there was no significant increase in the overall rates of crime, problem gambling, suicides or bankruptcy rates. The important exception to this is the City of Langley, which did experience an increase in problem gambling. In general, the Cascades Casino appears to have impacted the gambling behaviour of Langley residents to a much greater extent than the new venues in the other communities. Presumably, this is partly due to the greater visibility of the Cascades Casino because of its central location (unlike Fraser Downs and Edgewater), as well as its greater proximity (all City of Langley residents live within a few kilometers of it). However, a second reason likely concerns a difference in the pre-existing availability of gambling, in that residents of Vancouver and Surrey had much more convenient access to casino gambling prior to the introduction of their new venues (i.e., in other words, any social impacts may have already occurred). Support for this is seen in the fact that the 6.0% rate of problem gambling that Langley achieved in 2006 (up from 2.5% in 2004), is roughly comparable to the baseline 2004 rates in Vancouver (6.0%) and Surrey (5.6%). However, the failure to find increases in Vancouver and Surrey despite even greater availability (as well as the general decreases in problem gambling indices in the Lower Mainland in 2006) is also an important observation supporting the "social adaptation model" of gambling (Shaffer et al., 2004). This model contends that a product with potential to cause social harm typically produces most of its negative effects when first introduced. However, after some time the community adapts to its presence and the negative effects diminish somewhat. This "adaptation" subsequently provides some inoculation from further harm if presence of the product is expanded or further increased. While reassuring, this does not mean that all the remaining negative social impacts have now occurred, and things can only get better. First, the general public's attitude toward gambling is quite negative and getting more so. Regardless of the objective costs and benefits of casino gambling, there is likely to be increasing public pressure to curb it. Second, while considerable attention has been paid to "where the money goes", and "where the money comes from", there needs to be recognition of "who the money comes from". The present study estimates that the large majority of casino revenue comes from people who gamble several times a month or more (see Appendix F). Furthermore, Patron Survey data indicates that a substantial portion of these regular gamblers (23 of the 96 surveyed) are problem gamblers. This is an important finding when weighing the overall costs and benefits of gambling (Williams & Wood, 2004; in press).

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Appendix A: RDD Survey

Below is the 2005 interview guide which was also used in 2006. Changes between 2004 and 2005 are noted in red.

PHONE

POSTAL CODE

AREA1

City of Vancouver 1

City of Surrey... 2

City of Langley.. 3

Langley Township 4

INTRODUCTION

Hello, my name is... and I'm calling from Venture Research. We are conducting a survey on behalf of the Government of BC and the cities of Surrey, Langley and Vancouver, and the Township of Langley on gambling attitudes and practices. The information gathered in this survey will assist the province and municipalities in planning. We are interested in a wide representation of viewpoints and would like to speak with people who gamble as well as those who do not gamble. Let me assure you that your individual responses will be kept completely confidential and your phone number will not be attached to any responses. I'd like to speak to the person in your household who is 19 years of age or older who most recently had a birthday. Is that you? (If no, ask to speak to someone in the household who is and repeat the introduction.)

First, have I reached you at YOUR home telephone number? (No - thank, terminate)

Continue	21	
Refused	02	=> /END
Line busy	03	=> /END
No answer call back	04	=> /END
Schedule call back..	05	=> /CB
Not in service/ business...	07	=> /END
Interrupted	08	=> /END

Terminated during interview.. 09 => /END

Screened for gender/ age.. 10 => /END

Language/ hearing difficulties..11 => /END

Needs persuaders for validity of survey .... 12 => PERS

PERSUADER

=> +1 if NOT INT01=12

If you would like to confirm the validity of this study, you may call Enquiry BC at 1-800-663-7867 and ask to be connected to the Gaming Policy and Enforcement Branch. These calls can be made Monday - Friday, 8:30 a.m. to 4:30 p.m.

Continue 01

Refused .... 02 => /INT

Schedule call back.. 03 => /CB

S1

Could you please tell me your postal code?

Postal code same as imported 111111

Enter & confirm letters & numbers...

Don't know/ refused.. 999999

AREA (Filled if imported Postal Code is correct)

=> /+1 if S1=111111

And do you live in the …?

City of Vancouver 1

City of Surrey... 2

City of Langley.. 3

Township of Langley.. 4

Other - thank & terminate 5

Refused - thank & terminate... 9

GAMBLING BEHAVIOUR

Q1INTRODUCTION

First, we'd like to ask some questions about activities you may participate in. People bet money and gamble on many different things including buying lottery tickets, playing bingo, or card games with their friends. I am going to list some activities that you might have spent money on IN THE LAST YEAR. For each one, I will ask how often you participated in it - you may answer daily, several times a week, several times a month, once a month or less, only a few days all year, or not at all in the past 12 months. Then for each one I will ask you to estimate how much money you typically spend on that activity in a typical MONTH. You can simply answer in dollars.

Continue 1

Q1

Q1. In the past year, how often have you spent money on raffle tickets or charitable lottery tickets?

Daily (30+ times per month) 1

Several times a week (6 - 29 times per month) 2

Several times a month (3 - 5 times per month) 3

Once a month or less (6 - 12 times per year) 4

Only a few days all year (1 - 5 times per year) 5

Not at all in the past 12 months (0 times) 6

Don't know/ refused (DO NOT READ) 9

Q1A

=> +1 if Q1=5,6

Q1A. And, how much money do you spend on this activity in a typical month?

Enter monthly amount ....

Don't know/ refused 999999

Q2

Q2. In the past year, how often have you purchased other lottery tickets such as Lotto 6/49 or Super 7 for yourself or others?

Daily (30+ times per month) 1

Several times a week (6 - 29 times per month) 2

Several times a month (3 - 5 times per month) 3

Once a month or less (6 - 12 times per year) 4

Only a few days all year (1 - 5 times per year) 5

Not at all in the past 12 months (0 times) 6

Don't know/ refused (DO NOT READ) 9

Q2A

=> +1 if Q2=5,6

Q2A. How much do you spend on this activity in a typical month?
Enter monthly amount ....

Reports winning in a typical month...666666
Don't know/ refused.. 999999

Q3

Q3. In the past year, how often have you purchased Instant Win tickets for yourself or others (Pull Tab, Instant Win)?
Daily (30+ times per month) 1

Several times a week (6 - 29 times per month) 2

Several times a month (3 - 5 times per month) 3

Once a month or less (6 - 12 times per year) 4

Only a few days all year (1 - 5 times per year) 5

Not at all in the past 12 months (0 times) 6

Don't know/ refused (DO NOT READ) 9

Q3A

=> +1 if Q3=5,6

Q3A. How much money do you spend on this activity in a typical month?
Enter monthly amount ....

Reports winning in a typical month...666666
Don’t know/ refused.. 999999

Q4

Q4. In the past year, how often have you played bingo for money?
Daily (30+ times per month) 1

Several times a week (6 - 29 times per month).. 2

Several times a month (3 - 5 times per month) 3

Once a month or less (6 - 12 times per year)... 4

Only a few days all year (1 - 5 times per year)... 5

Not at all in the past 12 months (0 times).. 6

Don’t know/ refused (DO NOT READ) 9

Q4A

=> +1 if Q4=5,6

Q4A. How much money do you spend on this activity in a typical month?
Enter monthly amount ....

Reports winning in a typical month...666666
Don’t know/ refused.. 999999

Q4B – NEW FOR 2005

Q4B. In the past year, how often have you played other electronic forms of gambling such as electronic Keno or electronic racetracks?
Daily (30+ times per month) 1

Several times a week (6 - 29 times per month).. 2

Several times a month (3 - 5 times per month) 3

Once a month or less (6 - 12 times per year)... 4

Only a few days all year (1 - 5 times per year)... 5

Not at all in the past 12 months (0 times).. 6

Don’t know/ refused (DO NOT READ) 9

Q4C – NEW FOR 2005

=> +1 if Q4B=5,6

Q4C. How much money do you spend on this activity in a typical month?

Enter monthly amount ....

Reports winning in a typical month…………………………………...666666
Don’t know/ refused.. 999999

Q5

Q5. In the past year, how often have you played a slot machine or a video lottery terminal (i.e., a VLT)?

Daily (30+ times per month) 1

Several times a week (6 - 29 times per month)... 2

Several times a month (3 - 5 times per month) 3

Once a month or less (6 - 12 times per year).. 4

Only a few days all year (1 - 5 times per year).. 5

Not at all in the past 12 months (0 times)... 6

Don’t know/ refused (DO NOT READ) 9

Q5A

=> +1 if Q5=6

Q5A. Where do you normally do this (jurisdiction and facility)? (Key word is NORMALLY - confirm - if not below type in open box - type area first and then name of facility)

Burnaby - Gateway Casino... 01

Coquitlam - Great Canadian Casino.. 02

Langley - Gateway Casino 14

New Westminster - Gateway Casino (Royal Towers Hotel) 03

New Westminster - Royal City Star Riverboat Casino.............................. 04

Richmond - River Rock Casino Resort... 05

Surrey - Fraser Downs Gaming Centre 06

Vancouver - Edgewater Casino (Plaza of Nations) 15

BC - Outside Lower Mainland.. 10

Washington State 11

Las Vegas/ Reno 12

Cruise Ships 13

Record name of facility/ jurisdiction 91

Don't know/ refused.. 98

Q5B

=> +1 if Q5=5,6

Q5B. How much money do you spend on this activity in a typical month?
Enter monthly amount ....

Reports winning in a typical month……………………………………..666666
Don't know/ refused.. 999999

Q6

Q6. In the past year, how often have you played a table game (for example, roulette, blackjack) at a casino? [If necessary, define casino as a large gambling hall with many different kinds of games, for example, in a community casino, resort hotel or on a cruise ship.]
Daily (30+ times per month) 1

Several times a week (6 - 29 times per month)... 2

Several times a month (3 - 5 times per month) 3

Once a month or less (6 - 12 times per year)... 4

Only a few days all year (1 - 5 times per year).. 5

Not at all in the past 12 months (0 times)... 6

Don't know/ refused (DO NOT READ) 9

Q6A

=> +1 if Q6=6

Q6A. At what casino do you normally do this (jurisdiction and facility)? (Key word is NORMALLY - confirm - if not below type in open box - type area first and then name of facility)

Burnaby - Gateway Casino.. 01

Coquitlam - Great Canadian Casino.. 02

Langley - Gateway Casino 14

New Westminster - Gateway Casino (Royal Towers Hotel) 03

New Westminster - Royal City Star Riverboat Casino............................... 04

Richmond - River Rock Casino Resort... 05

Vancouver - Gateway Casino (Mandarin Centre)..................................... 07

Vancouver - Grand Casino 08

Vancouver - Great Canadian Casino (Holiday Inn) 09

BC - Outside Lower Mainland... 10

Washington State 11

Las Vegas/ Reno 12

Cruise Ships 13

Vancouver - Edgewater Casino (Plaza of Nations) 15

Record name of facility/ jurisdiction 91

Don't know/ refused.. 98

Q6B

=> +1 if Q6=5,6

Q6B. How much money do you spend on this activity in a typical month?

Enter monthly amount ....

Reports winning in a typical month……………………………………...666666

Don't know/ refused.. 999999

Q7

Q7. In the past year, how often have you placed a bet on a horse race?

Daily (30+ times per month) 1

Several times a week (6 - 29 times per month) 2

Several times a month (3 - 5 times per month) 3

Once a month or less (6 - 12 times per year) 4

Only a few days all year (1 - 5 times per year) 5

Not at all in the past 12 months (0 times) 6

Don't know/ refused (DO NOT READ) 9

Q7A

=> +1 if Q7=6

Q7A. Where do you normally do this (jurisdiction and facility)? (Key word is NORMALLY - confirm - if not below type in open box - type area first and then name of facility)

Surrey - Fraser Downs Gaming Centre (Cloverdale Raceway) 06

Vancouver - Hastings Racetrack 16

Chilliwack - Best Western Rainbow Country Inn teletheatre 17

Powell River - Inn at Westview teletheatre 18

Sechelt - Gilligan's Pub teletheatre 19

Squamish - Chieftain Hotel teletheatre 20

BC - Outside Lower Mainland 10

Washington State 11

Las Vegas/ Reno 12

Cruise Ships 13

Record name of facility/ jurisdiction 91

Don't know/ refused 98

Q7B

=> +1 if Q7=5,6

Q7B. How much money do you spend on this activity in a typical month?

Enter monthly amount ....

Reports winning in a typical month...666666
Don't know/ refused.. 999999

Q8

Q8. In the past year, how often have you bet on sports events?

Daily (30+ times per month) 1

Several times a week (6 - 29 times per month)... 2

Several times a month (3 - 5 times per month) 3

Once a month or less (6 - 12 times per year).. 4

Only a few days all year (1 - 5 times per year).. 5

Not at all in the past 12 months (0 times).. 6

Don't know/ refused (DO NOT READ) 9

Q8A

=> +1 if Q8=5,6

Q8A. How much money do you spend on this activity in a typical month?

Enter monthly amount ....

Reports winning in a typical month...666666
Don't know/ refused.. 999999

Q9

Q9. In the past year, how often have you played private card games, board games, or other games of skill against other people for money?

Daily (30+ times per month) 1

Several times a week (6 - 29 times per month)... 2

Several times a month (3 - 5 times per month) 3

Once a month or less (6 - 12 times per year).. 4

Only a few days all year (1 - 5 times per year).. 5

Not at all in the past 12 months (0 times).. 6

Don't know/ refused (DO NOT READ) 9

Q9A

=> +1 if Q9=5,6

Q9A. How much money do you spend on this activity in a typical month?
Enter monthly amount ....

Reports winning in a typical month……………………………………...666666
Don't know/ refused... 999999

Q10

Q10. In the past year, how often have you gambled on the Internet?
Daily (30+ times per month) 1

Several times a week (6 - 29 times per month)... 2

Several times a month (3 - 5 times per month) 3

Once a month or less (6 - 12 times per year).. 4

Only a few days all year (1 - 5 times per year).. 5

Not at all in the past 12 months (0 times).. 6

Don't know/ refused (DO NOT READ) 9

Q10A

=> +1 if Q10=5,6

Q10A. How much money do you spend on this activity in a typical month?
Enter monthly amount ....

Reports winning in a typical month……………………………………...666666
Don't know/ refused... 999999

Q11

Q11. In the past year, how often have you purchased high-risk stocks, options or futures?

Daily (30+ times per month) 1

Several times a week (6 - 29 times per month) 2

Several times a month (3 - 5 times per month) 3

Once a month or less (6 - 12 times per year) 4

Only a few days all year (1 - 5 times per year) 5

Not at all in the past 12 months (0 times) 6

Don’t know/ refused (DO NOT READ) 9

Q11A

=> +1 if Q11=5,6

Q11A. How much money do you spend on this activity in a typical month?

Enter monthly amount ....

Reports winning in a typical month……………………………………...666666

Don’t know/ refused.. 999999

ATTITUDES

Q12 INTRODUCTION

Now I am going to ask you some questions about how you feel about gambling.

Q12. Which best describes your belief about the benefit or harm that gambling has for society? (Read below)

The benefits far outweigh the harm 1

The benefits somewhat outweigh the harm 2

The benefits and the harm are roughly equivalent 3

The harm somewhat outweighs the benefits 4

The harm far outweighs the benefits 5

Don’t know/ refused (DO NOT READ) 9

Q13

Q13. Which best describes your attitude toward gambling? (Read below)

It is morally wrong... 1

It is somewhat morally wrong 2

I have no opinion one way or the other 3

It is a matter of personal choice.. 4

It is a fun, harmless thing to do.. 5

Don't know/ refused (DO NOT READ) 9

=> Q15A if AREA=2,3,4

Q14A1

Q14A1. Are you aware of Edgewater Casino in the Plaza of Nations that opened in February 2005? [If not aware, tell respondent...] It is a casino with 600 slot machines and 51 table games.

Yes... 1

No.. 2

Q14B1

Q14B1. Overall, would you say Edgewater Casino in the Plaza of Nations is likely to be (read below) to the community?

Very beneficial 1

Somewhat beneficial 2

Neither beneficial nor harmful... 3

Somewhat harmful.. 4

Very harmful 5

Don't know/ refused (DO NOT READ) 9

Q14C1

Q14C1. In your own words, what would you say are the likely major benefits, if any, of this facility? Any others? (Up to four responses)

No benefits at all... 00

Provides employment 01

Provides a convenient source of recreation 02

Entertainment value.. 03

Brings money into the community 04

Increases local or provincial revenue 05

Decreases taxes.. 06

Creates positive spin-offs to other local businesses................................. 07

Increases tourism 08

Decreases illegal gambling... 09

Keeps gambling money from going to outside jurisdictions...................... 10

Provides money for good causes 11

Supports the horse racing industry... 12

Revitalizes/ cleans-up the area 13

Attracts new businesses to the area... 14

Keeps the race track/ Hastings Park open 15

The convention centre/ hotel 16

Record responses 91

Don't know/ refused... 98

Q14D1

Q14D1. In your own words, what would you say are the likely major drawbacks, if any, of this facility? Any others? (Up to four responses)

No drawbacks at all 00

Increases gambling addiction 01

Exposes young people to gambling... 02

Negatively impacts people who can least afford to lose money 03

Is morally corrupting 04

Negatively impacts local businesses 05

Negatively impacts other forms of gambling (charity bingo, racing, etc.) .. 06

Brings greater noise/congestion/traffic 07

Adds to crime and/or policing costs... 08

More people will be drinking 09

Adds to family problems 10

Attracts the wrong people to the area...11

Negatively impacts the community image 12

People will waste/ lose money gambling.. 13

Record responses 91

Don't know/ refused.. 98

Q14E1-Q14K1 – NEW FOR 2005

Q14E1

=> Q15A if AREA=2,3,4

=> Q14A2 if Q14A1=2

Q14E1. Have you ever gambled at Edgewater Casino in the Plaza of Nations?

Yes.. 1

No .... 2 => Q14A2

Q14F1

Q14F1. How many times have you gone to Edgewater Casino in the Plaza of Nations since it opened?

Daily (30+ times per month) 1

Several times a week (6 - 29 times per month)... 2

Several times a month (3 - 5 times per month) 3

Once a month or less (6 - 12 times per year).. 4

Only a few days (1 - 5 times per year)... 5

Not at all (0 times) .... 6 => Q14A2

Don't know/ refused (DO NOT READ) 9

Q14G1

Q14G1. On average, how much do you spend per visit?
Enter amount per visit..

Reports winning in a typical visit……………………………………...666666
Don't know/ refused.. 999999

Q14H1

Q14H1. What sort of impact has this facility had on your overall gambling behaviour? Would you say it has...? (Read below)
Increased it... 1

Decreased it, or 2

No change 3

Don't know/ refused (DO NOT READ) 9

Q14I1

Q14I1. Where did you used to go to play table games or slot machines before this facility was built?
Did not used to play anywhere 00

Burnaby - Gateway Casino.. 01

Coquitlam - Great Canadian Casino.. 02

New Westminster - Gateway Casino (Royal Towers Hotel) 03

New Westminster - Royal City Star Riverboat Casino.............................. 04

Richmond - River Rock Casino Resort... 05

Surrey - Fraser Downs Gaming Centre 06

Vancouver - Gateway Casino (Mandarin Centre)..................................... 07

Vancouver - Grand Casino 08

Vancouver - Great Canadian Casino (Holiday Inn) 09

BC - Outside Lower Mainland 10

Washington State 11

Las Vegas/ Reno 12

Cruise Ships 13

Langley - Gateway Casino 14

Record name of facility/ jurisdiction 91

Don't know/ refused... 98

Record response 91

Don't know/ refused... 98

Q14J1

Q14J1. Do you spend less on other things now that you sometimes gamble at Edgewater Casino in the Plaza of Nations?

Yes – spend less on other things... 1

No change in spending habits 2

Don't know/ refused... 9

Q14K1

=> +1 if Q14J1=2

Q14K1. What things would that be?

Record response 91

Don't know/ refused... 98

=> Q15A if AREA=2,3,4

Q14A2 Not Asked in 2005

Q14A2. Are you aware of Hastings Racetrack with new slots to be added in December 2005?? [If not aware, tell respondent...] It is a horse race track which is adding 600 slot machines.

Yes.. 1

No 2

Q14B2 Not Asked in 2005

Q14B2. Overall, would you say Hastings Racetrack is likely to be (read below) to the community?

Very beneficial 1

Somewhat beneficial 2

Neither beneficial nor harmful........ 3

Somewhat harmful........ 4

Very harmful 5

Don’t know/ refused (DO NOT READ) 9

Q14C2 Not Asked in 2005

Q14C2. In your own words, what would you say are the likely major benefits, if any, of this facility? Any others? (Up to four responses)

No benefits at all........ 00

Provides employment........ 01

Provides a convenient source of recreation 02

Entertainment value........ 03

Brings money into the community 04

Increases local or provincial revenue 05

Decreases taxes........ 06

Creates positive spin-offs to other local businesses........ 07

Increases tourism 08

Decreases illegal gambling........ 09

Keeps gambling money from going to outside jurisdictions........ 10

Provides money for good causes 11

Supports the horse racing industry........ 12

Revitalizes/ cleans-up the area 13

Attracts new businesses to the area........ 14

Keeps the race track/ Hastings Park open 15

The convention centre/ hotel 16

Record responses 91

Don't know/ refused.. 98

Q14D2 Not Asked in 2005

Q14D2. In your own words, what would you say are the likely major drawbacks, if any, of this facility? Any others? (Up to four responses)

No drawbacks at all 00

Increases gambling addiction 01

Exposes young people to gambling... 02

Negatively impacts people who can least afford to lose money 03

Is morally corrupting 04

Negatively impacts local businesses 05

Negatively impacts other forms of gambling (charity bingo, racing, etc.) .. 06

Brings greater noise/congestion/traffic 07

Adds to crime and/or policing costs... 08

More people will be drinking 09

Adds to family problems 10

Attracts the wrong people to the area...11

Negatively impacts the community image 12

People will waste/ lose money gambling.. 13

Record responses 91

Don't know/ refused.. 98

Q14E2 Not asked in 2004 or 2005

=> Q15A if AREA=2,3,4 OR Q14A2=2

Q14E2. Have you ever gone to Hastings Racetrack to play the new slot machines?

Yes.. 1

No.. 2 => Q15A

....

Q14F2 Not asked in 2004 or 2005

Q14F2. How many times have you gone to Hastings Racetrack since it opened to play the new slot machines?

Daily (30+ times per month) 1

Several times a week (6 - 29 times per month)... 2

Several times a month (3 - 5 times per month) 3

Once a month or less (6 - 12 times per year)... 4

Only a few days (1 - 5 times per year)... 5

Not at all (0 times) .... 6 => Q15A

Don't know/ refused (DO NOT READ) 9

Q14G2 Not asked in 2004 or 2005

Q14G2. On average, how much do you spend per visit?

Enter amount per visit...

Reports winning in a typical visit………………………………………...666666

Don't know/ refused... 999999

Q14H2 Not asked in 2004 or 2005

Q14H2. What sort of impact has the addition of the new slot machines at this facility had on your overall gambling behaviour? Would you say it has...? (Read below)

Increased it.. 1

Decreased it, or 2

No change 3

Don't know/ refused (DO NOT READ) 9

Q14I2 Not asked in 2004 or 2005

Q14I2. Where did you used to go to play slot machines before this facility was expanded?

Did not used to play anywhere 00

Burnaby - Gateway Casino.......... 01

Coquitlam - Great Canadian Casino.......... 02

New Westminster - Gateway Casino (Royal Towers Hotel) 03

New Westminster - Royal City Star Riverboat Casino.......... 04

Richmond - River Rock Casino Resort.......... 05

Surrey - Fraser Downs Gaming Centre 06

Vancouver - Gateway Casino (Mandarin Centre).......... 07

Vancouver - Grand Casino 08

Vancouver - Great Canadian Casino (Holiday Inn) 09

BC - Outside Lower Mainland.......... 10

Washington State 11

Las Vegas/ Reno 12

Cruise Ships 13

Langley - Gateway Casino 14

Vancouver - Edgewater Casino (Plaza of Nations) 15

Record name of facility/ jurisdiction.......... 91

Don’t know/ refused.......... 98

Record response 91

Don’t know/ refused.......... 98

Q14J2 Not asked in 2004 or 2005

Q14J2. Do you spend less on other things now that you sometimes play the slot machines at Hastings Racetrack?

Yes – spend less on other things.......... 1

No change in spending habits 2

Don’t know/ refused 9

Q14K2 Not asked in 2004 or 2005

=> +1 if Q14J2=2

Q14K2. What things would that be?
Record response 91

Don’t know/ refused 98

Q15A

=> Q16A if AREA=1,3,4

Q15A. Are you aware of Fraser Downs Gaming Centre in Surrey with its expanded facilities that opened in June 2005? [If not aware, tell respondent...] It is a horse race track and casino with 400 slot machines and 3 table games.
Yes 1

No 2

Q15B

Q15B. Overall, would you say Fraser Downs Gaming Centre is likely to be (read below) to the community?
Very beneficial 1

Somewhat beneficial 2

Neither beneficial nor harmful 3

Somewhat harmful 4

Very harmful 5

Don’t know/ refused (DO NOT READ) 9

Q15C

Q15C. In your own words, what would you say are the likely major benefits, if any, of this facility? Any others? (Up to four responses)
No benefits at all 00

Provides employment 01

Provides a convenient source of recreation 02

Entertainment value.. 03

Brings money into the community 04

Increases local or provincial revenue 05

Decreases taxes.. 06

Creates positive spin-offs to other local businesses................................ 07

Increases tourism 08

Decreases illegal gambling... 09

Keeps gambling money from going to outside jurisdictions....................... 10

Provides money for good causes 11

Supports the horse racing industry... 12

Revitalizes/ cleans-up the area 13

Attracts new businesses to the area... 14

Keeps the race track/ Hastings Park open 15

The convention centre/ hotel 16

Record responses 91

Don't know/ refused.. 98

Q15D

Q15D. In your own words, what would you say are the likely major drawbacks, if any, of this facility? Any others? (Up to four responses)

No drawbacks at all 00

Increases gambling addiction 01

Exposes young people to gambling... 02

Negatively impacts people who can least afford to lose money 03

Is morally corrupting 04

Negatively impacts local businesses 05

Negatively impacts other forms of gambling (charity bingo, racing, etc.) .. 06

Brings greater noise/congestion/traffic 07

Adds to crime and/or policing costs 08

More people will be drinking 09

Adds to family problems 10

Attracts the wrong people to the area 11

Negatively impacts the community image 12

People will waste/ lose money gambling 13

Record responses 91

Don't know/ refused 98

Q15E-Q15K – NEW FOR 2005

Q15E

=> Q16A if AREA=1,3,4 OR Q15A=2

Q15E. Have you ever gambled at Fraser Downs Gaming Centre since the addition of the new slot machines and table games?

Yes 1

No .... 2 => Q16A

Q15F

Q15F. How many times have you gone to Fraser Downs Gaming Centre since the addition of the new slot machines and table games?

Daily (30+ times per month) 1

Several times a week (6 - 29 times per month) 2

Several times a month (3 - 5 times per month) 3

Once a month or less (6 - 12 times per year) 4

Only a few days (1 - 5 times per year) 5

Not at all (0 times) .... 6 => Q16A

Don't know/ refused (DO NOT READ) 9

Q15G

Q15G. On average, how much do you spend per visit?
Enter amount per visit...

Reports winning in a typical visit……………………………………...666666
Don't know/ refused 999999

Q15H

Q15H. What sort of impact has the addition of the new slot machines and table games at this facility had on your overall gambling behaviour? Would you say it has...? (Read below)

Increased it 1

Decreased it, or 2

No change 3

Don't know/ refused (DO NOT READ) 9

Q15I

Q15I. Where did you used to go to play table games or slot machines before this facility was expanded?

Did not used to play anywhere 00

Burnaby - Gateway Casino.. 01

Coquitlam - Great Canadian Casino.. 02

New Westminster - Gateway Casino (Royal Towers Hotel) 03

New Westminster - Royal City Star Riverboat Casino................................ 04

Richmond - River Rock Casino Resort.. 05

Vancouver - Gateway Casino (Mandarin Centre)....................................... 07

Vancouver - Grand Casino 08

Vancouver - Great Canadian Casino (Holiday Inn) 09

BC - Outside Lower Mainland.. 10

Washington State 11

Las Vegas/ Reno 12

Cruise Ships 13

Langley - Gateway Casino 14

Vancouver - Edgewater Casino (Plaza of Nations) 15

Record name of facility/ jurisdiction 91

Don't know/ refused 98

Record response 91

Don't know/ refused 98

Q15J

Q15J. Do you spend less on other things now that you sometimes gamble at the expanded Fraser Downs Gaming Centre?

Yes – spend less on other things 1

No change in spending habits 2

Don't know/ refused 9

Q15K

=> +1 if Q15J=2

Q15K. What things would that be?

Record response 91

Don't know/ refused 98

Q16A

=> Q18 if AREA=1,2

Q16A. Are you aware of Gateway Casino that opened in Langley in May 2005? [If not aware, tell respondent...] It is an integrated casino, hotel and convention centre with 500 slot machines and 33 table games.

Yes 1

No 2

Q16B

Q16B. Overall, would you say Gateway Casino is likely to be (read below) to the community?

Very beneficial 1

Somewhat beneficial 2

Neither beneficial nor harmful 3

Somewhat harmful 4

Very harmful 5

Don't know/ refused (DO NOT READ) 9

Q16C

Q16C. In your own words, what would you say are the likely major benefits, if any, of this facility? Any others? (Up to four responses)

No benefits at all 00

Provides employment 01

Provides a convenient source of recreation 02

Entertainment value 03

Brings money into the community 04

Increases local or provincial revenue 05

Decreases taxes 06

Creates positive spin-offs to other local businesses 07

Increases tourism 08

Decreases illegal gambling 09

Keeps gambling money from going to outside jurisdictions 10

Provides money for good causes 11

Supports the horse racing industry 12

Revitalizes/ cleans-up the area 13

Attracts new businesses to the area 14

Keeps the race track/ Hastings Park open 15

The convention centre/ hotel 16

Record responses 91

Don't know/ refused.. 98

Q16D

Q16D. In your own words, what would you say are the likely major drawbacks, if any, of this facility? Any others? (Up to four responses)

No drawbacks at all 00

Increases gambling addiction 01

Exposes young people to gambling.. 02

Negatively impacts people who can least afford to lose money 03

Is morally corrupting 04

Negatively impacts local businesses 05

Negatively impacts other forms of gambling (charity bingo, racing, etc.) .. 06

Brings greater noise/congestion/traffic 07

Adds to crime and/or policing costs.. 08

More people will be drinking 09

Adds to family problems 10

Attracts the wrong people to the area...11

Negatively impacts the community image 12

People will waste/ lose money gambling 13

Record responses 91

Don't know/ refused... 98

Q16E-Q16K – NEW FOR 2005

Q16E

=> Q18 if AREA=1,2 OR Q16A=2

Q16E. Have you ever gambled at Langley Gateway Casino?

Yes.. 1

No .... 2 => Q18

Q16F

Q16F. How many times have you gone to Langley Gateway Casino since it opened?

Daily (30+ times per month) 1

Several times a week (6 - 29 times per month).. 2

Several times a month (3 - 5 times per month) 3

Once a month or less (6 - 12 times per year).. 4

Only a few days (1 - 5 times per year).. 5

Not at all (0 times) .... 6 => Q18

Don't know/ refused (DO NOT READ) 9

Q16G

Q16G. On average, how much do you spend per visit?

Enter amount per visit...

Reports winning in a typical visit………………………………………..666666

Don't know/ refused.. 999999

Q16H

Q16H. What sort of impact has this facility had on your overall gambling behaviour? Would you say it has...? (Read below)

Increased it.. 1

Decreased it, or 2

No change 3

Don't know/ refused (DO NOT READ) 9

Q16I

Q16I. Where did you used to go to play table games or slot machines before this facility was built?

Did not used to play anywhere 00

Burnaby - Gateway Casino........ 01

Coquitlam - Great Canadian Casino........ 02

New Westminster - Gateway Casino (Royal Towers Hotel) 03

New Westminster - Royal City Star Riverboat Casino........ 04

Richmond - River Rock Casino Resort........ 05

Surrey - Fraser Downs Gaming Centre 06

Vancouver - Gateway Casino (Mandarin Centre)........ 07

Vancouver - Grand Casino 08

Vancouver - Great Canadian Casino (Holiday Inn) 09

BC - Outside Lower Mainland........ 10

Washington State 11

Las Vegas/ Reno 12

Cruise Ships 13

Vancouver - Edgewater Casino (Plaza of Nations) 15

Record name of facility/ jurisdiction........ 91

Don't know/ refused........ 98

Record response 91

Don't know/ refused........ 98

Q16J

Q16J. Do you spend less on other things now that you sometimes gamble at Langley Gateway Casino?

Yes – spend less on other things........ 1

No change in spending habits 2

Don't know/ refused........ 9

Q16K

=> +1 if Q16J=2

Q16K. What things would that be?
Record response 91

Don't know/ refused.. 98

Q17 – DELETED IN 2005

=> D1 if Q1=6 AND Q2=6 AND Q3=6 AND Q4=6 AND Q4B=6 AND Q5=6 AND Q6=6 AND Q7=6 AND Q8=6 AND Q9=6 AND Q10=6 AND Q11=6

CANADIAN PROBLEM GAMBLING INDEX

INTRODUCTION

Now I will ask some questions about how often you may or may not have experienced some things as a result of your gambling. Some of the questions may not apply to you, but please try to be as accurate as possible.

Q18

Q18. Thinking about the past 12 months, how often have you bet more than you could really afford to lose? Would you say never, sometimes, most of the time or almost always?

Never.. 1

Sometimes.. 2

Most of the time 3

Almost always.. 4

Don't know (DO NOT READ) 5

No answer/ refused (DO NOT READ)... 9

Q19

Q19. Still thinking about the past 12 months, how often have you felt guilty about the way you gamble or what happens when you gamble? Would you say never, sometimes, most of the time or almost always? [If they insist they do not have a gambling problem skip to the next section and record a 0 for the remaining questions.

If they simply refuse to answer any more of these problem questions skip to the next section and record a 9 for the remaining questions.]

Insists does not have a gambling problem ..... 0 => D1

Never 1

Sometimes 2

Most of the time 3

Almost always 4

Don't know (DO NOT READ) 5

No answer/ refused (DO NOT READ) ..... 9 => D1

Q20

Q20. And, (in the past 12 months), how often have you needed to gamble with larger amounts of money to get the same feeling of excitement? Would you say never, sometimes, most of the time or almost always? [If they insist they do not have a gambling problem skip to the next section and record a 0 for the remaining questions. If they simply refuse to answer any more of these problem questions skip to the next section and record a 9 for the remaining questions.]

Insists does not have a gambling problem ..... 0 => D1

Never 1

Sometimes 2

Most of the time 3

Almost always 4

Don't know (DO NOT READ) 5

No answer/ refused (DO NOT READ) ..... 9 => D1

Q21

Q21. And (in the past 12 months), how often when you gambled did you go back another day to try to win back the money you lost? Would you say never, sometimes, most of the time or almost always? [If they insist they do not have a gambling problem skip to the next section and record a 0 for the remaining questions. If they simply refuse to answer any more of these problem questions skip to the next section and record a 9 for the remaining questions.]

Insists does not have a gambling problem ..... 0 => D1

Never 1

Sometimes.. 2

Most of the time 3

Almost always... 4

Don't know (DO NOT READ) 5

No answer/ refused (DO NOT READ)... 9 => D1

Q22

Q22. And (in the past 12 months), how often have you borrowed money or sold anything to get money to gamble? Would you say never, sometimes, most of the time or almost always? [If they insist they do not have a gambling problem skip to the next section and record a 0 for the remaining questions. If they simply refuse to answer any more of these problem questions skip to the next section and record a 9 for the remaining questions.]

Insists does not have a gambling problem .... 0 => D1

Never 1

Sometimes.. 2

Most of the time 3

Almost always... 4

Don't know (DO NOT READ) 5

No answer/ refused (DO NOT READ)... 9 => D1

Q23

Q23. And (in the past 12 months), how often has your gambling caused any financial problems for you or your household? Would you say never, sometimes, most of the time or almost always? [If they insist they do not have a gambling problem skip to the next section and record a 0 for the remaining questions. If they simply refuse to answer any more of these problem questions skip to the next section and record a 9 for the remaining questions.]

Insists does not have a gambling problem .... 0 => D1

Never 1

Sometimes.. 2

Most of the time 3

Almost always.. 4

Don't know (DO NOT READ) 5

No answer/ refused (DO NOT READ)... 9 => D1

Q24

Q24. And in the past 12 months, has your gambling caused you any health problems, including stress or anxiety? Would you say never, sometimes, most of the time or almost always? [If they insist they do not have a gambling problem skip to the next section and record a 0 for the remaining questions. If they simply refuse to answer any more of these problem questions skip to the next section and record a 9 for the remaining questions.]

Insists does not have a gambling problem .... 0 => D1

Never... 1

Sometimes.. 2

Most of the time 3

Almost always.. 4

Don't know (DO NOT READ) 5

No answer/ refused (DO NOT READ)... 9 => D1

Q25

Q25. And in the past 12 months, how often have people criticized your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true? Would you say never, sometimes, most of the time or almost always? [If they insist they do not have a gambling problem skip to the next section and record a 0 for the remaining questions. If they simply refuse to answer any more of these problem questions skip to the next section and record a 9 for the remaining questions.]

Insists does not have a gambling problem .... 0 => D1

Never... 1

Sometimes.. 2

Most of the time 3

Almost always.. 4

Don't know (DO NOT READ) 5

No answer/ refused (DO NOT READ) .... 9 => D1

Q26

Q26. In the past 12 months, how often have you felt that you might have a problem with gambling? Would you say never, sometimes, most of the time or almost always? [If they insist they do not have a gambling problem skip to the next section and record a 0 for the remaining questions. If they simply refuse to answer any more of these problem questions skip to the next section and record a 9 for the remaining questions.]

Insists does not have a gambling problem .... 0 => D1

Never 1

Sometimes.. 2

Most of the time 3

Almost always.. 4

Don't know (DO NOT READ) 5

No answer/ refused (DO NOT READ) .... 9 => D1

Q27 – DELETED IN 2005

DEMOGRAPHICS INTRODUCTION

Now we have some statistical questions to help classify your responses. All information is anonymous of course.

D1. Which of the following age groups do you fall within?

19 - 24 1

25 - 34 2

35 - 44 3

45 - 54 4

55 - 64 5

65 or over 6

Refused (DO NOT READ) 9

D2

D2. Currently, which best describes you (read below)?
Married 1

Living with a partner 2

Widowed 3

Divorced 4

Separated 5

Never married 6

Refused (DO NOT READ) 9

D3

D3. Which of the following broad categories best describes your family income? That is the combined total income before taxes of all persons in your household. Would you say...? (Read list below)?
Under $30,000 1

$30,000 to just under $60,000 2

$60,000 to just under $100,000 3

$100,000 or more 4

Don't know/ refused (DO NOT READ) 9

D4

D4. What is the highest level of formal education that you have completed? [If necessary, read list below]
Grade school or some high school 1

High school 2

Post secondary technical school 3

Some college or university 4

College diploma.. 5

University degree.. 6

Post graduate degree (Masters, PhD, etc.) 7

Refused (DO NOT READ).. 9

D5

Clarify

D5. What is your present job status? Are you employed full-time, employed part-time, unemployed, a student, retired or a homemaker?

Employed full-time (30 or more hours/week)... 1

Employed part-time (less than 30 hours/week) 2

Unemployed (not looking work).. 3

Unemployed (but looking for work).. 4

Student - employed part-time or full-time 5

Student - not employed 6

Homemaker... 7

Retired 8

Refused 9

D6

=> +1 if D5=9

D6. What IS/ WAS your occupation? [Read list only to clarify]

Never been employed 00

Professional (doctor, lawyer, teacher, nurse).. 01

Business executive/ manager.. 02

Owner/ entrepreneur/ self-employed 03

Commission/ agency sales.. 04

Clerical/ service/ retail sales... 05

Technical (e.g., computer programmer).. 06

Skilled labour (plumber, carpenter, electrician).. 07

Unskilled labour (e.g., waitress/ janitorial services)................................... 08

Police/ military 09

Farmer/ fisher 10

Other - specify 91

Refused (DO NOT READ).. 98

D7

D7. Finally, to what ethnic group did you and your ancestors belong to on first coming to this country? [If person says "Canadian", prompt with...] "In addition to Canadian?" [If not clear, say...] "Are you Scottish, Chinese, Greek, etc.?"

Aboriginal/ Native/ Metis.. 01

African 02

Arabic 03

English/ Irish/ Scottish/ Welsh 04

French 05

Central or Eastern European (Czech, Polish, Croatian, Serbian, etc.)...... 06

Chinese/ Hong Kong/ Taiwanese 07

Dutch 08

East Indian/ Pakistani 09

Filipino/ Philippines... 10

German..11

Greek.. 12

Hungarian 13

D8

D8. Gender (from voice)

Male 1

Female 2

INT

END OF INTERVIEW

We are finished! On behalf of the provincial government and your municipality, thank you for participating.

Complete	21	=> /END
Refused	02	=> /END
Line busy	03	=> /END
No answer call back	04	=> /END
Schedule call back	05	=> /CB
Disqualified – incorrect/ refused Area/ Postal Code	06	=> /END
Not in service/ business	07	=> /END
Interrupted – call back	08	=> /CB
Terminated during interview	09	=> /END
Screened for gender/ age	10	=> /END
Language/ hearing difficulties	11	=> /END

CB

=> END if	$A>25

When would be a good time to call back ?

Appendix B:
Gaming Venue Employee Survey

Please Do Not Write Your Name

Background

We are conducting a survey on behalf of the Government of BC and Lower Mainland Municipalities on the social and economic impacts of gambling. The information gathered in this survey will assist the province and municipalities in understanding the economic and social effects of casinos. Your individual responses will be kept completely confidential and your name and phone number will not be attached to any responses.

Question 1: Are you registered with the G.P.E.B.?

- ☐ Yes
- ☐ No

Question 2: On average, how many hours per week do you work? ____________

Question 3: Which of the following best describes your employment status immediately before you started working at this gaming facility?

- ☐ Unemployed (skip to question 6)
- ☐ Working Full-time
- ☐ Working Part-time

Question 4: What industry were you employed in immediately before your employment with this gaming facility?

- ☐ Entertainment
- ☐ Accommodation or Food Services
- ☐ Other

Question 5a: How does your current compensation compare to your previous job?

- ☐ Current job pays more
- ☐ Current job pays less
- ☐ About the same (skip to question 6)

Question 5b: Including tips/gratuities, approximately what percent more/less does your current job pay than your previous job? ____%

Question 6: Did you move from a different municipality for this job?

- ☐ Yes
- ☐ No

Question 7: Do you live in the municipality where this gaming facility is located?

- ☐ Yes
- ☐ No

Thank you for your time and effort. Your responses will be beneficial in assisting the province, municipalities and the BC lottery corporation in future planning.

Appendix C: Patron Survey

The city of Surrey/Langley/Vancouver and the Province of BC would like to know more about the social and economic impact of Fraser Downs/Gateway Casino/Edgewater Casino on the local community. All of your responses will be kept confidential and you will remain anonymous.

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1. How often do you come here?

- ☐ Daily
- ☐ Several times/wk
- ☐ Several times/mo
- ☐ Once a month or less
- ☐ Only been here a couple of times
- ☐ This is my first visit

2. Roughly how much do you estimate you spend on gambling each visit?

3. Roughly how much do you estimate you spend on food and drink each visit?

4. Roughly how much do you estimate you spend on accommodation each visit?

5. Do you visit or spend money on any other things when you come here?

- ☐ yes
- ☐ no

If yes, what do you visit or spend money on?

6. What impact if any has this facility had on your gambling?

- ☐ I gamble more since this facility opened
- ☐ I gamble the same
- ☐ I gamble less since this facility opened

7. What impact if any has this facility had on your spending on other things such as food, clothing, other entertainment, etc.?

- ☐ I find that I am spending less on other things such as ______________
- ☐ I find I am spending about the same on other things
- ☐ I find that I am spending more on other things such as ______________

8. What was your favourite place to gamble before this facility opened?

- ☐ Fraser Downs Gaming Centre
- ☐ Edgewater Casino
- ☐ Gateway Casino in Langley
- ☐ Great Canadian Casino Coquitlam
- ☐ River Rock Casino Richmond
- ☐ Royal City Star (River Boat Casino) New Westminster
- ☐ Lakeside Resort Casino Penticton
- ☐ One or more of the casinos in Washington State
- ☐ Las Vegas, Nevada
- ☐ Reno, Nevada
- ☐ Other (Please name) ______________
- ☐ Did not gamble before

9. What is your favourite place to gamble now?

- ☐ Fraser Downs Gaming Centre
- ☐ Edgewater Casino
- ☐ Gateway Casino in Langley
- ☐ Great Canadian Casino Coquitlam
- ☐ River Rock Casino Richmond
- ☐ Royal City Star (River Boat Casino) New Westminster
- ☐ Lakeside Resort Casino Penticton
- ☐ One or more of the casinos in Washington State
- ☐ Las Vegas, Nevada
- ☐ Reno, Nevada
- ☐ Other (Please name) ______________
- ☐ Did not gamble before

10. What province or state do you live in?

- ☐ BC
- ☐ AB
- ☐ WASHINGTON
- ☐ OTHER

11. In what city?

- ☐ Abbotsford
- ☐ Agassiz
- ☐ Burnaby
- ☐ Cloverdale
- ☐ Delta
- ☐ Langley
- ☐ Richmond
- ☐ Surrey
- ☐ Vancouver
- ☐ Other ________________________

12. What are the first 3 digits of your postal code or the five digits of your zip code?

13. You are:

- ☐ male
- ☐ female

14. In what year were you born?

19 ___ ___

15. Marital status:

- ☐ Married
- ☐ Living with a partner
- ☐ Widowed
- ☐ Divorced
- ☐ Separated
- ☐ Never married

16. Which of the following broad categories best describes your family income? (That is, the combined total income before taxes of all persons in your household?)

- ☐ Under $30,000
- ☐ $30,000 to $59,000
- ☐ $60,000 to just under $99,000
- ☐ $100,000 or more

17. What is the highest level of education that you have completed?

- ☐ Grade school or some high school
- ☐ Completed high school
- ☐ Post secondary technical school
- ☐ Some college or university
- ☐ Completed college diploma
- ☐ Completed university degree
- ☐ Post-grad degree (Masters, PhD, etc.)

18. To what ethnic or cultural group(s) did your ancestors belong? (For example, Canadian, French, English, Chinese, Italian, German, Scottish, Irish, Cree, Micmac, Métis, Inuit (Eskimo), East Indian, Ukrainian, Dutch, Polish, Portuguese, Filipino, Jewish, Greek, Jamaican, Vietnamese, Lebanese, Chilean, Somali, etc.). Specify as many groups as applicable.

19. Do you have anything you would like to add?

Thank you for participating in the survey!

To be completed by Interviewer

VENUE:

- ☐ Fraser Downs
- ☐ Gateway Casino
- ☐ Edgewater Casino
- ☐ Hastings Racetrack

Date______________________________ Time______________________________

Appendix D: Qualitative Interview Guides

MERCHANT INTERVIEW GUIDE (Drop In Interviews)

1. In the past year, has Cascades Casino/Fraser Downs Gaming Centre:

    a. Increased your sales?

    b. Had no effect on your sales?

    c. Decreased your sales?

2. Ask for and explore possible reasons for above response.

3. In the past year, what overall effects would you say Cascades Casino/ Fraser Downs Gaming Centre has had on:

    a. Local traffic and parking

        i. Positive?

        ii. Negative?

    b. Public order – vandalism, noise, crime, shoplifting, etc.

        i. Positive?

        ii. Negative?

    c. Local commerce

        i. Positive?

        ii. Negative?

    d. General tone of the community

        i. Positive?

        ii. Negative?

4. Do you have any other comments for us?

CITY PLANNERS FOLLOW-UP GUIDE (Telephone Interviews)

1. Over the past year, what expected planning needs, if any, have arisen from the presence and operation of (the facility)?

2. Over the past year, what unexpected planning needs, if any, have arisen from the presence and operation of (the facility)?

3. In the past year, what overall effects would you say (the facility) has had on your community in:

   a. Economic benefits or costs
   b. Social Impacts
      i. Order
      ii. Traffic
      iii. Family issues and services
      iv. Crime
      v. Recreation patterns
      vi. Employment

4. Explore responses.

5. In the past year, what overall impact would you say (the facility) has had on quality of life in your community?

6. Explore responses.

7. Do you have any other relevant comments?

POLICE INTERVIEW GUIDE (Telephone Interviews)

1. In the past year, would you say (the facility):

   a. Increased need for police response?
   b. Had no effect the level of police response
   c. Decreased the need for police response

2. Ask for and explore possible reasons for above response.

3. In the past year, what overall effects would you say (the facility) has had on:

   a. Local traffic and parking issues
      i. Positive?
      ii. Negative?

   b. Public order – vandalism, noise, crime, shoplifting, public intoxication, drinking driving, etc.
      i. Positive?
      ii. Negative?

   c. Family violence or disruption among residents in the immediate area?
      i. Positive?
      ii. Negative

   d. Other crime: Infiltration of major crime, loan sharking
      i. Positive?
      ii. Negative

4. Do you have any other police issues you would mention that are related to (the facilities)?

PROBLEM GAMBLING COUNSELLOR SURVEY

YOUR RESPONSES WILL BE READ ONLY BY THE INDEPENDENT RESEARCH TEAM, NOT BY BCLC OR MINISTRY PERSONNEL

1. Please underline or bold your response: In the past year, have you:

   a. Experienced an increase in your number of clients?
   b. Had about the same number of clients as the previous year?
   c. Experienced a decrease in your number of clients?

2. If your case load increased or decreased, are you able to offer any reasons for this?

3. Place a percent estimate after each choice below. It may not total 100%. About what percent of your clients report gambling mainly at:

   a. Edgewater Casino in Vancouver
   b. Fraser Downs Gaming Centre in Surrey
   c. Cascades Casino in Langley

4. What issues, if any, have your clients mentioned in the past year specifically related to any of the three facilities we are studying?

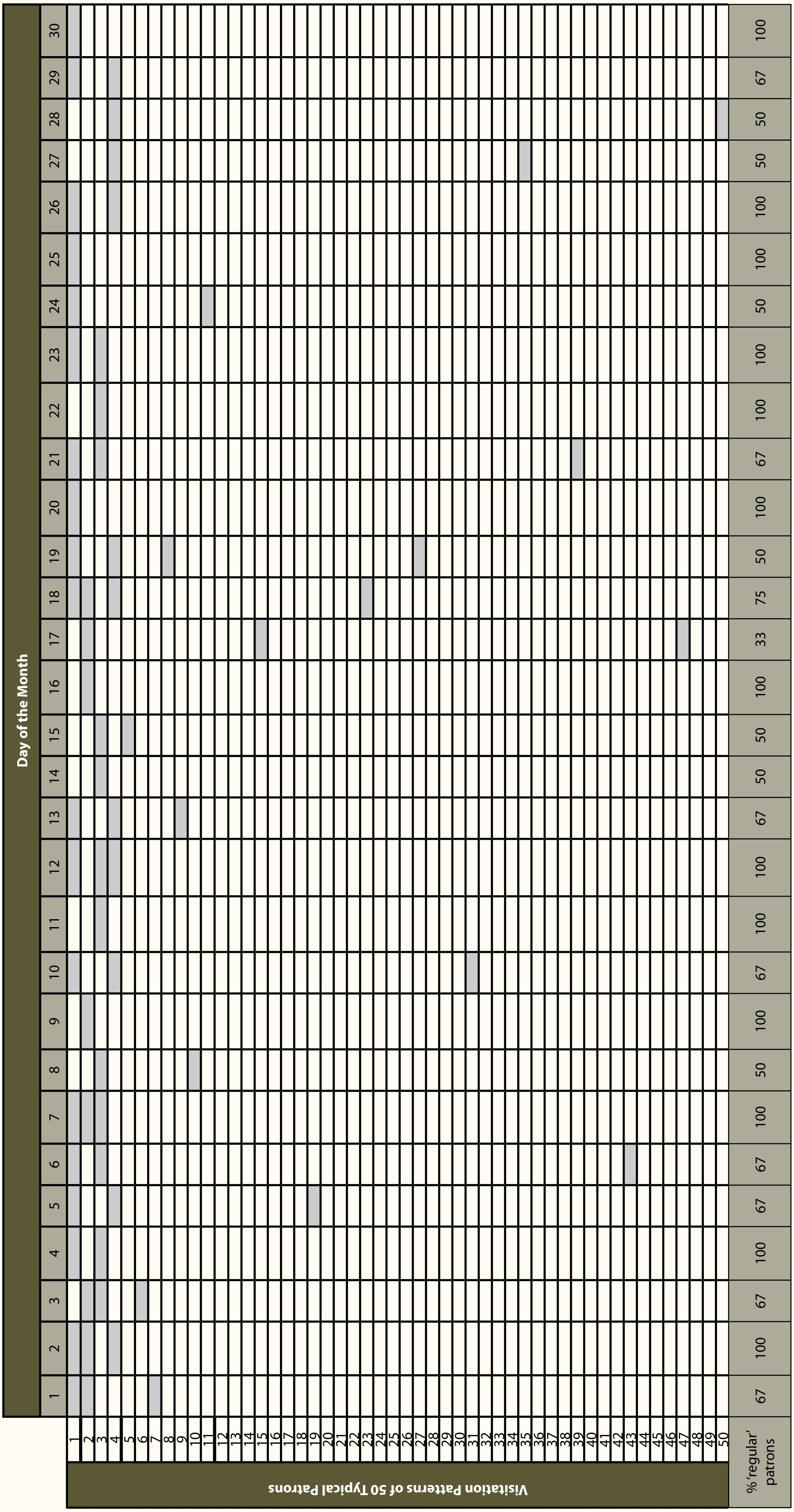
5. Do you have any other relevant comments for us?

That is all. Please send to Colin Mangham by responding to this e-mail. DO NOT hit "Reply to All" option.

Appendix E:
Simulation of Patronage

Surveys of people at the venue itself will always oversample regular patrons, and therefore, provide a picture of "patronage", rather than "patrons". Error! Reference source not found. below illustrates this. The 2005 and 2006 RDD data indicate that for people who do play slot machines, 2.07% go daily or several times a week, 6.00% go several times a month, 14.91% go once a month or less, and 77.02% go just a few days a year. figure 22. displays this visitation pattern for 50 typical patrons in a one month period (1 person going several times a week; 3 people going several times a month; 7 going once a month or less; and 39 going once every four months ("few days every year")). As can be seen, if you survey patrons on any given day during that month, "regular" patrons (i.e., those who gamble several times a month or more) will, on average, constitute about 75% of the your sample, even though they only comprise 8% of all patrons. Thus, venue-based patron surveys provide very useful and representative information about a venue's patronage, as people who attend several times a month or more also account for about 75% of all "visits" (50/67 in the chart below). (Results from the RDD surveys provide a representative survey of "patrons" within the communities being studied).

Figure 22: ***Simulation of Sample Patron Visitation Patterns Based on RDD Data***



Appendix F:
Calculation of Casino Revenue Contribution as a Function of Patron Type (i.e., frequency of attendance)

1. RDD Study establishes the estimated frequency of past year slot machine play among the four communities combined in 2005 and 2006 (reported in Table 28).

	Not at all	Few days	Once a month or less	Several times a month	Several times a week	Daily
2005	74.9%	19.1%	4.3%	1.2%	0.4%	0.1%
2006	76.6%	18.1%	3.1%	1.7%	0.5%	0%

2. The people who do not play slots at all are eliminated, and the prevalence of each type of patron frequency *among slot players* is recalculated (using the precise raw numbers from the RDD SPSS file).

	Not at all	Few days	Once a month or less	Several times a month	Several times a week	Daily
2005 & 2006 combined	Eliminated	77.02%	14.91%	6.00%	1.86%	0.21%

3. The Patron Data in table 54 tells us the self-reported per visit expenditure for each type of gambler. The average reported expenditure for all venues combined, averaging across 2005 and 2006 is as follows:

2005 & 2006	Self-Reported Per Visit Average Expenditure for All Venues Combined	Self-Reported Per Visit Median Expenditure for All Venues Combined
Daily patrons	$206.25	($150.00)
Several times a week patrons	$165.35	($100.00)
Several times a month patrons	$150.75	($100.00)
Once a month or less patrons	$116.67	($60.00)
Few times a year patrons	$82.66	($50.00)

4. The estimated 1 month expenditures of each type of gambler is then tallied:

2005 & 2006	All Venues	Days/month	Estimated Monthly Spending
Daily	$206.25	x 30	$6187.50
Several times a week	$165.35	x 15	$2480.25
Several times a month	$150.75	x 7	$1055.25
Once a month or less	$116.67	x 1	$116.67
Only been here a couple of times	$82.66	x .25	$20.67

5. The monthly spending of each type of gambler is then multiplied by their frequency among slot players to determine the proportion of slot revenue from each type of gambler.

2005 & 2006	Average Estimated Monthly Spending	Prevalence of this Type of Gambler among Slot Players	Estimated Revenue from 100 Randomly Selected Slot Players	Estimated Proportion of Total Slot Revenue
Daily	$6187.50	.21%	$1299.38	8.34%
Several times a week	$2480.25	1.86%	$4613.27	29.62%
Several times a month	$1055.25	6.00%	$6331.50	40.65%
Once a month or less	$116.67	14.91%	$1739.55	11.17%
Only been here a couple of times	$20.67	77.02%	$1540.40	10.22%
TOTAL		**100%**	**$15524.10**	**100%**

6. Thus, the percentage of 1 month slot revenue accounted for by people who play slots several times a month or more is 8.34% + 29.62% + 40.65% = 78.61%. This same proportion occurs regardless of the time frame used (i.e., daily, yearly, etc.). This proportion is similar even if the gambling days per month estimate is assumed to be lower (see below).

2005 & 2006	All Venues	Days/month	Estimated Monthly Spending	Estimated Proportion of Total Slot Revenue
Daily	$206.25	x 20	$4125.00	7.95%
Several times a week	$165.35	x 10	$1653.50	28.24%
Several times a month	$150.75	x 4	$1055.25	33.22%
Once a month or less	$116.67	x 1	$116.67	15.97%
Only been here a couple of times	$82.66	x .25	$20.67	14.61%

In addition to the above analysis, we tabulated the CPGI gambling rating with reported frequency of gambling for the three casinos (Cascades, Fraser Downs, Edgewater). These numbers are not weighted, as the patron population is not the same as the municipal population. There are 96 frequent gamblers (more than several times a month) of which 23 of these (24%) are problem gamblers (moderate and severe problem gamblers).

GAMBLING RATING	THREE STUDY CASINOS					Total
	daily	several/week	several/month	once/month	seldom	
nongambler	1	0	0	0	9	10
nonproblem gambler	2	11	31	102	534	680
low risk gambler	0	8	20	35	100	163
moderate problem gambler	2	3	10	16	32	63
severe problem gambler	3	2	3	2	10	20
Total	**8**	**24**	**64**	**155**	**685**	**936**