

DETERMINING SOCIO-ECONOMIC IMPACTS OF NEW GAMING VENUES IN FOUR LOWER MAINLAND COMMUNITIES

Socio-Economic Issues and Impacts
Final baseline report November 2005

Prepared for:

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Prepared by:

Blue Thorn Research and
Analysis Group

Authors:

Colin Mangham
Greg Carney
Sean Burnett
Robert Williams



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EXECUTIVE SUMMARY

BACKGROUND

Casino style gambling has been expanding rapidly over the last decade in Canada. Gambling is often associated with a range of positive and negative outcomes for individuals, local communities and society and is therefore an important public policy topic. The BC Ministry of Public Safety and Solicitor General, Gaming Policy and Enforcement Branch requires research on the economic and social costs and benefits of increasing casino style venues to develop responsible gaming policies and assist the provincial government and other stakeholders in community planning. The opening of four gaming venues in the Lower Mainland (two new facilities and two expansions of existing facilities to include slot machines) created an opportunity to study the impacts of new gaming facilities. These venues are:

- The Fraser Downs racetrack in Surrey
- The Hastings Racecourse in Vancouver
- The Edgewater Casino in the Plaza of Nations in Vancouver
- The Gateway “Cascades” Casino in Langley

An interim baseline report was prepared in June 2005 that presented initial findings for the study. This final baseline report incorporates that data, as well as additional economic analysis completed this fall.

PURPOSE

The purpose of this document is to provide a summary of the social and economic data collected before and around the time the new venues opened. This data will form the baseline for comparison with data collected over the course of this study from 2004 to 2006, in order to determine the impacts of these gaming venues in the four Lower Mainland communities. Conclusions about venue impacts will appear in the interim and final reports due in 2006 and 2007.

MULTI-PERSPECTIVE APPROACH

This study will use three different methods to assess the social impacts of the new gaming venues:

- Random digit dialling (RDD) survey interviews to assess general public opinion in each of the communities that are part of this study.
- Patron surveys to assess the opinions of those who patronize the new gaming venues
- Local qualitative analysis conducted through interviews and focus groups in the area surrounding each gaming venue.

This study will also use five main economic analysis types, such as econometric estimation and accounting methods, to assess the economic impacts using the following methods:

- Estimating the economic multiplier effect
- Analyzing the economic impacts on the labour force
- Analyzing the economic effects on industry
- Estimating direct and indirect government revenue and costs

- Examining the money flow of gaming facilities in terms of investment capital and profits in and out of the community and in and out of the province.

SOCIAL IMPACTS BASELINE

The RDD attitudinal survey was conducted between September and November 2004 and people who initially declined were recontacted in early January 2005. The survey had a sample size of 3,000 respondents spread over the four communities in this study (578 from Langley City, 672 from the township of Langley, 596 from Surrey and 1154 from the City of Vancouver). The following characteristics and trends emerged from this survey regarding gambling behaviour:

- Outside of lotteries, charity raffles and scratch tickets, a majority of the public does not participate in gambling at all.
- Most people who do gamble tend to spend fairly small amounts on a monthly basis.
- There are four types of gambling where median monthly expenditures are much higher than other forms: high-risk stocks (\$2,799.66), Internet gambling (\$267.62), slot machines (\$100.00), and casino table games (\$100.00).
- For all types of gambling there is a small percentage of gamblers who spend considerably more than the average.
- Among people who play slot machines and/or casino table games, a significant percentage go to destination centres such as Las Vegas and Reno.
- Patrons tend to favour those gaming venues closest to them.
- There are only slight differences in the frequency of involvement in the various gambling activities (lotteries, instant win-

win tickets, slot machines, horse racing, sports betting, etc) between the four different communities.

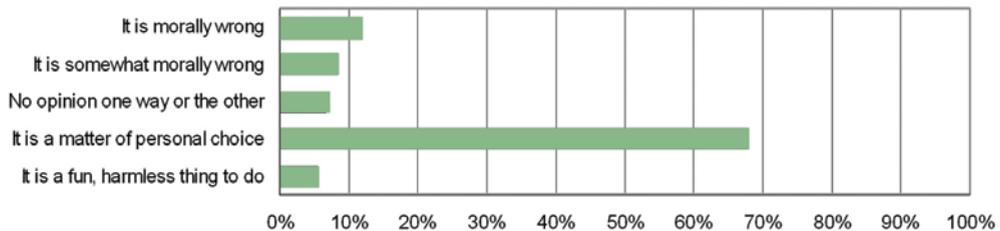
Three of the four casino venues became operational in the spring and summer of 2005. Fraser Downs was operational early in the year; however, final renovations weren't completed until June 2005. The Edgewater Casino in Vancouver opened in February 2005 and Cascades Casino in Langley opened in May 2005. Patron survey and local qualitative analysis data for these venues will be included in the next report.

Hastings Racecourse has a revised opening date – tentatively scheduled for mid 2006. Data for this venue will be collected for the final report.

The following characteristics and trends emerged regarding attitudes towards gambling:

- The most common perceived benefits to gaming venues were (in the words used in the survey question): “provides employment”, “brings money into the community” and “increases tourism”.
- The most common perceived drawbacks to gaming venues were (in the words used in the survey question): “increased crime and policing costs,” “an increase in gambling addiction” and “negatively impacting those who could least afford it”.
- Public awareness of the new gaming venues was generally low, below 40 per cent, with the exception of the Gateway Casino in the City of Langley, which has received considerable news coverage.
- 39 per cent of gamblers report that they gamble more after the opening of a new facility.
- A large majority believe gambling to be a matter of personal choice and not morally wrong.

Which best describes your attitude towards gambling?



ECONOMIC IMPACTS BASELINE

This study will focus on a number of indicators which may reflect negative or positive economic impacts on the lower mainland communities which introduce casino gaming venues. Reflecting the Economic Methodology report, the baseline report prepares available statistical information on five key areas of analysis:

- 1] Estimating the Multiplier Effect
- 2] Analyzing Economic Impacts on the Labour Force
- 3] Analyzing the Economic Effects on Industry
- 4] Estimating Direct and Indirect Government Revenue and Costs
- 5] Examining the Gambling Money Flow

Per the study design, the baseline reports do not measure any casino economic impact but rather prepare baseline trend information which will be extended and monitored throughout the casino implementation and operation.

1. *Estimating the Multiplier Effect*

The multiplier model is explained but due to lags in required employment data, no useful reporting on estimating the multiplier could be made at this time. Instead, snapshot data regarding the pre-existing casino venues are presented. It is evident that a number of casinos have been operating in BC prior to the introduction of these lower mainland casinos.

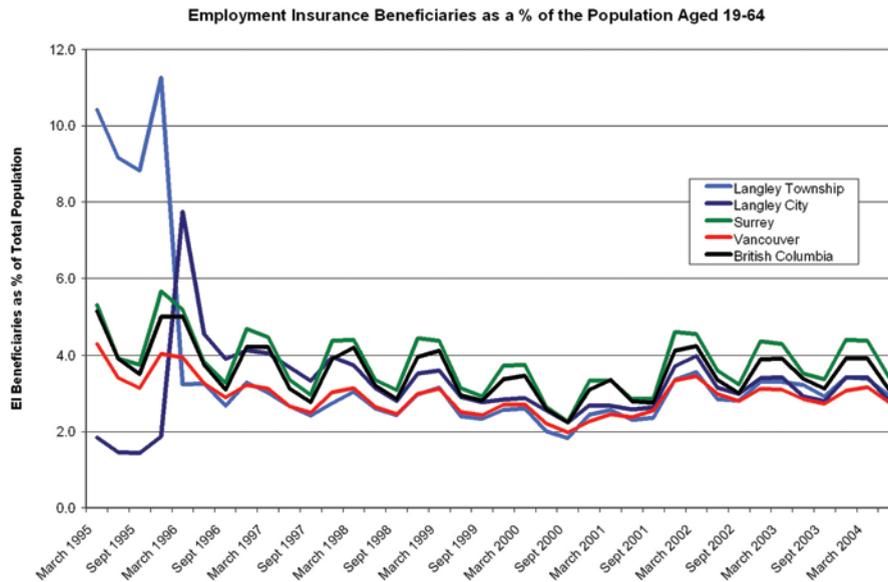
2. *Analyzing Economic Impacts on the Labour Force*

This section prepares quantitative statistics on the employment generated directly by the casino venue itself. A casino employee survey was implemented at Edgewater casino in Vancouver in June, 2005.

The following salient results can be derived from the Edgewater casino employee survey:

- 8.3% of employees were previously unemployed which represents net labour force growth
- More employees stated that they took a wage cut than employees which stated a wage increase (43.17% vs 31.12%).
- Employees who experienced a wage increase experienced a higher increase than those who experienced a wage decrease (30.8% wage increase vs 24.4% wage decrease).
- 19.23% of employees moved to the municipality to work at the casino
- About half of casino employees live in the municipality in which they work

In addition to the employee survey, the number of EI beneficiaries in each municipality will be used to determine the impact of the casinos on employment. The baseline reports includes data up to June 2004 – before any of the casinos in this study opened or expanded.



3. Analyzing Economic Effects on Industry

Measuring the effects on industry due to the introduction of casino-style gaming will be captured by comparing industry trends in the study communities versus control communities. This section prepares quantitative analysis on a variety of trends related to construction. The highly cyclical building cycles for each study municipality are prepared in terms of:

- Annual Housing starts (1993-2004)
- Value of Residential Construction (1999-2004)
- Value of Non-Residential Construction (1999-2004)

4. Estimating Direct and Indirect Government Revenues and Costs

This section prepares financial figures relating to the distribution of casino net win revenues in BC. In addition, a variety of graphs outline trends in problem gambling treatment across the study communities as well as the rest of BC.

- *Total Calls per Month to the Problem Gambling Help Line* indicate that the demand for this service has increased steadily since the beginning of the new call tracking system (2001). However, it should be noted that the service includes non-casino related gambling and a high portion of mis-directed calls – 52% non-gambling related calls to the gambling help line (2004).
- *Total Treatment Sessions Delivered by Month* from 2004-01 to 2005-09 indicates that the demand for clinical treatment has been increasing over the past 21 months in BC
- *Portion of Problem Gambling Admissions by Casino/Slots vs Non-Casino/Slots* indicate that about 40% of problem gambling admissions are categorized as Casino/Slots related.
- *Total New Admissions for Problem Gambling Counselling by Year and Month* from 2004-01 to 2005-09 has been volatile but relatively steady.
- *Total Hours Spent on Preventative Services* has been very volatile with a peak in

November, 2004.

- *Criminal Code Offences* indicate a somewhat steady but seasonal fluctuation in BC and study communities. The data for criminal code offences will be used to determine whether there is a significant increase or decrease in the crime rate due to the introduction of a gaming venue.

5. Examining the Gambling Money Flow

Money flow will be analyzed in terms of investment capital and profits flowing into and out of the municipalities. This section prepares financial figures and background regarding casino/municipality investment packages.

Langley City received a conference centre valued at \$7 million in exchange for sale of land to developer and \$24.5 million in building permits from the Gateway Casinos investments in the Cascades venue. Furthermore, the developer spent \$20.5 million in construction and furnishing costs and some of this was spent locally. There have been minimal costs to the municipality so far as this project is a private public partnership.

Surrey's Fraser Downs Racetrack and Casino saw an investment \$36.1 million for a significant expansion of an existing venue. The city expects indirect benefits of the casino to include increased employment and tourism. Furthermore, the city should benefit by keeping gaming dollars in the community.

Vancouver saw an \$18 Million investment with the Edgewater casino which will employ approximately 660 people and have an annual payroll of approximately \$16 Million.

DISCUSSION

The data presented in this report is baseline data only; no final conclusions can be drawn at this time. However, we can make a note of trends in the data that will be worth watching in future iterations of this study. For example, our baseline data shows a large percentage of residents in the Lower Mainland do not gamble and the proportion of problem gamblers is small. Will these data change or remain stable as new facilities are added? The baseline data also revealed gamblers preferences for large destination facilities in Nevada and facilities closest to them. Will gambling patterns change after the new casinos are introduced? This study's interim and final reports will explore answers to these questions and other questions once more data becomes available.

INTRODUCTION

The casino-style gambling industry has experienced dramatic growth in Canada during the past decade. Statistics Canada reports that Canadian net gaming revenue (the total money wagered, less winnings) from casino-style gaming facilities, non-charity lotteries, and video lottery terminals increased from \$3.2 billion in 1993 to over \$11.8 billion in 2003, with \$6.5 billion of this being profit.

The British Columbia gaming industry generates a broad range of outcomes that could be viewed as beneficial or costly to individuals, local communities, and society as a whole. It is a provincial mandate to develop strategies in cooperation with the gaming industry and local communities to form the foundation of a responsible gambling framework for the province.

PURPOSE OF THE STUDY

In 2004, Blue Thorn Research and Analysis Group, working with Population Health Promotion Associates and the Alberta Gaming Research Centre at the University of Lethbridge, was contracted by the BC Ministry of Public Safety and Solicitor General, Gaming Policy and Enforcement Branch, to assess the economic and social impacts of four yet-to-be built gaming venues in the Lower Mainland region of British Columbia. These venues include:

- The addition of slot machines at Fraser Downs racetrack in Surrey

- The addition of slot machines at Hastings Racecourse in Vancouver
- The creation of Edgewater Casino in the Plaza of Nations in Vancouver
- The creation of Great Canadian Casino in Langley.

The purpose of the study is to learn, to the most comprehensible extent possible, what economic and social costs and benefits will be arising from the creation and operation of these four new venues over time. The intent is to generalize these findings to assist the provincial government and other stakeholders in future planning.

PURPOSE OF THIS DOCUMENT

This document is a report on the baseline social and economic data, which have been gathered prior to the opening of most of the four gaming venues. The plan is to use the same methodology to gather data at regular intervals over the course of this three-year study to track the emergence, change, or stasis of social and economic impacts of the new gaming venues in the Lower Mainland.

MULTI-PERSPECTIVE APPROACH

Due to the wide range of socio-economic effects, no single model can respond to the multi-dimensional information needs associated with gaming facility impact. This study's approach to socio-economic analysis, including parallel economic and attitudinal surveys, is supported by the following statement:

There is likely no ideal analytical method for assessing impacts, rather a menu of options to choose from depending on the domain, sub-domain or impact being considered. Ideally, a

more holistic impact accounting stance is more desirable than a narrowly defined analytic perspective. Traditional methods such as financial analysis and new-classical economic benefit-cost analysis tend to be narrowly focused on the money-related impacts and do not deal well with qualitative impacts which gambling can entail (Wynne, Harold J. and Anielski, Mark, "The Whistler Symposium Report. The First International Symposium on the Economic and Social Impact of Gambling," Sept 23-27, 2000)

To assess social impacts, three different methods are used in this study:

- Random digit dialling survey (RDDs) interviews to assess general public opinion in each of the communities scheduled to receive a new gaming venue
- Patron surveys to assess the opinions of those who patronize the new gaming venues
- Local qualitative analysis conducted through interviews and focus groups in the local area surrounding each gaming venue.

For assessing the economic impacts, the following methods are used. These methods cover five main economic analysis types, ranging from econometric estimation to accounting methods:

- Estimating the economic multiplier effect
- Analyzing the economic impacts on the labour force
- Analyzing the economic effects on industry
- Estimating direct and indirect government revenue and costs
- Examining the money flow of gaming facilities in terms of investment capital and profits in and out of the community and in and out of the province.

BASELINE REPORT LIMITATIONS

Since most of the proposed gaming venues were not in operation at the time of this baseline study, there is a concern that there may not be sufficient data to form a baseline at this time.

Much of this study's socio-economic impact report ideally would be based on data collected from gaming venues that have been in operation for a minimum of three months. This time-in-operation requirement would allow the gaming venue to establish its day-to-day operations and also allows sufficient time for patrons and the general public to form opinions regarding the new gaming venue. Presently, only two of the four new venues are in operation, and only one of them, Fraser Downs, has been open for more than three months. This has limited the amount of data gathered for this baseline report and will result in significant delays in conducting the patron and employee surveys scheduled for each gaming venue.

Much of this study's economic impact report ideally would be based on information available only after the gaming venues have opened. In addition, much of the data used in the economic analysis, including Statistics Canada employment and income data, is subject to significant lags in collection. The combination of these factors, along with delays in scheduled openings of gaming facilities, means the economic section of this baseline report can present only minimal information. Therefore, a second iteration of this report will be produced after the gaming venues have opened.

PROJECT STATUS

During 2004, the Ministry and Contractor, together with an Advisory Committee of municipal and provincial representatives, worked to determine what costs, benefits and impacts would be reasonable to pursue, and developed instrumentation in both the economic and social spheres to gather information. To assist in this process the contractor undertook a comprehensive review of the research literature. This review is documented in Socio-economic Impacts Associated with the Introduction of Casino Gambling: A Literature Review and Synthesis by: Rhys Stevens, B.A., M.L.I.S. & Robert J. Williams, Ph.D., C.Psych.. Date: July 31, 2004.

Operational status of the four planned gaming venues as of June 1, 2005:

- Fraser Downs is in operation but is not in its final completed state.
- The Edgewater Casino opened February 2005.
- Hastings Racecourse has a revised opening date – tentatively scheduled for late 2005.
- The Langley Casino opened in May 2005.

A patron survey was conducted at the temporary Fraser Downs facility. This pilot project allowed us to fine-tune the survey questions, explore different incentive options to attract respondents, and determine response rates for different times of the day on different days of the week. We will be modifying our method to include patron count and origin data supplied by the British Columbia Lottery Corporation (BCLC) for organized bus excursions to casinos. We will also examine how to use BCLC existing patron survey data to measure social and economic impacts.

The delayed casino openings allowed us to complete our baseline RDD attitudinal survey before any venues were fully open. All the gaming venues in the scope of the study should be open by the time the second attitudinal survey is conducted in the fall of 2005.

Some focus group interviews have been conducted within the local communities surrounding the new gaming venues, but the results are still being tabulated and analyzed. The research team is currently formulating an employee survey that will be conducted in conjunction with patron surveys when three of the four gaming venues are in operation by the end of June 2005.

The one-year extension of this study will allow us to conduct two attitudinal surveys after the casino venues are opened. Without the extension, we would not be able to collect much economic impact data for the casinos. Because of the lag time for some economic data sources, we will be limited as to how much economic impact data we can collect. This will make detection of significant economic impacts challenging.

SOCIAL IMPACTS BASELINE

This chapter describes attitudes and practices regarding gambling of the following three groups: the public at large in the four communities; gaming patrons at the four facilities; and commercial, government, and non-profit services surrounding the four gaming facilities. This multi-perspective approach provides three angles from which to judge the social impacts of the four new gaming facilities.

The following methodologies were used to establish the baseline attitudes and practices of the three groups:

- Random Digit Dialling Survey conducted among residents in the four municipalities in which the new gaming facilities are in operation or are in the planning stages.
- Patron Survey conducted at the one venue already in operation, Fraser Downs.
- Local qualitative analysis of impacts through interviews and focus groups in the area surrounding the venue in operation, Fraser Downs.

Since this is a baseline report, its depth is limited to presenting only the data available thus far. No conclusions can be drawn at this point regarding the social impacts of the four new gaming facilities. However, this baseline lists the key indicators to examine in subsequent iterations of the study. These key indicators are listed in the Discussion chapter.

PART I: RANDOM DIGIT DIALING SURVEY

METHODOLOGY

In the fall of 2004, a Random Digit Dialing Survey (RDDS) was conducted among the public in the four communities to gather information on public demographics, attitudes and practices toward gambling, and the prevalence of problem gambling behaviors. The text of this survey is included in Appendix A of this report.

Venture Market Research Corporation, in Victoria, British Columbia, was contracted to conduct the random digit dialing telephone survey of 2,500 adults in the four study communities using a computer-assisted telephone interview (CATI) system. The survey was conducted between September 28 and November 14, 2004. The sample was allocated as follows: 500 for Langley City; 500 for Township of Langley; 500 for Surrey; and 1,000 for the city of Vancouver. Most people who initially declined to be interviewed were re-contacted between January 6 and January 13, 2005. The final sample consisted of 3,000 people: 578 from Langley City; 672 from Township of Langley; 596 from Surrey; and 1,154 from the City of Vancouver.

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

- 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 next birthday.

- Maximum effort was made to complete an interview with the randomly designated person.
- Up to 16 attempts were made to contact the designated person.
- The majority of the telephone interviews were conducted in the evenings and on weekends.
- For individuals with English as a second language, an offer was made to arrange a telephone interview in Cantonese, Mandarin or Punjabi.

CASRO Response Rate

- The first step after conducting the RDDS was to establish the overall response rate for the survey. The most appropriate method of calculating response rates is the one recommended by the Council of American Survey Research Organizations (CASRO)¹. Essentially, this calculation equals the number of completed interviews divided by the number of eligible telephone numbers. In the present RDD survey, the telephone number was eligible if it was a residential household number within one of the four communities to receive a new gaming venue.

Many phone numbers were not eligible because the interviewers could not confirm these numbers were within one of the four designated lower mainland communities. The interviewers often received no answer or respondents refused to participate in the survey. In the Lower Mainland, phone exchanges are not unique to a municipality and when a household moves they may keep their phone number. The percentage of unknown numbers deemed eligible was determined by multiplying the number of unknown cases (d + f + h) by the fraction of telephone numbers that the survey generally found to be eligible ((a + b + c + e + g)/ i).

¹ Council of American Survey Research Organizations (CASRO) (1982). *On the Definition of Response Rates*. Port Jefferson, New York: CASRO.

Table 1 presents the data used to generate the response rate.

Table 1: Response Rate Data, RDD Survey

a	Completed interviews	3,000
b	Prematurely terminated interviews of eligible people	117
c	Refusals by eligible people	unknown
d	Refusals by people with unknown eligibility	6,940
e	Interviews not conducted with eligible people because of language/hearing/competency difficulties	unknown
f	Interviews not conducted with people of unknown eligibility because of language/hearing/competency difficulties	727
g	Eligible numbers that never answer (ascertained by info contained in answering machine message)	unknown
h	Eligibility unknown due to never answering and/or always busy or call-back requests that do not result in a completed interview.	6,377
i	No interview attempt because of ineligibility (business number; out-of-service; residence was not within one of the four designated communities)	8,238

Using the above method, the overall response rate for this survey was 35.6%.

Weighting the Sample

Next, age, gender and ethnicity within each community's RDD sample area were compared against Statistics Canada census data for 2001 (Statistics Canada, 2001). This was done to compensate for the fact that the baseline survey sample tended to under-represent young people, males, and ethnic minority groups, as is the case in most RDD surveys. 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. Demographic data from Statistics Canada is considered to be the "gold standard" because it assesses the entire population and achieves a very high response rate. This is due largely in part to the census' self-administered format which

is more conducive to a valid self-report.

In addition, tables were created for the Total Sample, in which each community's data has been weighted by its relative population size. For example: Langley City (24,000 = .025 weight); Langley Township (63,000 = .065 weight); Surrey (348,000 = .357 weight); Vancouver City (541,000 = .554 weight).

Limitations of the RDD Survey

The response rate of 35.6% and the measures described above to re-contact individuals provides a measure of confidence comparable to other major random digit dialling surveys in Canada. However, all random digit dialling surveys are voluntary in nature. It is possible that those persons willing to participate in the survey may differ in some way from the general population. Of those eligible respondents participating in the survey, some interviews were prematurely terminated and subsequent attempts to reconnect with

the respondent failed. A number of reasons could account for premature termination, including: interrupted phone connection, respondent called away from the phone, respondent does not have time to complete the survey and hangs up, or the respondent receives another phone call on the same line. As well, language can create a barrier despite the fact that provisions were made to interview in Cantonese, Mandarin and Punjabi. In the Lower Mainland, a number of different languages are spoken for which Venture Research does not have the proper interpreters to conduct the surveys.

FINDINGS

The following sections present data on gambling behaviors, gambling attitudes and problem gambling prevalence among the public in the four Lower Mainland communities. The data is presented in tables for each community, followed by a summary table.

Gambling Behaviours – Tables 2 – 5 present data on gambling behaviours in each of the four communities Table 6 provides totals for the entire sample.

Table 2: Gambling Behaviour in the City of Langley in 2004 (n = 578).

	Past Year Frequency of Involvement					Money spent in a typical month (for people reporting any spending in a typical month)		
	not at all	few days per year	once a month or less	several times a month	several times a week	daily	average (SD*)	median
Raffles and Charitable Lotteries	43.7%	39.2%	10.6%	4.0%	1.9%	0.4%	\$23.48 (\$32.10)	\$10.76
Other lotteries	30.5%	19.5%	16.4%	20.7%	12.4%	0.4%	\$22.86 (\$26.40)	\$12.00
Instant Win tickets	52.6%	22.0%	10.1%	9.5%	4.7%	0.8%	\$14.89 (\$20.60)	\$10.00
Bingo	90.7%	5.5%	1.7%	1.6%	0.5%	0%	\$54.55 (\$61.10)	\$30.35
Slot Machines	76.5%	17.9%	3.4%	1.7%	0.3%	0.2%	\$130.01 (\$213.20)	\$60.00
Casino Table Games	89.0%	8.6%	1.9%	0.1%	0%	0.3%	\$147.25 (\$169.20)	\$50.00
Horse Racing	91.8%	6.4%	0.6%	0.4%	0.5%	0.4%	\$46.14 (\$69.60)	\$20.00
Sports Betting	93.0%	4.8%	0.9%	0.7%	0.3%	0%	\$38.76 (\$51.60)	\$25.00
Private Games	84.7%	9.3%	3.2%	1.5%	1.3%	0%	\$34.25 (\$46.80)	\$20.00
Internet Gambling	98.4%	0.9%	0.2%	0%	0.4%	0%	\$11.09 (\$8.30)	\$10.00
High Risk Stocks	95.8%	2.8%	0.5%	0.3%	0.3%	0.2%	\$5,459.46 (\$5,791.00)	\$4100.00

	Where do you normally go to play slots? (n = 138)	What casino do you normally go to play table games? (n = 59)	Where do you normally go to bet on horse racing? (n = 49)
21.0%	Las Vegas/Reno	24.6%	Surrey-Fraser Downs
17.4%	Coquitlam-Great Canadian	15.4%	Vancouver-Hastings Racetrack
13.0%	Surrey- Fraser Downs	15.4%	BC-outside lower mainland
11.6%	New Westminster-Royal City	13.8%	
10.1%	Washington State	7.7%	

SD* - A statistical measure of the spread of results. The higher the standard deviation, the greater the spread of data. Defined as the square root of the sum of squared differences between the average value and all observed values.

Table 3: Gambling Behaviour in the Township of Langley in 2004 (n = 672).

	Past Year Frequency of Involvement					Money spent in a typical month (for people reporting any spending in a typical month)		
	not at all	few days per year	once a month or less	several times a month	several times a week	daily	average (SD*)	median
Raffles and Charitable Lotteries	40.0%	43.8%	11.1%	3.9%	0.9%	0%	\$25.70 (\$33.80)	\$10.00
Other lotteries	36.5%	17.4%	17.8%	19.2%	8.5%	0.3%	\$18.82 (\$19.50)	\$10.00
Instant Win tickets	60.0%	18.1%	9.3%	9.2%	2.8%	0.4%	\$15.07 (\$20.80)	\$10.00
Bingo	95.7%	3.2%	0.7%	0.2%	0.1%	0%	\$64.53 (\$63.20)	\$40.00
Slot Machines	76.8%	18.2%	2.3%	2.1%	0.3%	0.2%	\$140.55 (\$216.30)	\$100.00
Casino Table Games	86.3%	10.8%	1.4%	1.1%	0%	0.2%	\$101.92 (\$66.30)	\$98.75
Horse Racing	93.1%	5.3%	0.4%	0.9%	0.2%	0%	\$159.84 (\$164.20)	\$97.50
Sports Betting	91.8%	3.5%	0.5%	2.4%	1.7%	0%	\$82.13 (\$80.10)	\$50.00
Private Games	85.6%	8.3%	2.7%	2.6%	0.7%	0%	\$130.32 (\$203.70)	\$22.72
Internet Gambling	99.0%	0.4%	0.2%	0.4%	0%	0%	\$28.05 (\$15.30)	\$20.00
High Risk Stocks	94.2%	4.5%	0.5%	0.3%	0%	0%	\$7,466.67 (\$15,106.00)	\$1000.00

	Where do you normally go to play slots? (n = 157)			What casino do you normally go to play table games? (n = 91)			Where do you normally go to bet on horse racing? (n = 47)		
34.5%	Coquitlam-Great Canadian	46.8%	Coquitlam-Great Canadian	58.5%	Surrey-Fraser Downs				
19.0%	Las Vegas/Reno	25.5%	Las Vegas/Reno	37.7%	Vancouver-Hastings Racetrack				
13.8%	Richmond-River Rock	21.3%	Richmond-River Rock	1.9%	BC-outside lower mainland				
13.8%	Washington State	14.9%	Other						
12.9%	Surrey-Fraser Downs	12.8%	BC-outside lower mainland						

SD* - A statistical measure of the spread of results. The higher the standard deviation, the greater the spread of data. Defined as the square root of the sum of squared differences between the average value and all observed values.

Table 4: Gambling Behaviour in the City of Surrey in 2004 (n = 596).

	Past Year Frequency of Involvement					Money spent in a typical month (for people reporting any spending in a typical month)		
	not at all	few days per year	once a month or less	several times a month	several times a week	daily	average (SD)	median
Raffles and Charitable Lotteries	43.5%	43.3%	9.3%	2.9%	0.4%	0%	\$25.54 (\$38.70)	\$10.00
Other lotteries	32.4%	23.1%	18.4%	17.1%	8.3%	0.3%	\$18.91 (\$39.10)	\$10.00
Instant Win tickets	56.7%	21.0%	11.8%	7.3%	1.8%	0.9%	\$17.16 (\$52.80)	\$10.00
Bingo	94.6%	4.1%	0.7%	0.4%	0.3%	0%	\$87.45 (\$95.90)	\$64.40
Slot Machines	73.9%	19.2%	4.1%	1.5%	1.0%	0.3%	\$274.02 (\$744.70)	\$100.00
Casino Table Games	89.0%	7.9%	1.7%	1.1%	0.1%	0.1%	\$3982.06 (\$19,151.00)	\$100.00
Horse Racing	94.1%	4.8%	0.4%	0.3%	0.4%	0%	\$57.31 (\$33.20)	\$50.00
Sports Betting	89.4%	7.2%	0.6%	2.5%	0.3%	0%	\$196.41 (\$552.90)	\$22.11
Private Games	84.0%	11.0%	3.3%	0.8%	0.9%	0.1%	\$36.27 (\$40.30)	\$21.32
Internet Gambling	99.2%	0.1%	0%	0.1%	0.4%	0%	\$1,193.85 (\$1,214.00)	\$1502.75
High Risk Stocks	92.9%	4.4%	1.8%	0.3%	0%	0%	\$24,974.19 (\$68,790.00)	\$400.00

Where do you normally go to play slots? (n = 147)		What casino do you normally go to play table games? (n = 60)		Where do you normally go to bet on horse racing? (n = 35)	
21.8%	Coquitlam-Great Canadian	31.7%	Coquitlam-Great Canadian	60.0%	Surrey-Fraser Downs
16.3%	New Westminster-Royal City	15.0%	New Westminster-Royal City	34.3%	Vancouver-Hastings Racetrack
12.2%	Surrey-Fraser Downs	15.0%	Richmond-River Rock	2.9%	BC-outside lower mainland
10.9%	Las Vegas/Reno	8.3%	Las Vegas/Reno		
8.1%	Richmond-River Rock	6.7%	Burnaby-Gateway Casino		

SD* - A statistical measure of the spread of results. The higher the standard deviation, the greater the spread of data. Defined as the square root of the sum of squared differences between the average value and all observed values.

Table 5: Gambling Behaviour in the City of Vancouver in 2004 (n = 1154).

	Past Year Frequency of Involvement					Money spent in a typical month (for people reporting any spending in a typical month)		
	not at all	few days per year	once a month or less	several times a month	several times a week	daily	average (SD)	median
Raffles and Charitable Lotteries	50.8%	39.5%	6.3%	1.7%	1.4%	0.1%	\$26.05 (\$48.00)	\$14.00
Other lotteries	36.8%	22.1%	17.9%	16.9%	5.9%	0.2%	\$16.75 (\$37.10)	\$10.00
Instant Win tickets	74.3%	15.8%	5.6%	3.1%	0.8%	0%	\$11.27 (\$19.60)	\$5.00
Bingo	97.2%	1.9%	0.5%	0.1%	0.3%	0%	\$65.13 (\$106.00)	\$20.50
Slot Machines	81.5%	15.6%	2.2%	0.6%	0.1%	0%	\$183.31 (\$199.10)	\$100.00
Casino Table Games	89.1%	8.6%	1.3%	0.7%	0.2%	0%	\$242.19 (\$256.40)	\$126.00
Horse Racing	92.7%	5.7%	1.0%	0.5%	0.2%	0%	\$605.62 (\$2,276.00)	\$77.80
Sports Betting	92.3%	4.7%	1.6%	0.9%	0.3%	0.1%	\$758.83 (\$2,586.00)	\$23.02
Private Games	87.8%	7.2%	2.7%	1.5%	0.8%	0.1%	\$321.31 (\$2,006.00)	\$20.80
Internet Gambling	98.8%	0.5%	0.3%	0.2%	0.1%	0.1%	\$3,823.64 (\$10,402.00)	\$193.75
High Risk Stocks	89.8%	5.7%	2.1%	1.3%	0.1%	0.2%	\$8,515.48 (\$15,195.00)	\$3000.00

	What casino do you normally go to play table games? (n = 120)	Where do you normally go to bet on horse racing? (n = 85)
31.1%	Richmond-River Rock	88.2%
23.9%	Las Vegas/Reno	7.1%
11.0%	Burnaby-Gateway Casino	4.7%
8.1%	New Westminster-Royal City	
6.2%	BC-outside lower mainland	
		Vancouver-Hastings Racetrack
		Other
		Surrey-Fraser Downs
		Burnaby-Gateway Casino
		New Westminster-Royal City
		Vancouver-Hastings Racetrack
		Other
		Surrey-Fraser Downs

SD* - A statistical measure of the spread of results. The higher the standard deviation, the greater the spread of data. Defined as the square root of the sum of squared differences between the average value and all observed values.

Table 6:. Gambling Behaviour for Entire Sample weighted by Population (n = 3000).

	Past Year Frequency of Involvement					Money spent in a typical month (for people reporting any spending in a typical month)		
	not at all	few days per year	once a month or less	several times a month	several times a week	daily	average (SD)	median
Raffles and Charitable Lotteries	48.3%	41.0%	7.4%	2.1%	0.9%	0.1%	\$25.82 (\$44.40)	\$11.46
Other lotteries	36.3%	22.4%	17.6%	16.8%	6.4%	0.3%	\$17.49 (\$36.70)	\$10.00
Instant Win tickets	67.5%	17.8%	8.2%	4.7%	1.3%	0.1%	\$13.88 (\$35.90)	\$7.29
Bingo	95.9%	3.1%	0.5%	0.2%	0.3%	0%	\$70.54 (\$99.90)	\$29.59
Slot Machines	78.5%	17.2%	2.9%	0.9%	0.4%	0.1%	\$213.83 (\$488.50)	\$100.00
Casino Table Games	88.9%	8.6%	1.6%	0.7%	0.2%	0.1%	\$1309.10 (\$10,364.00)	\$100.00
Horse Racing	92.2%	6.1%	0.8%	0.6%	0.3%	0%	\$480.33 (\$2,024.00)	\$75.23
Sports Betting	91.9%	5.3%	1.3%	1.1%	0.3%	0.1%	\$567.50 (\$2,170.00)	\$24.60
Private Games	86.1%	8.1%	3.1%	1.6%	0.9%	0.1%	\$238.06 (\$1,673.00)	\$24.02
Internet Gambling	99.0%	0.4%	0.1%	0.2%	0.2%	0.1%	\$3137.22 (\$9,488.00)	\$267.62
High Risk Stocks	91.4%	5.1%	1.7%	0.8%	0.1%	0.2%	\$10,350.30 (\$26,935.00)	\$2799.66

	Where do you normally go to play slots? (645 respondents)	What casino do you normally go to play table games? (333 respondents)	Where do you normally go to bet on horse racing? (234 respondents)
23.5%	Richmond-River Rock	21.9%	Richmond-River Rock
20.1%	Las Vegas/Reno	18.8%	Las Vegas/Reno
11.2%	Coquitlam-Great Canadian	11.5%	Coquitlam-Great Canadian
10.6%	New Westminster-Royal City	9.4%	New Westminster-Royal City
			Vancouver-Hastings Racetrack
			Surrey-Fraser Downs
			Other

SD* - A statistical measure of the spread of results. The higher the standard deviation, the greater the spread of data. Defined as the square root of the sum of squared differences between the average value and all observed values.

Tables 2-5 show baseline gambling behaviors among the public within each of the four communities. The behaviors were pooled in Table 6. The following characteristics and trends emerge from these baseline data:

tickets, the majority surveyed do not participate in gambling at all. The most popular types of gambling within the last year are (in order of popularity): commercial lotteries (63.7%); raffles & charitable lotteries (51.7%); scratch tickets (32.5%); slot machines (21.5%); private games (13.9%); casino table games (11.1%); sports betting (8.1%); high risk stocks (8.6%); horse racing (7.8%); bingo (4.1%); and Internet gambling (1.0%). In each of these gambling categories there is a very small percentage of people who gamble several times a week or more.

1. Aside from lotteries, raffles and scratch

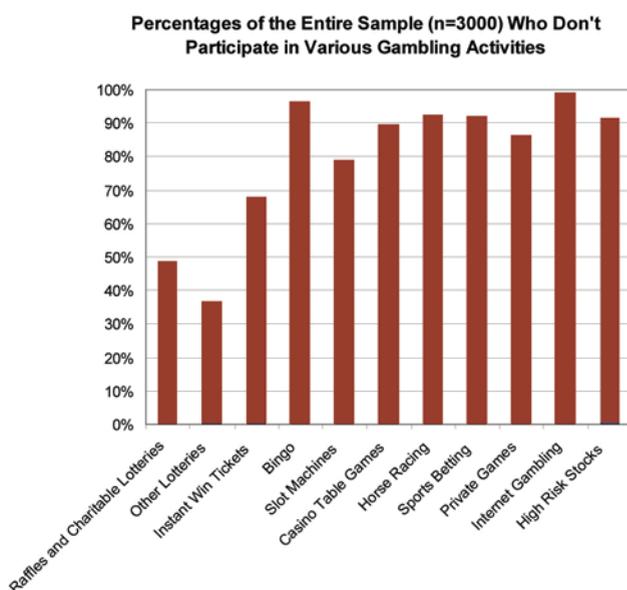


Figure 1: Percentages of the Entire Sample (n=3000) Who Don't Participate in Various Gambling Activities

2. Most people surveyed who gamble tend to spend fairly small amounts on a monthly basis. However, there are four types of gambling where median monthly expenditures are much higher than other forms: high-risk stocks (\$2,799.66), Internet gambling (\$267.62), slot machines (\$100.00), and casino table games (\$100.00).

Also, for all types of gambling there is a small percentage of gamblers who spend considerably more than the average. This is illustrated by the variances between median and mean expenditures for each type of gambling.

**Money Spent in a Typical Month:
 Differences Between Mean and Median**

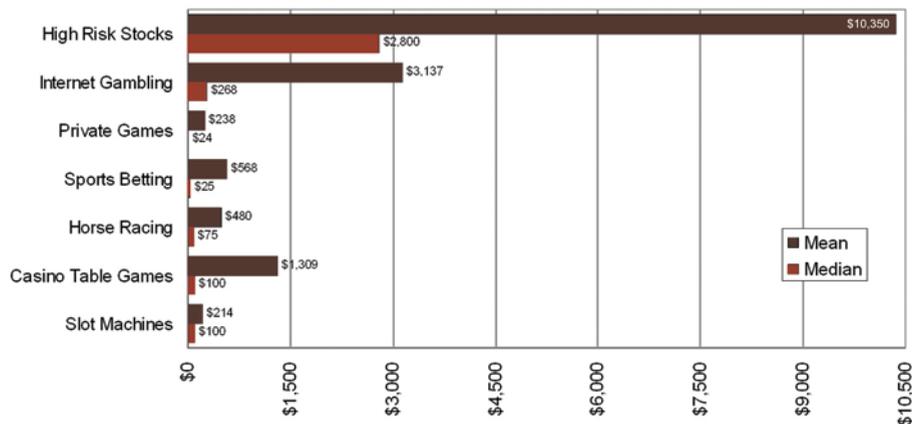


Figure 2: Money Spent in a Typical Month: Differences Between Mean and Median

3. Among people surveyed who play slot machines and/or casino table games, a significant percentage go to big city centres such as Las Vegas and Reno: one in four or five for those living in Vancouver, Langley, and Langley Township, and about one in 10 for Surrey. For the pooled sample weighted by municipality, Las Vegas/Reno is second only to River Rock Casino as the venue people regularly go to. People tend to go to the local gaming facilities closest to them. People in Surrey, the City of Langley and the District of Langley are more likely to go to Coquitlam or New Westminister, while those in Vancouver go to Richmond.

4. There are slight differences in the patterns of game play and expenditure between the four different communities.

Gambling Attitudes

To determine gambling attitudes among the public, the RDD survey asked the interviewees about the following:

- Beliefs about whether gambling in general is beneficial or harmful for society. Persons were asked to respond to this question using a scale that went from “the benefits far outweigh the harm” to “the harm far outweighs the benefits.”
- Normative attitudes toward gambling on a scale running from “It is a fun, harmless thing to do” to “It is morally wrong.”
- Perceptions from residents within each respective community as to whether the new venue(s) planned for their community were going to be harmful or beneficial, again on a relative four-point scale.
- Benefits or drawbacks of the venue(s) being built in their respective communities.

As part of this section, participants were asked whether they were aware of the respective venue(s) planned for their community.

Tables 7 - 11 present the data with respect to gambling attitudes.

Table 7: Gambling Attitudes in the City of Langley in 2004 (n = 578).

	benefits far outweigh harm	benefits somewhat outweigh harm	benefits and harm equal	harm somewhat outweighs benefits	harm far outweighs benefits	Average score (+2 to -2)
Which best describes your belief about the benefit or harm that gambling has for society?	7.0%	16.9%	31.4%	16.6%	28.0%	-0.42
Which best describes your attitude towards gambling?	7.1%	71.4%	5.1%	5.9%	10.6%	+0.58
<p>Note: 95.1% of respondents were aware of the scheduled opening of Gateway Casino in April 2005. The remaining 4.9% were told it was 'an integrated casino, hotel and convention centre with 500 slot machines and 33 table games.'</p>						
	very beneficial	somewhat beneficial	neither beneficial nor harmful	somewhat harmful	very harmful	Average score (+2 to -2)
Overall, would you say Gateway Casino is likely to be _____ to the community?	15.8%	35.2%	9.1%	21.9%	18.0%	+0.09
<p>In your own words, what would you say are the likely major benefits, if any, of this facility (Gateway Casino)? Any others? (Up to four responses) (805 total responses)</p>						
22.0%	Provides employment	27.1%	Adds to crime and/or policing costs			
13.9%	Increases tourism	21.1%	Increases gambling addiction			
11.1%	Provides money for good causes	15.3%	Greater noise/congestion/traffic			
10.9%	Increases local or provincial government revenue	12.0%	Negatively impacts people who can least afford it			
10.7%	Brings money into the community	7.2%	No drawbacks at all			
10.1%	No benefits at all	4.8%	Don't know/refused			
4.1%	Don't know/refused	3.4%	Adds to family problems			
3.6%	Entertainment value	2.2%	Attracts the wrong type of people to the area			

Table 8: Gambling Attitudes in the Township of Langley in 2004 (n = 672).

Which best describes your belief about the benefit or harm that gambling has for society?	benefits far outweigh harm	benefits somewhat outweigh harm	benefits and harm equal	harm somewhat outweighs benefits	harm far outweighs benefits	Average score (+2 to -2)
	6.1%	12.6%	34.0%	16.5%	30.7%	-0.53
Which best describes your attitude towards gambling?						
	6.0%	66.1%	5.8%	6.1%	16.0%	+0.40
	it is a fun, harmless thing to do	it is a matter of personal choice	no opinion one way or the other	it is somewhat morally wrong	it is morally wrong	Average score (+2 to -2)

Note: 88.5% of respondents were aware of the scheduled opening of Gateway Casino in April 2005. The remaining 11.5% were told it was "an integrated casino, hotel and convention centre with 500 slot machines and 33 table games."

Overall, would you say Gateway Casino is likely to be _____ to the community?	very beneficial	somewhat beneficial	neither beneficial nor harmful	somewhat harmful	very harmful	Average score (+2 to -2)
	13.7%	26.0%	15.3%	24.0%	21.0%	-0.12

In your own words, what would you say are the likely major benefits, if any, of this facility (Gateway Casino)? Any others? (Up to four responses) (911 total responses)	In your own words, what would you say are the likely major drawbacks, if any, of this facility (Gateway Casino)? Any others? (Up to four responses) (961 total responses)
22.4% Provides employment	27.1% Increases gambling addiction
13.3% Increases local or provincial government revenue	22.8% Adds to crime or policing costs
12.8% Provides money for good causes	16.8% Negatively impacts people who can least afford it
12.3% No benefits at all	11.1% Brings greater noise/congestion/traffic
10.0% Increases tourism	8.0% No drawbacks at all
9.5% Brings money into the community	3.9% Adds to family problems
4.1% Entertainment value	2.9% Don't know/refused
3.5% Don't know/refused	1.5% Negatively impacts the community image

Table 9: Gambling Attitudes in the City of Surrey in 2004 (n = 596).

Which best describes your belief about the benefit or harm that gambling has for society?	benefits far outweigh harm	benefits somewhat outweigh harm	benefits and harm equal	harm somewhat outweighs benefits	harm far outweighs benefits	Average score (+2 to -2)
	8.1%	13.4%	26.5%	21.0%	31.0%	-0.53
Which best describes your attitude towards gambling?	it is a fun, harmless thing to do	it is a matter of personal choice	no opinion one way or the other	it is somewhat morally wrong	it is morally wrong	Average score (+2 to -2)
	7.0%	65.9%	5.9%	6.7%	14.5%	+0.44

Note: 62.0% of respondents were aware of the scheduled expanded facilities of Fraser Downs Gaming Centre in November 2004. The remaining 38.0% were told it was "a horse race track and casino with 400 slot machines and 3 table games."

Overall, would you say Fraser Downs Gaming Centre is likely to be _____ to the community?	very beneficial	somewhat beneficial	neither beneficial nor harmful	somewhat harmful	very harmful	Average score (+2 to -2)
	11.6%	28.5%	17.0%	26.2%	16.7%	-0.08

In your own words, what would you say are the likely major benefits, if any, of this facility (Fraser Downs Gaming Centre)? Any others? (Up to four responses) (712 total responses)

21.8%	Provides employment	28.2%	Increases gambling addiction
17.4%	Provides money for good causes	16.7%	Negatively impacts people who can least afford it
16.7%	No benefits at all	15.9%	Adds to crime and/or policing costs
10.0%	Increases tourism	11.1%	No drawbacks at all
8.6%	Don't know/refused	9.3%	Brings greater noise/congestion/traffic
7.4%	Increases local or provincial government revenue	3.3%	Adds to family problems
5.8%	Entertainment value	2.6%	Other
4.5%	Brings money into the community	1.4%	Exposes young people to gambling

Table 10: Gambling Attitudes in the City of Vancouver in 2004 (n = 1,154).

Which best describes your belief about the benefit or harm that gambling has for society?	benefits far outweigh harm	benefits somewhat outweigh harm	benefits and harm equal	harm somewhat outweighs benefits	harm far outweighs benefits	Average score (+2 to -2)
	4.3%	11.8%	27.3%	25.0%	31.7%	-0.68
Which best describes your attitude towards gambling?	it is a fun, harmless thing to do	it is a matter of personal choice	no opinion one way or the other	it is somewhat morally wrong	it is morally wrong	Average score (+2 to -2)
	4.9%	68.5%	7.1%	9.1%	10.5%	+0.48

Note: 38.8 per cent of respondents were aware of the scheduled November 2004 opening of Edgewater Casino in the Plaza of Nations . The remaining 61.2 per cent were told it was "a casino with 600 slot machines and 51 table games."

Overall, would you say Edgewater Casino is likely to be _____ to the community?	very beneficial	somewhat beneficial	neither beneficial nor harmful	somewhat harmful	very harmful	Average score (+2 to -2)
	4.9%	21.1%	21.8%	31.2%	21.0%	-0.42

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) (1,468 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) (1,616 total responses)

- 19.4% No benefit at all
- 17.0% Provides money for good causes
- 15.9% Provides employment
- 12.4% Increases tourism
- 9.7% Entertainment value
- 9.4% Increases local or provincial government revenue
- 7.0% Don't know/refused
- 3.2% Brings money into the community

- 31.6% Increases gambling addiction
- 18.3% Negatively impacts people who can least afford it
- 16.7% Adds to crime and/or policing costs
- 7.7% Don't know/refused
- 7.0% No drawbacks at all
- 5.8% Brings greater noise/congestion/traffic
- 3.6% Other
- 3.3% Adds to family problems

Note: 63.1 per cent of respondents were aware of the scheduled expansion of Hastings Racecourse with new slots to be added in March 2005. The remaining 36.9 per cent were told it was "a horse race track, which is adding 600 slot machines."

Table 10 (cont) : Gambling Attitudes in the City of Vancouver in 2004 (n = 1154)

Overall, would you say Hastings Racetrack is likely to be _____ to the community?		very beneficial	somewhat beneficial	neither beneficial nor harmful	somewhat harmful	very harmful	Average score (+2 to -2)
		6.7%	22.0%	25.6%	28.2%	17.6%	-0.28
In your own words, what would you say are the likely major benefits, if any, of this facility (Hastings Racetrack)? Any others? (Up to four responses) (1,384 total responses)							
23.6%	No benefit at all	In your own words, what would you say are the likely major drawbacks, if any, of this facility (Hastings Racetrack)? Any others? (Up to four responses) (1,483 total responses)					
15.7%	Provides employment	29.5%	Increases gambling addiction				
10.7%	Keeps the racetrack/Hastings Park open	18.1%	Negatively impacts people who can least afford it				
10.7%	Provides money for good causes	13.1%	Adds to crime and/or policing costs				
10.3%	Don't know/refused	11.9%	No drawbacks at all				
10.0%	Entertainment value	11.3%	Don't know/refused				
6.9%	Increases tourism	6.2%	Brings greater noise/congestion/traffic				
6.3%	Increases local or provincial government revenue	2.4%	Other				
		1.7%	Adds to family problems				

Table 11: Gambling Attitudes in the Entire Sample weighted by Population (n = 3,000)

	benefits far outweigh harm	benefits somewhat outweigh harm	benefits and harm equal	harm somewhat outweighs benefits	harm far outweighs benefits	Average score (+2 to -2)
Which best describes your belief about the benefit or harm that gambling has for society?	5.2%	12.3%	27.5%	23.5%	31.4%	-0.64
Which best describes your attitude towards gambling?	5.5%	67.8%	6.7%	8.3%	11.7%	+0.47
	it is a fun, harmless thing to do	it is a matter of personal choice	no opinion one way or the other	it is somewhat morally wrong	it is morally wrong	

Which best describes your belief about the benefit or harm that gambling has for society?

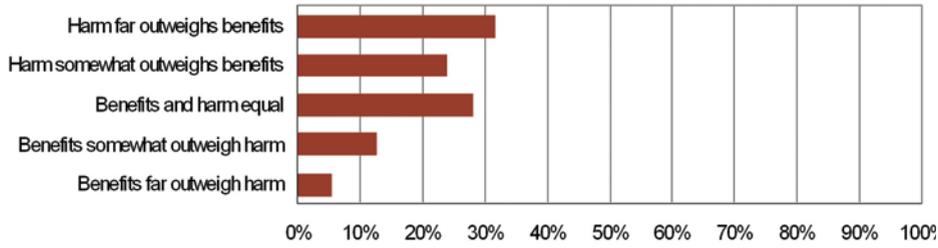


Figure 3: Which best describes your belief about the benefit or harm that gambling has for society?

Which best describes your attitude towards gambling?

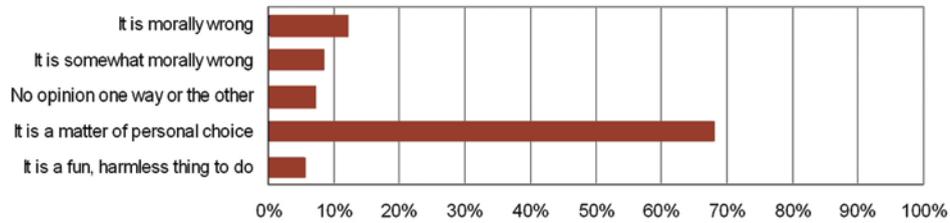


Figure 4: Which best describes your attitude towards gambling?

Overall, would you say [the local casino] is likely to be _____ to the community?

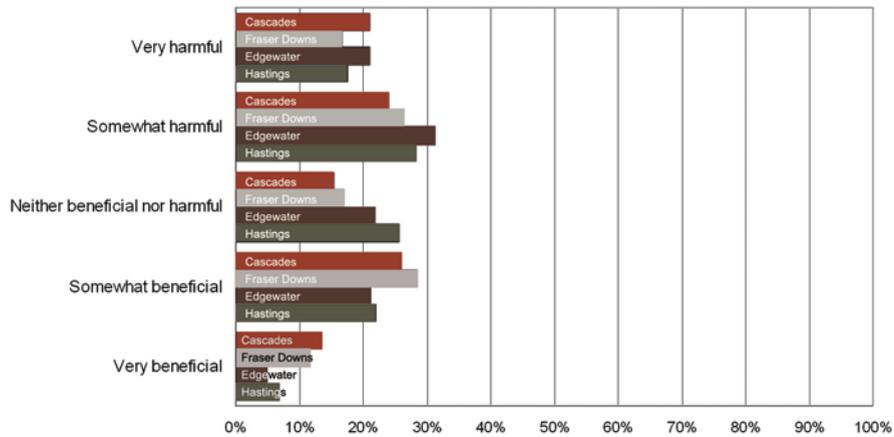


Figure 5: Overall, would you say [the local casino] is likely to be ---- to the community?

A number of trends emerge from the baseline RDD survey data on attitudes toward gambling:

- 1] More people believe the harm outweighs the benefits of gambling, by an average ratio of 2 to 1.
- 2] When asked the normative attitude question pertaining to the “rightness or wrongness” of gambling, a large majority in all communities indicated gambling was a matter of personal choice and not morally wrong.
- 3] Among responses pertaining to the potential benefits or harm of the specific venue slated for their community, there were more positive responses than the general opinion about the benefits or harm of gambling. Overall, the public was evenly split as to whether the venue would be beneficial or harmful to the community. The exception to this case was the Edgewater Casino in the Plaza of Nations, where significantly more people believed this venue would be harmful.
- 4] When asked about likely benefits of a gaming venue, respondents in Surrey, Langley City and the township of Langley gave the highest ranking to benefits, such as bringing in employment, more money for good causes, and bringing in tourism. In Vancouver, the largest group of respondents ranked “no benefits” the highest, followed by the above-mentioned benefits. The highest percentage response for any one item was about 20 per cent.
- 5] The most commonly reported drawbacks of new gaming facilities cited in the responses were: “increased crime and policing costs,” “an increase in gambling addiction,” and “negatively affecting those who could least afford it.”

The highest percentage of response for any one item was about 30 per cent.

- 6] Public awareness of each venue was varied. The highest awareness of a new gaming venue in their area was among the public in Langley with respect to the Gateway Casino. It should be noted that this casino has for some time received considerable news coverage in the City of Langley and the Township of Langley. The lowest level of awareness was in Vancouver with respect to the Edgewater Casino, where only 38.8 per cent of the Vancouver public was aware of the planned facility.

Problem Gambling

Respondents in the RDD survey were asked questions from the Canadian Problem Gambling Index (CPGI) to establish baseline prevalence of non-gamblers, non-problem gamblers, low risk gamblers, moderate problem gamblers and severe problem gamblers. Table 12 gives a breakdown of these results.

Table 12. Problem Gambling Status in 2004.

	Langley City	Langley Township	Surrey	City of Vancouver	Weighted Average
Non Gamblers	15.7%	19.0%	17.7%	20.2%	19.5% ± 2.6% (95% C.I.*)
Non Problem Gamblers (CPGI 0)	74.4%	69.4%	67.7%	64.6%	65.7% ± 3.1% (95% C.I.)
Low Risk Gamblers (CPGI 1-2)	7.3%	7.6%	9.1%	9.1%	9.0% ± 1.9% (95% C.I.)
Moderate Problem Gamblers (CPGI 3-7)	2.0%	3.6%	4.0%	4.5%	4.3% ± 1.3% (95% C.I.)
Severe Problem Gamblers (CPGI 8+)	0.5%	0.4%	1.6%	1.5%	1.5% ¹ ± 0.8% (95% C.I.)

1] Ipsos-Reid and Gemini Research conducted a prevalence study of gambling and problem gambling in British Columbia in 2002 and concluded that the rate of severe problem gambling was 0.4 per cent. The 2002 results are not comparable the above results due to the significant difference in survey methodologies.

The most important difference concerns the use of "refusal conversion." In the current study, people who initially refused to participate were contacted again to see if they would then agree. The people who agreed on this second attempt had twice

the prevalence rate of severe problem gambling compared to people who had agreed on first contact.

Other methodological differences were: more call-back attempts (16 versus 10); weighting by age, gender and ethnicity (versus just age and gender); and having the survey conducted in English, Punjabi, Mandarin and Cantonese (versus English only in the Ipsos-Reid study).

The baseline data presented here can be compared only to data collected using the same methodology in the following years of this study.

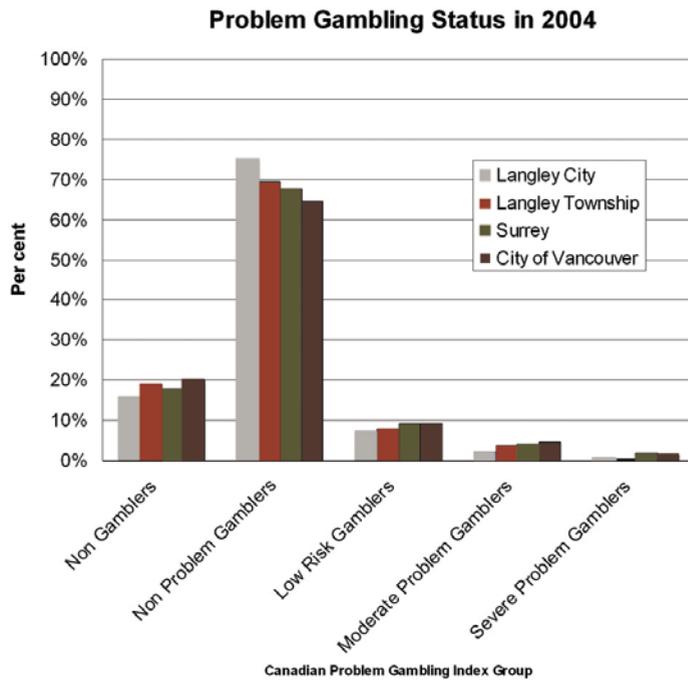


Figure 6: Problem Gambling Status in 2004

PART II: PATRON SURVEY

METHODOLOGY

In order to generate a baseline from which to measure social and economic benefits, costs and other impacts, information from patrons of gaming venues is required. In 2004, the project team, which included members of the Ministry, Contractor, and Advisory Committee, developed a patron survey. This voluntary survey solicited self-report information in three domains: demographics, gambling patterns and expenses.

ADMINISTRATION

In January 2005, the survey was administered to patrons at Fraser Downs on three consecutive evenings. Participants were given an incentive of coffee and donuts to participate. The refusal rate was approximately 50%. The researchers did not note any pattern in refusals. The most frequent reason for refusal was "I do not have time." Participants completed their surveys and dropped them into a sealed box. A total of 114 completed surveys were received.

After an initial analysis of the survey results it was determined that the sample size was insufficient. It was recommended that future patron surveys set a target of 200 completed patron surveys at each gaming venue. Furthermore, Fraser Downs was the only one of the four new gaming facilities operating at the time of this survey, but even at that point in time the facility was only temporary and would be in its final form at a later date. With these conditions in mind, the research team has decided that this particular instance of the patron survey will be regarded as a pilot project.

While these results will not be used in the study, this survey process did provide the research team with insight and experience that will be used to formulate future patron surveys that will be conducted at the new gaming facilities as they become operational. This pilot has also determined the peak response rates at different times of the day on different days of the week and the incentives that will heighten response rates. The team also decided that patron surveys would be conducted only at gaming facilities that had been in operation for at least three months. This would allow enough time for the gaming venues to establish their operations, attract clientele and allow patrons to form opinions.

PART III: LOCAL QUALITATIVE ANALYSIS

The third method for assessing social impacts is to conduct interviews and focus groups with commercial, government and non-profit services surrounding the gaming facilities. At the time of this baseline study, the only venue in operation was Fraser Downs. Hence the only local baseline data available was in the vicinity of this new venue. Much of this data is still being analyzed and includes:

- Interviews with local hoteliers, fast food restaurant managers, service stations, and restaurants
- Interviews with pawn shops and cheque-cashing services
- Interviews with Surrey police
- Survey of Gambling Counsellors in the Lower Mainland

Establishments in each of these categories were asked if they noticed any changes in business or services attributable to the new venue, and if so, what sorts of changes. Based on the self-report of the above mentioned parties, the Fraser Downs venue has produced very few, if any, tangible local impacts, positive or negative. The lack of reported impacts is not at all surprising because the venue was still relatively new. However, the data gathered in this local qualitative analysis does provide a baseline for future comparisons.

ECONOMIC IMPACTS BASELINE

In keeping with the multi-perspective approach, different methods will be used in five main economic analyses ranging from econometric estimation to accounting methods:

- Estimating the economic multiplier effect
- Analyzing the economic impacts on the labour force
- Analyzing the economic effects on industry
- Estimating direct and indirect government revenue and costs
- Examining the money flow of gaming facilities in terms of investment capital and profits in and out of the community and in and out of the province.

PART I: ESTIMATING THE MULTIPLIER EFFECT

Estimating the economic multiplier associated with the introduction of casino-style gaming depends on before and after employment data. Since most of the gaming facilities are not yet in operation, coupled with the delay in collecting employment data, the multiplier estimation cannot be performed in time for this baseline analysis. Background on the approach is presented here.

WHAT IS A “MULTIPLIER”?

The multiplier effect is the central challenge in assessing the economic impact of introducing casino-style gambling to a community. The multiplier is the ratio of total economic effect on a local economy to the direct gaming venue investment. There are different types of multipliers, including the employment multiplier, income multiplier, government revenue multiplier, etc. This study will focus on the employment multiplier to gauge the net new jobs and earnings created by the establishment of a new gaming venue.

Employment related to the introduction of casino-style gambling includes:

- Direct employment at the gaming venue (gaming)
- Direct employment at the gaming venue (non-gaming)
- Direct employment in the construction of gaming facilities, and upgrading & maintenance of the facilities
- Indirect employment in complimentary sectors such as hotels, restaurants, etc.
- Direct employment in corporations servicing the gaming industry, such as gaming equipment providers

ECONOMIC IMPACT FACTORS

Economic impact studies typically cite two offsetting factors for the economic impact of a gaming facility: crowding out and export growth. The relative weight of these factors determines whether a community will prosper or decline as a result of the gaming facility.

Crowding Out

It is argued that the multiplier effect does not hold true for casino-style gambling

because money spent by gaming facility patrons would otherwise be spent in other local establishments. According to this argument, gaming facilities crowd-out other businesses (Grinols and Omorov, 1995). The one exception occurs when patrons come from outside the municipality, bringing “outside money” into the local economy.

Considered on a province-wide scale, if the province were to reach a point of gaming saturation, crowding out could also then become a factor. The first gaming facility in the province may attract many outside-community patrons while the tenth gaming facility may attract only patrons for whom the gaming facility is closest. Therefore, the multiplier estimation model will include an explanatory variable that will represent the distance away from other casinos.

Export Growth

The export hypothesis suggests that communities that attract a larger number of patrons from outside the community will have a greater impact on the local economy (Ryan et al, 1999) because they are “exporting” their product, gaming. However, Walker and Jackson point out that export is not the sole determinant of growth, giving the example of the world economy, which has grown enormously without exporting anything. From this we would expect municipalities that attract a larger number of patrons from outside the local community to have a larger multiplier than those that cater more to local patrons, but we would not assume export to be a necessity for a multiplier greater than 1.

Results of patron surveys will identify out-of-community patrons to estimate the export growth factor.

Whether a gaming facility will drive out other business or cause the community to grow as a whole will be measured within a multiplier regression model based on total employment in a community over time.

BASELINE REPORTS RELATED TO THE MULTIPLIER MODEL

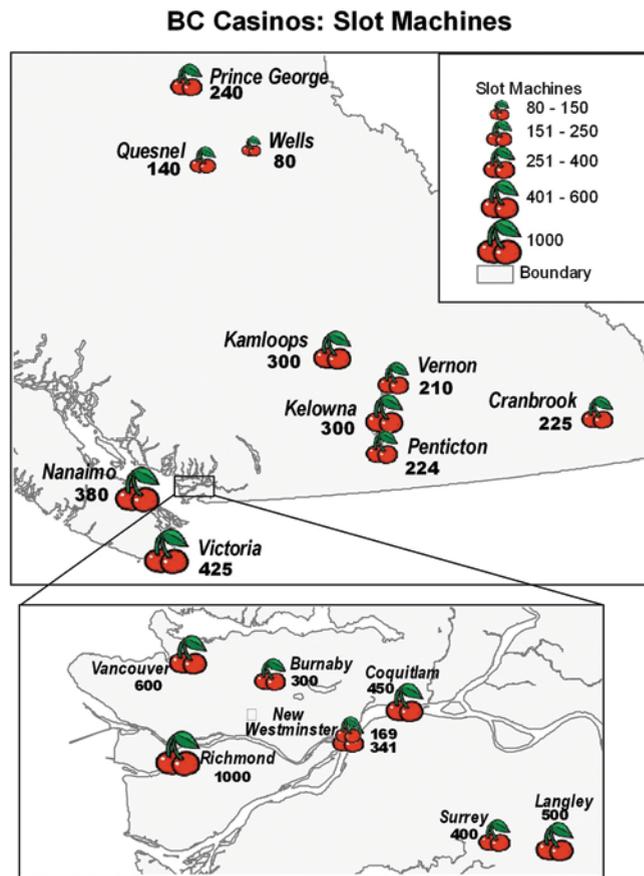


Figure 7: Map 1 - Existing Slot Machine Facilities as of 2005

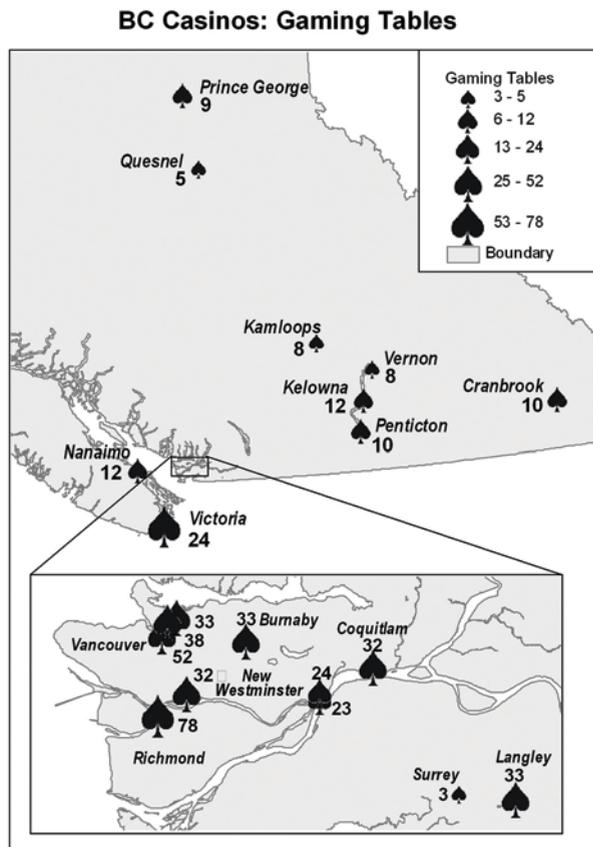


Figure 8: Map 2 – Existing Gaming Tables as of 2005

PART II: ANALYZING ECONOMIC IMPACTS ON THE LABOUR FORCE

APPROACH

The economic impacts of new gaming facilities on the local labour force will be addressed through descriptive statistics. In addition to examining data trends in municipalities before and after the introduction of a new gaming venue, study communities will be compared with matched control communities. The ultimate goal of using matched control communities is to compare the change in labour force characteristics in gaming venue and non-gaming venue communities. This will effectively isolate labour force effects associated with the introduction of a new gaming venue.

Changes in the following labour force characteristics will be presented and compared:

- Per capita income
- Employment rates
- Participation rates
- Wage rates

The control communities will consist of directly matched communities based on the criteria listed below, as well as a BC average of all non-study communities. See Appendix C for a list of characteristics on which communities will be matched. The municipality of Vancouver will not have a directly matched control community. It will be compared only to the BC average of all non-study municipalities.

Employee Survey

One aspect of the economic impact on labour force is to differentiate between gaming venue employees who were previously unemployed and those who switched from other employment. Similarly, it is useful to record whether gaming venue employees experienced an increase in income due to their change in employment. To gather this information, an employee survey will be conducted at each of the new gaming facilities.

Casino employee surveys were completed at Edgewater Casino in Vancouver during the first week of June, 2005. The survey focused on getting a better understanding of the employment history, comparative wage rate, and residency location of each employee. All employees registered with the Gaming Policy Enforcement Branch were asked to fill out a survey, there were 286 respondents. The following is the actual survey given to employees with aggregate results embedded:

Casino Venue Employee Survey - Edgewater

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

Results

	n	%
Number of people registered:	286	100.00%
Number of people not registered:	0	0.00%
Unknown/invalid:	0	0.00%

Question 2

On average, how many hours per week do you work? _____

Results: Average work week= 37.25 hours

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

Results

	n	%
Number unemployed:	24	8.39%
Number part-time:	58	20.28%
Number full-time:	204	71.33%
Unknown/invalid:	0	0.00%

Question 4

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

- Entertainment
- Accommodation or Food Services
- Other

Results

	n	%
Accommodation/Food Services:	31	10.84%
Entertainment:	70	24.48%
Other:	170	59.44%
Unknown/invalid:	15	5.24%

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)

Results

	n	%
Number pay more:	89	31.12%
Number pay less:	125	43.71%
Number pay the same:	56	19.58%
Unknown/invalid:	16	5.59%

Question 5b

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

Results

Of respondents who noted current job pays less:	24.4%
Of respondents who noted current job pays more:	30.8%

Question 6

Did you move from a different municipality for this job?

- Yes
 No

Results

	n	%
Number yes:	55	19.23%
Number no:	231	80.77%
Unknown/invalid:	0	0.00%

Question 7

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

- Yes
 No

Results

	n	%
Number yes:	163	56.99%
Number no:	123	43.01%
Unknown/invalid:	0	0.00%

End

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.

The following salient results can be derived from the Edgewater casino employee survey:

- 8.3% of employees were previously unemployed which represents net labour force growth
- More employees stated that they took a wage cut than employees which stated a wage increase (43.17% vs 31.12%). All other things equal, labour economics suggests that there must have been other job satisfaction factors for the employees to voluntarily take a wage cut to work at a casino.
- Employees who experienced a wage increase experienced a higher increase than those who experienced a wage decrease (30.8% wage increase vs 24.4% wage decrease).
- 19.23% of employees moved to the municipality to work at the casino
- About half of casino employees live in the municipality in which they work

BASELINE REPORTS RELATED TO LABOUR FORCE

The economic multiplier model will be based on total employment. Due to data gaps and lags at Statistics Canada, a substitute measure will be constructed using employment

insurance beneficiaries held at BC Statistics. BC Statistics data on industry shocks will also be used in the multiplier model.

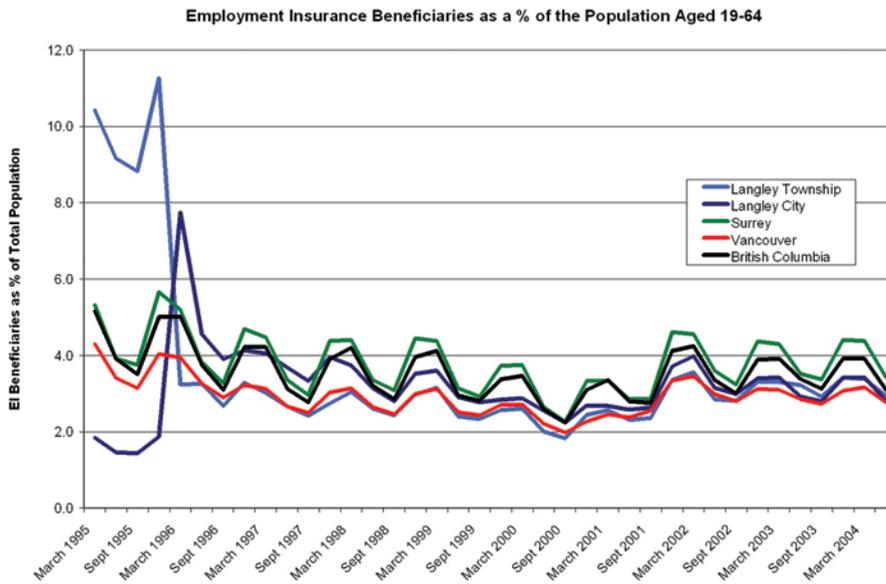


Figure 9: Employment Insurance Beneficiaries as a % of the Population Aged 19 - 64

Source: Human Resources Development Canada Administrative Files and BC STATS Population Estimates. Prepared by: BC STATS. February 18, 2005.

The above baseline graph on employment insurance beneficiaries in the study communities indicates considerable seasonal variation in employment. Therefore, the multiplier model will include a cyclical/seasonal adjustment. Also evident

are BC-wide trends not related to gaming facility introduction. Again, the multiplier estimation model will adjust for this using BC trend data.

PART III: ANALYSING THE ECONOMIC EFFECTS ON INDUSTRY

APPROACH

Measuring the effects on industry due to the introduction of casino-style gaming is best captured by comparing industry trends in the study communities versus control communities. Control communities will be matched using the same criteria listed in Part II above. Pre and post-gaming venue introduction data will be used to measure the effects on tourism revenue, hospitality revenue (hotels, restaurants, etc), construction (residential and commercial), bankruptcies (personal and corporate), property values, and rental rates.

BASELINE REPORTS RELATED TO INDUSTRY

Annual Housing Starts

One factor that can be used to measure economic activity or decline is housing starts. The following baseline trends indicate there is considerable variation over time and over communities that is unrelated to the introduction of a gaming facility.

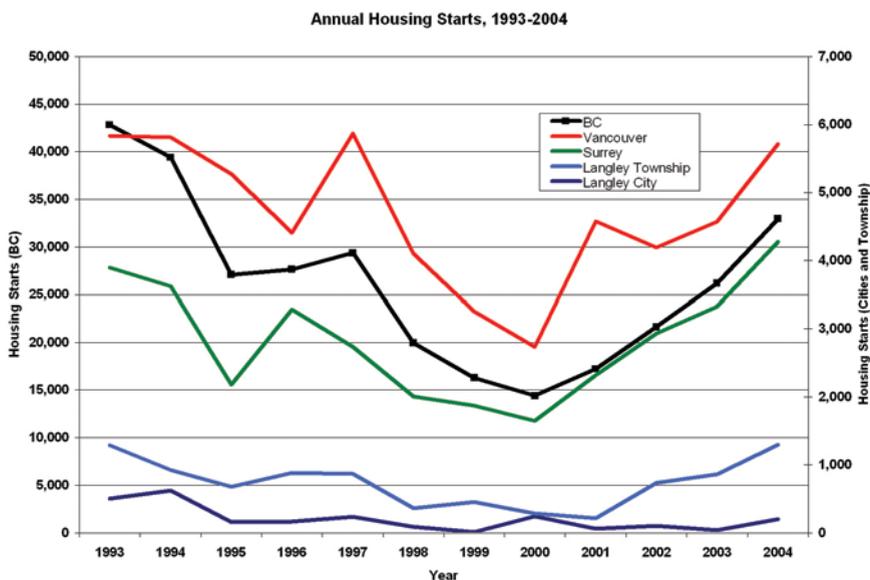


Figure 10: Annual Housing Starts 1993 – 2004

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.

The following baseline trends indicate there is considerable variation over time and over communities that is unrelated to the introduction of a gaming facility.

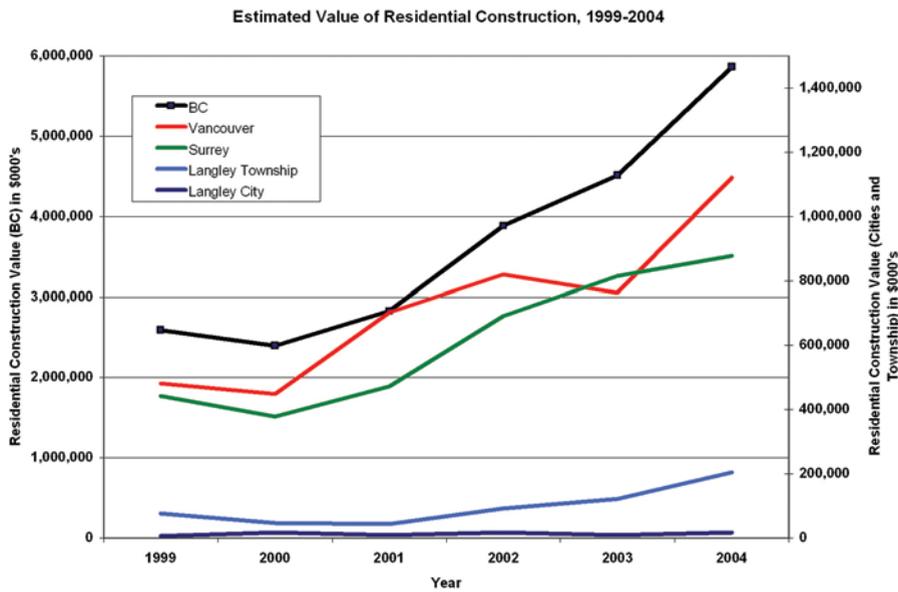


Figure 11: Estimated Value of Residential Construction 1999 - 2004

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 community, is the dollar trend of all non-residential construction.

The following baseline trends indicate that there is considerable variation over time and over communities that is unrelated to the introduction of a gaming facility.

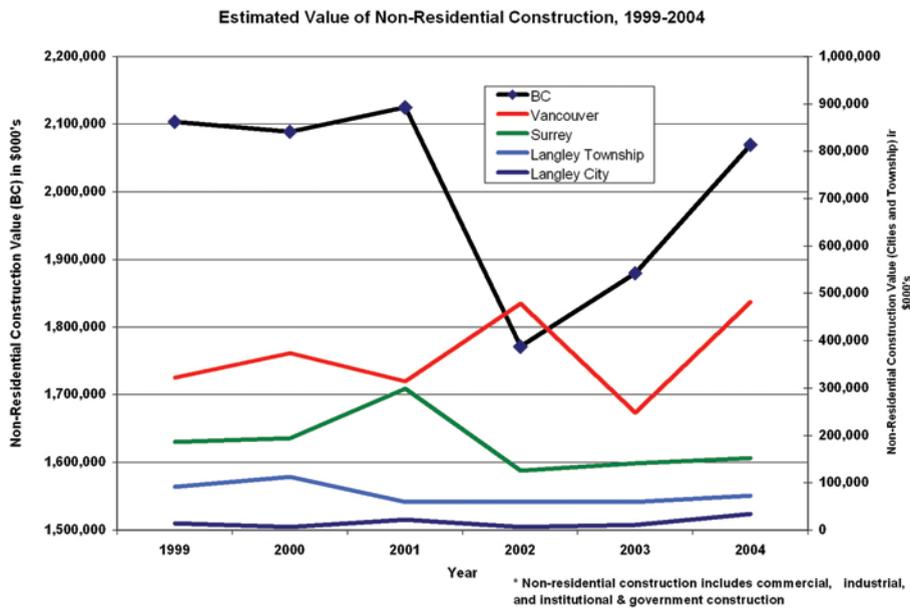


Figure 12: Estimated Value of Non-Residential Construction 1999 - 2004

PART IV: ESTIMATING DIRECT AND INDIRECT GOVERNMENT REVENUE AND COSTS

APPROACH

Estimating the effects on government finances is best approached as a multi-stage accounting undertaking. 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. Indirect costs may include costs for additional policing, infrastructure development, gambling addiction treatment, and possibly legal aid (pending data availability).

The disposition of government revenue received from gambling activities is an important consideration. Revenues may be collected provincially or federally, representing a net outflow of money from the municipality. Municipalities, however, will often receive a guaranteed percentage of these revenues. This percentage is an important factor in determining the overall economic benefit of introducing a gaming venue into the municipality.

Policing costs – or savings – will be estimated by analyzing the number of criminal code offences in each policing jurisdiction. It is conceivable that the introduction of legalized gambling will produce an element of savings if there is a drop in the number of offences related to illegal gambling activity. It would be inaccurate to look solely at actual expenditures on policing, as an increase could be attributed to an increase in municipal tax revenue rather than an increase in crime.

BASELINE REPORTS RELATED TO GOVERNMENT COSTS

Government Revenues from Casino Style Gaming Facilities

Gaming facility net income is distributed to various levels of government in order to pay for health and education services as well as to provide revenue for community organizations and local economic development.

While specific community amounts cannot be calculated prior to the introduction and operation of a gaming facility, casino net income for all of BC was as follows for 2003/04:

Distribution of Casino Revenues	Net Income 2003/04 (\$millions)
Total Revenue (Slots and table games)	\$ 733.4
Direct Expenses	\$ 252.3
Operating Expenses	\$ 62.8
Net Income	\$ 418.3
Government of Canada	\$ 4.6*
Government of British Columbia	\$ 368.9
Local host governments	\$ 44.8**

* Source: BC Lottery Corporation Annual Report 2003/04 pp. 11, 36 ** Source: <http://www.pssg.gov.bc.ca>

Note: Distribution of casino net income is approximate, based on percentage distribution of all BC Lottery Corporation net income, 2003/04.

Table 13: Distribution of Casino Revenues

Host local governments receive 1/10th of the revenue generated by community casinos located in their jurisdiction and 1/6th of the revenue generated by destination casinos. The Province allocates revenue to the Consolidated Revenue Fund, Health Special Account, charitable and community organizations, development assistance compensation and the Problem Gambling Program, in addition to the Government of Canada and host local governments.

The Cost and Incidence of Treating Gambling Addiction

The following graphs illustrate the BC-wide and study community trends of calls to the problem gambling help line and problem gambling treatment volumes.

Problem Gambling Help Line

The Province provides \$4M in funding for comprehensive problem gambling prevention and treatment services. These include a toll free, 24/7 Help Line that provides information and referral in addition to crises intervention. Treatment is delivered province wide by 40 counsellors through free outpatient counselling services (both individual and group therapy) for problem gamblers and those affected by someone else's gambling.

Prevention Services consist of prevention strategies targeted to at risk populations and a range of awareness initiatives delivered to community groups, schools and allied professions.

Services are managed centrally but delivered province wide through contracts with professional counsellors and non-profit agencies.

The annual budget for the BC Problem Gambling Help Line is \$175,000. Calls to the problem gambling help line have increased steadily for all of BC for the last five years. Awareness and promotion of the issue of problem gambling and availability of services has dramatically increased since 2001, when the Help Line number began appearing on all lottery tickets. The spike in 2004-01 to 2004-03 coincides with the first provincial media campaign that ran from February to April. Of note is the volatility in this trend. When analyzing study community trends beyond baseline data, adjustments will be made for BC wide trends. The volatility in this trend will affect the ability to obtain statistically significant conclusions. These data are based on the city residence of the caller.

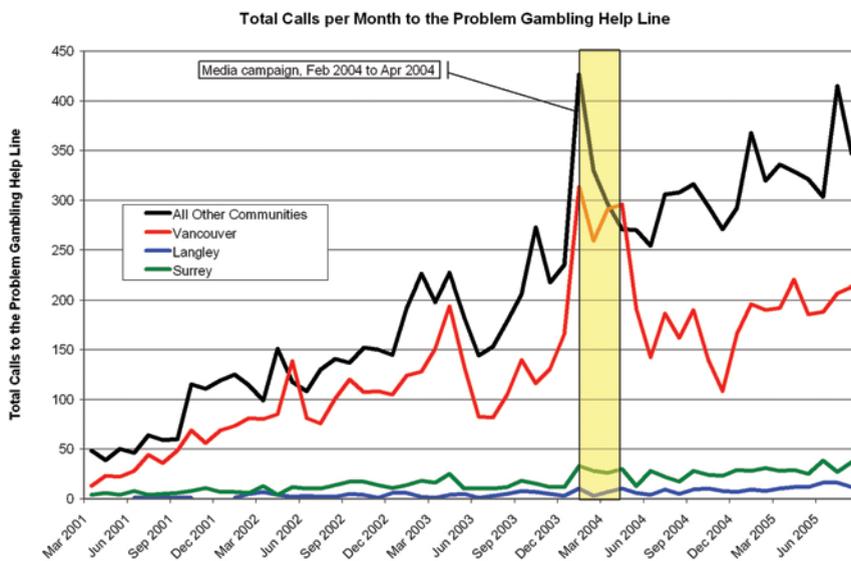


Figure 13: Total Calls per Month to the Problem Gambling Help Line

Treatment Volumes: Hours Spent on Treatment by Clinical Providers

Clinical counselling services are offered on a sessional fee basis, reimbursing counsellors at \$200 for every 3.5 hour session of clinical activity time. 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. Private client information is not viewed by government.

The following graph illustrates how problem gambling treatment volumes have increased steadily for as long as the REGIS case management system has been in existence (Nov, 2003). When analyzing study community trends beyond baseline data, adjustments will be made for BC wide trends. The volatility in this trend will affect the ability to obtain statistical significance. These data are based on the city residence of the individual.

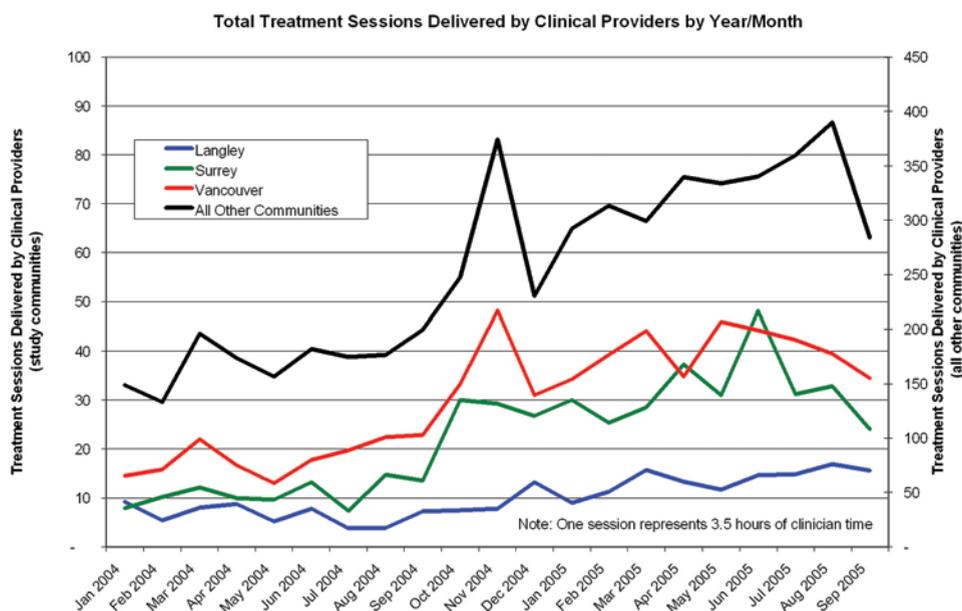


Figure 14: Total Treatment Sessions Delivered by Clinical Providers by Year/Month

Treatment Volumes: Problem Gambling Admissions by Game Type

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 illustrates that casino-related problem gambling represents approximately 40 per cent of problem gambling admissions. This portion is consistent across the study communities and all other BC communities. These data are based on the city residence of the individual.

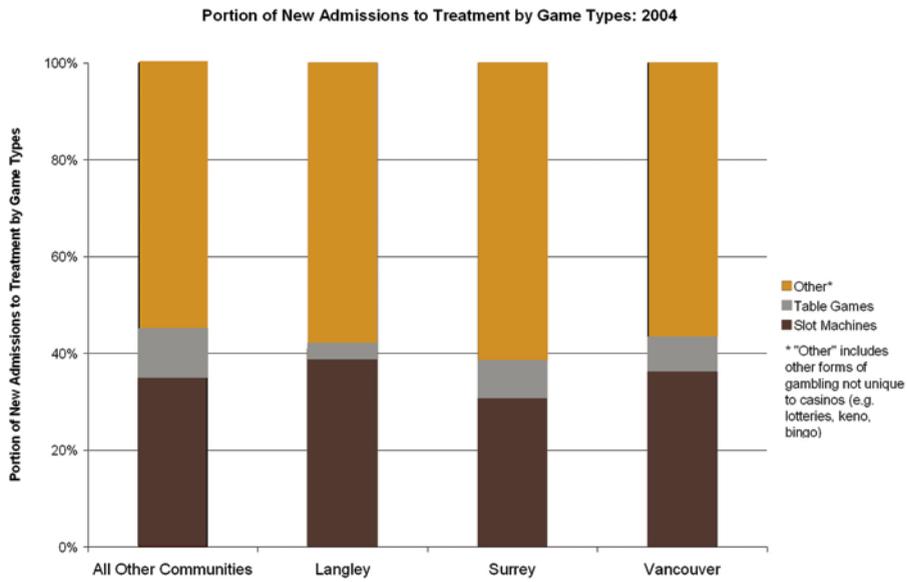


Figure 15 Portion of New Admissions to Treatment by Game Types: 2004

Of 23 game types, "Table Games in Casino" and "Slots" were counted as "Casino/Slots".

Treatment Volumes: New Admissions to Treatment

Treatment services are delivered free of charge to problem gamblers and those affected by problem gambling. Contracted service providers are reimbursed at \$200 for every session of 3.5 hours delivered. The following graphs show new admissions to treatment services in 2004/2005. The following graph illustrates that new admissions for problem gambling treatment

(about 40 per cent of which is casino-related) is a somewhat flat, but highly volatile trend. Due to the low number of admissions in each municipality, it may be difficult to show statistically significant effects. These data are based on the city residence of the individual.

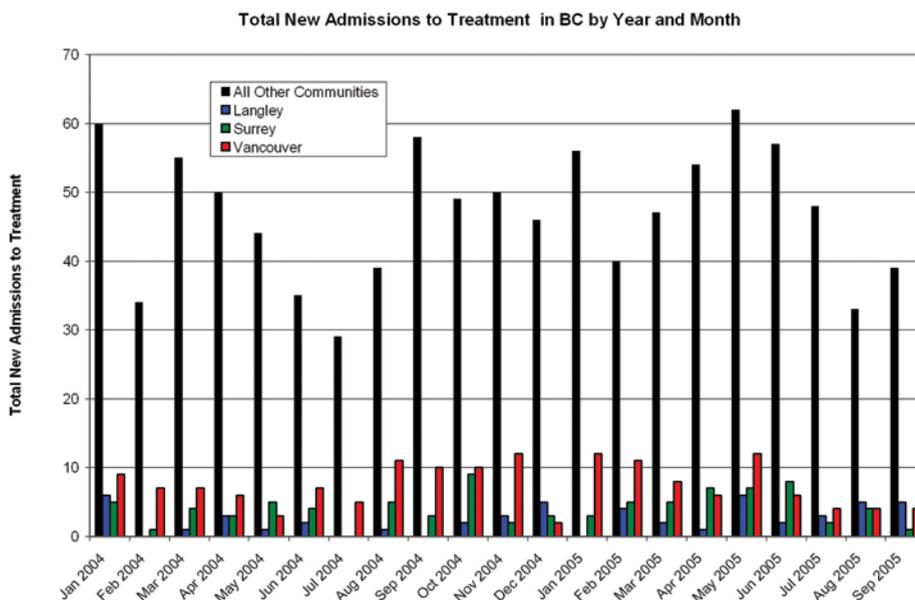


Figure 16: Total New Admissions to Treatment in BC by Year and Month

Service Volumes: Prevention Services

Prevention services are delivered within a population health model, where risk populations and practices are targeted for awareness, education and prevention initiatives. The target populations as defined by the 2003 prevalence study are youth, seniors and Northern residents. The program has three provincial coordinators who support the delivery of the program and play a major role in the delivery of prevention and awareness services across the province. Co-ordination duties are charged at \$50 per hour and prevention services are charged at \$40 per hour by contracted practitioners.

The following graph illustrates that total hours spent on prevention is highly volatile. The location for these data are based on the office location of the counsellor. Therefore, although there are no prevention services logged for Langley, it does not mean that prevention services were not delivered in Langley, only that no service providers operate out of Langley.

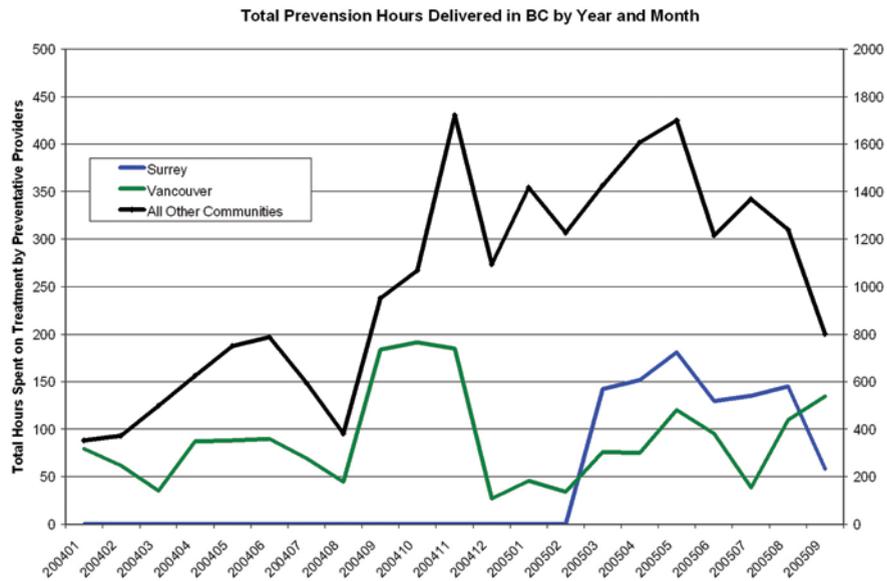


Figure 17: Total Prevention Hours Delivered in BC by Year and Month

Impact on Criminal Offence Caseload

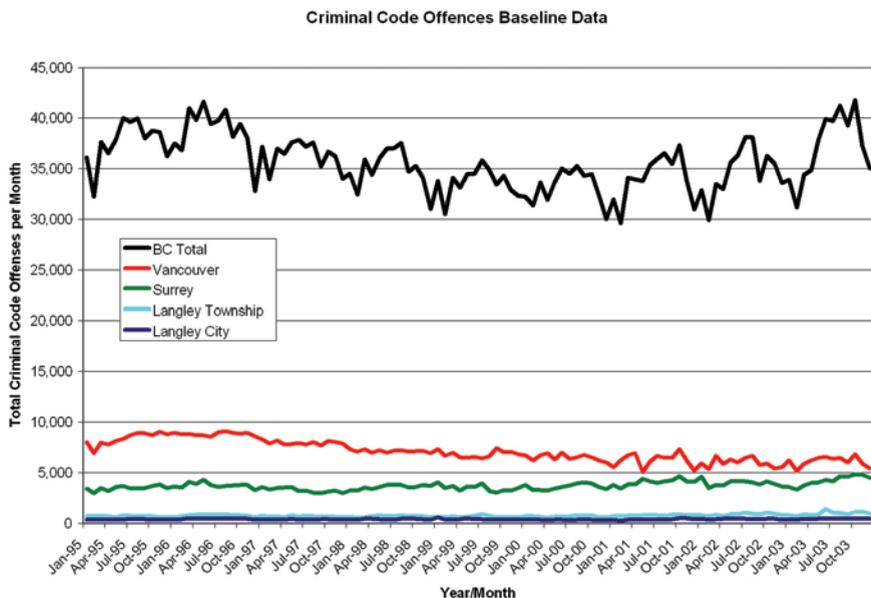


Figure 18: Criminal Code Offences Baseline Data

The data for criminal code offences will be used to determine whether there is a significant increase or decrease in the crime rate due to the introduction of a gaming venue. If the introduction of a gaming venue is found to have a significant effect, that estimate will be used to impute increased or decreased policing costs. As discussed above, this method is a more robust method of estimating increased policing costs compared to simply tracking before and after policing expenditures. Municipalities may spend extra revenue from gaming facilities on policing activities unrelated to gaming.

The chart above shows there was significant variation in criminal code offences over time before the casino was introduced or scheduled for opening. Also evident is a clear secular (long term) and cyclical (yearly) variation, which the impact model will need to consider.

PART V: EXAMINING THE GAMBLING MONEY FLOW

APPROACH

Money flow will be analyzed in terms of investment capital and profits flowing into and out of the municipalities. Profit outflow will be identified using the location of the corporations providing investment capital and the location of companies selling to gaming venue investors. Other factors to be considered include construction expenditures, furniture and other non-casino equipment, and slot machines and other gambling equipment (this includes equipment initially purchased, replacement equipment, and maintenance costs).

Vendors often provide a package of investment benefits to municipalities in exchange for permission to build and operate a gambling venue. Examples of these incentives include: providing green space (parks, plant trees, etc), upgrading municipal infrastructure, or funding other community programs. These incentives represent a significant contribution to the economic benefit of introducing a casino-style gaming venue.

Two of the three lower mainland casino municipalities responded to surveys on how the casino development projects impacted the economic situation of the community.

Case 1: Langley "Cascades" Casino *Description of Development Project*

City of Langley invited proposals for casino and venue development with the intent that it not be a free-standing casino. Gateway Casino's proposal won the bid, offering a casino with attached convention centre and hotel. Total value of 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 1000 already existing. The process has been described as a public private partnership.

Benefits to the Municipality

Direct Benefits:

- Portion of gaming revenue which accrues to municipality (described in section IV, "Government Revenues from Casino-Style Gaming Facilities")²
- One-time revenue of \$7 million realized from sale of venue land
- The City of Langley receives a number of days in which they can use the conference facility at no cost
- \$24.5 million of this went to the city in terms of building permits

Indirect economic and social benefits as described by municipality lead:

- \$20.5 million in construction and furnishing costs, some of which was spent on local trades and materials
- Increased employment (number of employees unknown at this time)
- The attached hotel and conference centre which attract business and business functions
- 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

²The gaming facility has been in operation for less than one year, therefore the revenue from gaming cannot yet be calculated.

- Gateway Casinos has been described by the municipal lead as an outstanding community partner which sponsors community events

Financial Costs to the Municipality

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

Case 2: Surrey Fraser Downs Expansion Description of Development Project

City of Surrey issued a development permit on March 22, 2004 to permit an addition and exterior upgrade to the existing Fraser Downs facility and parking area. The total value of construction was \$36.1 M. 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 to the Municipality

Direct Benefits:

- Portion of gaming revenue which accrues to municipality (described in section IV, "Government Revenues from Casino-Style Gaming Facilities")³

³The gaming facility has been in operation for less than one year, therefore the annual revenue from gaming cannot yet be calculated.

- Land lease revenues (unknown at this time)
- \$308,712.15 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

Indirect economic and social benefits as described by municipality lead:

- Increase in the number of FTE full time employees 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

Financial Costs to the Municipality

- Cost of processing permits (estimated at the price paid (\$308,712.15))
- Cost of infrastructure upgrades (estimated at \$457,000)

Case 3: VancouverEdgewater Casino Description of Development Project

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 and the facility is expected to be occupied for only 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 m² (68,639 sq. ft.). The floor space allocated for the slot machines, gaming tables and related circulation is 3 387 m² (36,468 sq. ft.). The main floor contain slot machines, gaming tables, a café, a lounge and back-of-house space. The second floor contain slot machines, gaming tables and a theatre (not in use at this point). The third floor contains staff facilities.

Benefits to the Municipality

Direct Benefits:

Portion of gaming revenue which accrues to municipality (described in section IV, "Government Revenues from Casino-Style Gaming Facilities")⁴

- 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.

Indirect economic and social benefits as described by this project's municipality representative:

- 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.
- Municipality of Vancouver has an agreement with Edgewater casino investors that fifteen percent 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 been able to fulfill (actually surpassed it) this requirement.

Financial Costs to the Municipality

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

⁴The gaming facility has been in operation for less than one year, therefore the annual revenue from gaming cannot yet be calculated.

DISCUSSION

The data presented in this report is baseline data only; no final conclusions can be drawn at this time. However, we can make a note of trends in the data that will be worth watching in future iterations of this study. We have noted the following trends and related questions:

- 1] A large percentage of residents in the Lower Mainland do not gamble in gaming venues. Will this percentage change as new facilities are added?
- 2] We know the current proportion of problem gamblers within the general population. Will the percentage of problem gamblers remain stable as new facilities are added?
- 3] A significant number of gamblers favour the large destination facilities of Nevada. Will the new facilities repatriate any of these gamblers?
- 4] Gamblers tend to favour those facilities closest to them. Will new facilities move these gamblers from one location to another, and will the former locations suffer?
- 5] Some people report that they gamble more now that a new venue is open. Will this affect the percentage of problem gamblers or will the increased gambling be principally restricted to responsible gambling and an improvement in the industry?
- 6] We know the average expenditures on gambling activities of the public through self-report. Will this average increase or remain stable as the new facilities are added?

- 7] Two of the facilities offer slot machines only. Will this particular gaming activity replace other gaming activities or add to total gaming activities?
- 8] The majority of the public believes that gambling is harmful as opposed to being beneficial to a community. With the introduction of new gaming facilities over time, will the public become more accustomed to gaming facilities in their midst and will this change the public's perception?
- 9] We have a baseline profile of public perceptions regarding the benefits and drawbacks of gaming facilities and attitudes towards gambling. Will the actual benefits and drawbacks, if any, found in this study match those perceived by the public? Will the intensity of perception of these drawbacks decrease or increase over time due to the addition of gaming facilities in the Lower Mainland?
- 10] Will the low public awareness of the Edgewater Casino at baseline lead to a reduction in patronage? As a result, would this delay the onset of any observable socio-economic impacts on the local community?
- 11] Have there been any indicators of the economic multiplier effect in terms of jobs gained and lost?
- 12] Have there been any indicators of the economic effects on industry, such as housing starts in the four communities before and after the introduction of the new gaming venues?

APPENDIX A – RDD SURVEY QUESTIONS

Randon Digit Dialing General Population Survey

Prepared for BC Ministry of Health Services and Selected Lower Mainland Municipalities

September 2004

Background

Communities

Participating communities include:

- City of Vancouver (Edgewater Casino, scheduled opening Nov 2004; Hastings Racetrack, scheduled opening Mar 2005)
- Surrey (Fraser Downs Gaming Centre, permanent structure scheduled to open Nov 2004)
- Langley Township (including city of Langley) (Gateway Casino, scheduled opening Apr 2005)

Methodology

- N=2500 (1/3 in each site)
- Telephone number databank from which numbers are randomly drawn will include unlisted numbers, and exclude cell phones to prevent multiple sampling of the same household.
- The household interviewee will be randomly determined by requesting the interview be conducted with the adult (19 or older) having the next birthday.
- Phone calls will be spread over a 6-8 week period to maximize the chances of contacting the person.
- Maximal effort will be made to complete an interview with the randomly designated person.
 - › There will be at least 12 attempts to

contact each person

- › The majority of the phoning will occur in the evening and on weekends
- › Refusals will be contacted again at a later time IF the reason for refusal was that they were busy at the time AND if they do not say they do not want to participate.
- › The survey will be kept short to increase the chances the person will participate

Optimal Administration Dates

- Late Oct 2004 (prior to all scheduled openings)
- Oct 2005
- Oct 2006

Goals

To establish baseline levels of, and changes in:

- Community attitudes towards gambling generally
- Community attitudes toward the specific gambling venue that has been introduced
- General gambling behaviour
- Levels of problem gambling

To establish how these things vary as a function of demographic variables (e.g., income, gender, etc.)

A General Population Survey of Attitudes and Practices Regarding New Gaming Facilities

Hello, my name is _____ and I'm calling from Venture Research. Today we're conducting a survey on behalf of the Government of BC and Lower Mainland Municipalities on gambling attitudes and practices. The information gathered in this survey will assist the province and municipalities in developing new services. 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 name and phone number will not be attached to any responses.

I'd like to speak to the person in your household who is 18 years of age or older and most recently had a birthday.

Is that you?

Yes - CONTINUE

Don't Know - ASK AGAIN, IF STILL DK/REF THEN THANK AND TERMINATE

No May I speak to that person? RE-READ INTRODUCTION

[IF ASKED] If you would like further information about 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 to Friday 8:30 to 4:30.

SCREENER ITEMS

A. First, have I reached you at your home telephone number?

Yes

No

[IF YES CONTINUE, ELSE THANK AND TERMINATE]

B. Do you or does anyone in your household work for a marketing research company, a newspaper, radio or television station?

Yes

No

[IF YES THANK AND TERMINATE, ELSE CONTINUE]

Gambling Behaviour

INTERVIEWER: DO NOT COMMENT ON LEGALITY OF ANY GAMBLING BEHAVIOURS

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 bet money on in the last year. For each one, I will ask how often you participated in it – you may answer 1) Daily, 2) Several times a week, 3) Several times a month, 4) Once a month or less, 5) only a few days all year, or, 6) never. 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.

Ready?

1. In the past year, how often have you spent money on a charitable lottery such as for a hospital? (Give the scale for the first one or two, or until the person catches on)

- Daily (30+ times per month)*
- Several times a week (6 – 29 times per month)*
- Several times a month (3 – 5 times per month)*
- Once a month or less (6 – 12 times per year)*
- Only a few days all year (1 – 5 times per year)*
- Not at all in the past 12 months (0 times)*

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

2. Lottery tickets?

- Daily (30+ times per month)*
- Several times a week (6 – 29 times per month)*
- Several times a month (3 – 5 times per month)*
- Once a month or less (6 – 12 times per year)*
- Only a few days all year (1 – 5 times per year)*
- Not at all in the past 12 months (0 times)*

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

3. Bought Instant Win tickets?

- Daily (30+ times per month)*
- Several times a week (6 – 29 times per month)*
- Several times a month (3 – 5 times per month)*
- Once a month or less (6 – 12 times per year)*
- Only a few days all year (1 – 5 times per year)*
- Not at all in the past 12 months (0 times)*

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

4. Bought raffle tickets?

- Daily (30+ times per month)*
- Several times a week (6 – 29 times per month)*
- Several times a month (3 – 5 times per month)*
- Once a month or less (6 – 12 times per year)*
- Only a few days all year (1 – 5 times per year)*

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

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

5. Played bingo for money?

- Daily (30+ times per month)*
- Several times a week (6 – 29 times per month)*
- Several times a month (3 – 5 times per month)*
- Once a month or less (6 – 12 times per year)*
- Only a few days all year (1 – 5 times per year)*
- Not at all in the past 12 months (0 times)*

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

6. Played a slot machine?

- Daily (30+ times per month)*
- Several times a week (6 – 29 times per month)*
- Several times a month (3 – 5 times per month)*
- Once a month or less (6 – 12 times per year)*
- Only a few days all year (1 – 5 times per year)*
- Not at all in the past 12 months (0 times)*

If yes, where do you normally do this (jurisdiction and facility) ?

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

7. Played a table game 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)*
- Several times a week (6 – 29 times per month)*
- Several times a month (3 – 5 times per month)*
- Once a month or less (6 – 12 times per year)*
- Only a few days all year (1 – 5 times per year)*
- Not at all in the past 12 months (0 times)*

If yes, where do you normally do this (jurisdiction and facility)?

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

8. Placed a bet on a horse race?

- Daily (30+ times per month)
- Several times a week (6 – 29 times per month)
- Several times a month (3 – 5 times per month)
- Once a month or less (6 – 12 times per year)
- Only a few days all year (1 – 5 times per year)
- Not at all in the past 12 months (0 times)

If yes, where do you normally do this (jurisdiction and facility)?

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

9. Bet on sports events?

- Daily (30+ times per month)
- Several times a week (6 – 29 times per month)
- Several times a month (3 – 5 times per month)
- Once a month or less (6 – 12 times per year)
- Only a few days all year (1 – 5 times per year)
- Not at all in the past 12 months (0 times)

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

10. Played games of skill against other people for money?

- Daily (30+ times per month)
- Several times a week (6 – 29 times per month)
- Several times a month (3 – 5 times per month)
- Once a month or less (6 – 12 times per year)
- Only a few days all year (1 – 5 times per year)
- Not at all in the past 12 months (0 times)

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

11. Played games of chance for money on the Internet?

- Daily (30+ times per month)
- Several times a week (6 – 29 times per month)
- Several times a month (3 – 5 times per month)
- Once a month or less (6 – 12 times per year)
- Only a few days all year (1 – 5 times per year)
- Not at all in the past 12 months (0 times)

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

12. Purchased high-risk stocks, options, or futures?

- Daily (30+ times per month)
- Several times a week (6 – 29 times per month)
- Several times a month (3 – 5 times per month)
- Once a month or less (6 – 12 times per year)
- Only a few days all year (1 – 5 times per year)
- Not at all in the past 12 months (0 times)

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

Have you ever gambled at (gaming facility)? (Not administered at baseline)

No

Yes

How many times have you gone to (gaming facility) in the past 12 months?

On average, how much \$ do you spend per visit?

What sort of impact has this facility had on your overall gambling behaviour (Has it increased it, decreased it, or no change)?

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

Do you spend less on other things now that you sometimes gamble at (gaming facility)?

No

Yes

(If yes) What things would that be?

Attitudes

Now I am going to ask you some questions about how you feel about gambling. For each, I will read you five possible answers. Please give me the one answer that best describes how you feel.

Ready?

13. Which best describes your belief about the benefit or harm that gambling has for society?

1. The benefits far outweigh the harm
2. The benefits somewhat outweigh the harm
3. The benefits and the harm are roughly equivalent
4. The harm somewhat outweighs the benefits
5. The harm far outweighs the benefits

14. Which best describes your attitude toward gambling?

1. It is very morally wrong
2. It is somewhat morally wrong
3. I have no opinion one way or the other
4. It is a matter of personal choice
5. It is a fun, harmless thing to do

15. Are you aware of (gaming facility) that is scheduled to open in (date)/opened in

(date)? (This is a yes or no question).

1. Yes
2. No (Indicate that it is a facility that contains xx slot machines xx table games)

16. Overall, would you say (facility) is likely to be?

1. Very beneficial to the community
2. Somewhat beneficial to the community
3. Neither beneficial or harmful
4. Somewhat harmful to the community
5. Very harmful to the community

17. In your own words, what would you say are the likely major benefits or drawbacks of this facility? (Do not prompt. Code open-ended responses into one or more of the following categories. Multiple answers are OK.)

- Provides employment
- Provides a convenient source of recreation
- Entertainment value
- Brings money into the community
- Increases local or provincial revenue
- Decreases taxes
- Creates positive spin-offs to other local businesses
- Increases tourism
- Decreases illegal gambling
- Keeps gambling money from going to outside jurisdictions
- Provides money for good causes
- Supports the horse racing industry
- Increases gambling addiction
- Exposes young people to gambling
- Negatively impacts people who can least afford to lose money
- Is morally corrupting

- Negatively impacts local businesses*
- Negatively impacts other forms of gambling (charity bingo, racing, etc.)*
- Brings greater noise/congestion/traffic*
- Adds to crime and/or policing costs*

Now, I will ask some questions about how often you may or may not have experienced some things while gambling.

SKIP if respondent has never gambled. If a respondent insists s/he does not have gambling problems twice, do not ask the rest of the questions in this section.)

Answers are on a scale of 1 to 5:

- 1 Never
- 2 Sometimes
- 3 Most of the time
- 4 Almost always
- 5 "I don't know."

18. Thinking about the past 12 months, how often have you bet more than you could really afford to lose?

- 1 Never
- 2 Sometimes
- 3 Most of the time
- 4 Almost always
- 5 "I don't know."

18. Thinking about the past 12 months, how often have you felt guilty about the way you gamble or what happens when you gamble?

- 1
- 2
- 3
- 4
- 5

19. In the past 12 months, how often have you needed to gamble with larger amounts of money to get the same feeling of excitement?

- 1
- 2
- 3
- 4
- 5

20. 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?

- 1
- 2
- 3
- 4
- 5

21. In the past 12 months, how often have you borrowed money or sold anything to get money to gamble?

- 1
- 2
- 3
- 4
- 5

22. In the past 12 months, how often has your gambling caused any financial problems for you or your household?

- 1
- 2
- 3
- 4
- 5

23. In the past 12 months, has your gambling caused you any health problems, including stress or anxiety?

- 1
- 2
- 3
- 4
- 5

24. 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?

1 2 3 4 5

25. In the past 12 months, how often have you felt that you might have a problem with gambling?

1 2 3 4 5

26. In your own words: Can you tell me in more detail about specific financial, psychological, familial, employment, legal or health impacts you have felt from your gambling?

Demographics

We are just about done. I have only more questions about your background. All information is anonymous of course.

27. Record gender:

28. In what year were you born? (ENTER RANGE FROM 1892 TO 1985)

ENTER YEAR _____

29. Currently, which best describes you:

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

30. What is your postal code? (If unknown: In what town or city do you live?)

31. 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? (READ LIST)

- Under \$30,000
- \$30,000 to just under \$60,000
- \$60,000 to just under \$100,000
- \$100,000 or more

32. What is the highest level of formal education that you have completed? READ LIST AS NECESSARY

- 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.)

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

IF RESPONDENT GIVES MORE THAN ONE ANSWER, RECORD THE ONE THAT APPEARS FIRST ON THE LIST.

- Employed full time (30 or more hours/week)
- Employed part time (less than 30 hours/week)
- Unemployed (out of work but looking for work)
- Student – employed part time or full time
- Student – not employed
- Self-employed
- Retired
- Homemaker
- Other

34. What is your occupation? (Or, what is your occupation when you are employed)?

(READ LIST ONLY TO CLARIFY)

- Professional (e.g., doctor, lawyer, teacher)
- Business executive/manager
- Owner/entrepreneur
- Commission/agency sales
- Clerical/service/retail sales
- Technical (e.g., computer programmer)
- Skilled labour (e.g., plumber, carpenter, electrician)
- Unskilled labour (e.g., waitress, janitorial services)
- Police/military
- Farmer/fisher
- Other (Specify)
-

35. And finally, to what ethnic or cultural group did you or your ancestors belong to on first coming to this country?

(INTERVIEWER: IF NOT CLEAR, SAY "ARE YOU SCOTTISH, CHINESE, GREEK, OR SOMETHING ELSE?") ACCEPT MULTIPLE ANSWERS.

28. To what ethnic or cultural group did you or your ancestors belong to on first coming to this country? (You may check more than one response).

- Aboriginal/Native/Métis
- African
- Arabic
- English/Irish/Scottish/Welsh
- French
- Central or Eastern European (Czech, Polish, Croatian, Serbian etc.)
- Chinese/Hong Kong/Taiwanese
- Dutch
- East Indian/Pakistani
- Filipino/Philippines
- German
- Greek
- Hungarian
- Italian
- Japanese
- Jewish

- Korean
- Mennonite
- Persian (Iranian)
- Portuguese
- Russian
- Scandinavian – Sweden, Norway, Denmark, Finland, Iceland
- South or Central America or Mexico
- Spanish
- Swiss
- Thai
- Ukrainian
- Vietnamese/Laotian/Cambodian

Other (Please specify):

[IF RESPONDENT ANSWERED CANADIAN ONLY, ASK QUESTION #35.]

36. In addition to being Canadian, to what ethnic or cultural group did you or your ancestors belong to on first coming to this continent? (READ IF NECESSARY: "ARE YOU SCOTTISH, CHINESE, GREEK, OR SOMETHING ELSE?") (ACCEPT MULTIPLE ANSWERS)

28. To what ethnic or cultural group did you or your ancestors belong to on first coming to this country? (You may check more than one response).

- Aboriginal/Native/Métis
- African
- Arabic
- English/Irish/Scottish/Welsh
- French
- Central or Eastern European (Czech, Polish, Croatian, Serbian etc.)
- Chinese/Hong Kong/Taiwanese
- Dutch
- East Indian/Pakistani
- Filipino/Philippines
- German
- Greek
- Hungarian
- Italian
- Japanese
- Jewish
- Korean
- Mennonite

- Persian (Iranian)*
- Portuguese*
- Russian*
- Scandinavian – Sweden, Norway, Denmark, Finland, Iceland*
- South or Central America or Mexico*
- Spanish*
- Swiss*
- Thai*
- Ukrainian*
- Vietnamese/ Laotian/Cambodian*

Other (Please specify):

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

APPENDIX B – CANADIAN
PROBLEM GAMBLING INDEX
(CPGI) SURVEY

Canadian Problem Gambling Index

Ferris & Wynne (2001)

Name:

Date:

Some of the next questions may not apply to you, but please try to be as accurate as possible. Thinking about the past 12 months:	never	sometimes	Most of the	Almost always	Don't know
Have you bet more than you could really afford to lose?					
Have you needed to gamble with larger amounts of money to get the same feeling of excitement?					
When you gambled, did you go back another day to try to win back the money you lost?					
Have you borrowed money or sold anything to get money to gamble?					
Have you felt that you might have a problem with gambling?					
Has gambling caused you any health problems, including stress or anxiety?					
Have people criticized your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?					
Has your gambling caused any financial problems for you or your household?					
Have you felt guilty about the way you gamble or what happens when you gamble?					

Score 1 for each response of "sometimes", 2 for each "most of the time" and 3 for each "almost always".
TOTAL SCORE:

- 0 = NON PROBLEM GAMBLER
- 1-2 = LOW RISK GAMBLER
- 3-7 = MODERATE PROBLEM GAMBLER
- 8-27 = SEVERE PROBLEM GAMBLER

APPENDIX C – COMMUNITY CHARACTERISTICS AND MATCHING

The following characteristics will be used to match study communities with control communities for statistical power.

Municipality	Sq Km	Female %	Pop 2001	%65+	Immig %	Total Labour Force %	Partic Rate	Unemp Rate	Median Family Income	Labour Arts, ent rec %	Labour Accom & food %
Vancouver	114.67	50.9%	545671	12.9	45.4%	55.7%	65.1	8.3	\$51,258	1.53%	5.47%
Surrey	317.4	50.5%	347825	10.8	33.0%	52.1%	67.0	7.4	\$55,608	0.93%	3.42%
Chilliwack	257.96	51.4%	62927	15.7	13.9%	48.2%	62.5	8.3	\$49,998	0.87%	3.75%
Langley City	10.22	52.5%	23643	15.1	15.4%	53.1%	65.9	7.3	\$53,704	0.99%	3.98%
Nelson	7.27	52.6%	9298	15.4	13.6%	51.2%	63.6	8.9	\$52,488	1.18%	5.05%
100 Mile House	51.34	55.5%	1739	20.2	9.8%	47.7%	60.5	13.2	\$46,932	1.73%	4.03%
Abbotsford	359.18	50.6%	115463	13.9	23.4%	51.3%	67.0	8.2	\$51,498	0.59%	3.37%
Alberni-Clayoquot	6885.3	49.5%	30,345	13.9	11.3%	49.1%	61.3	13.8	\$50,090	0.89%	5.11%
Alert Bay	1.82	50.6%	583	8.5	12.9%	60.9%	79.8	16.9	\$43,488	1.72%	6.00%
Anmore	27.42	50.6%	1344	5.2	18.2%	58.4%	80.1	4.5	\$84,102	2.98%	1.49%
Armstrong	5.23	53.9%	4258	19.6	6.9%	45.2%	58.0	10.1	\$42,768	0.59%	3.64%
Ashcroft	7.96	51.5%	1788	21.3	8.1%	45.3%	55.6	6.7	\$53,532	0.56%	4.75%
Belcarra	5.46	49.9%	682	8.8	14.7%	59.4%	73.0	3.7	\$105,016	0.00%	2.20%
Bowen Island	49.94	51.1%	2957	10.3	22.3%	58.7%	75.4	4.6	\$73,932	3.38%	3.21%
Bulkley-Nechako	77821	48.6%	40856	8.2	10.9%	52.9%	70.3	12.6	\$57,841	0.77%	2.99%
Burnaby	90.09	51.1%	193954	13.4	46.8%	51.8%	62.5	8.3	\$51,571	0.96%	4.02%
Burns Lake	7.11	50.2%	1942	11.6	6.4%	52.3%	71.6	15.7	\$60,548	0.51%	6.18%
Cache Creek	10.57	48.3%	1056	19.0	5.2%	43.1%	52.6	7.6	\$38,988	0.00%	9.00%
Campbell River	133.34	50.4%	28456	11.1	12.4%	52.6%	66.4	12.7	\$54,289	1.18%	5.15%
Capital	2454	52.4%	325754	18.0	18.7%	53.3%	64.0	6.6	\$58,343	1.28%	4.48%
Cariboo	82529.1	49.4%	65659	10.7	10.9%	53.7%	68.2	14.3	\$51,071	0.57%	4.68%
Castlegar	18	51.8%	7002	16.1	11.7%	50.4%	62.3	11.3	\$55,521	0.36%	3.93%
Central Coast	25180.8	47.6%	3781	7.5	5.7%	51.0%	66.6	20.0	\$37,014	0.93%	3.17%
Central Kootenay	23160.3	50.3%	57019	16.1	11.6%	50.1%	61.9	11.6	\$47,299	1.05%	4.61%

Central Okanagan	3034.9	51.7%	147739	18.5	13.7%	50.3%	62.0	8.8	\$51,136	1.25%	4.42%
Central Saanich	41.39	41.39	15348	17.1	17.0%	54.0%	65.7	4.0	\$67,573	1.66%	2.54%
Chase	3.05	51.0%	2460	26.4	7.5%	38.6%	47.6	13.2	\$40,560	0.61%	3.05%
Clinton	1.46	49.1%	621	16.9	12.1%	33.8%	42.7	4.9	\$37,428	1.61%	5.64%
Coldstream	67.25	50.1%	9106	13.1	12.5%	53.5%	67.5	8.3	\$65,076	2.09%	3.40%
Columbia-Shuswap	30107.2	50.2%	48219	16.9	10.7%	50.4%	62.1	11.4	\$48,144	1.41%	6.45%
Colwood	17.76	51.0%	13745	9.6	11.1%	53.0%	69.5	4.9	\$62,547	0.95%	2.87%
Comox	14.2	52.5%	11172	19.9	13.4%	45.8%	57.0	7.8	\$56,050	0.98%	2.33%
Comox-Strathcona	20298.7	50.5%	96131	13.7	12.7%	51.1%	63.7	12.0	\$50,926	1.21%	4.61%
Coquitlam	121.68	50.7%	112890	9.8	36.6%	53.5%	67.2	7.0	\$60,031	1.09%	3.43%
Courtenay	17.02	52.4%	18304	16.5	12.8%	48.7%	61.1	13.3	\$46,719	0.90%	5.76%
Cowichan Valley	3508.9	51.0%	71998	16.9	13.3%	48.4%	60.7	9.7	\$51,446	1.10%	3.57%
Cranbrook	17.8	51.5%	18476	13.9	8.1%	50.2%	63.7	10.7	\$53,317	1.08%	4.47%
Creston	8.48	52.8%	4795	29.9	11.1%	42.1%	51.6	9.9	\$43,699	1.25%	4.07%
Cumberland	7.74	50.8%	2618	13.9	10.3%	50.2%	64.9	13.7	\$46,975	0.95%	3.44%
Dawson Creek	20.66	51.1%	10754	11.1	6.8%	53.5%	69.5	10.4	\$53,155	0.84%	5.07%
Delta	183.78	50.8%	96950	11.1	26.6%	54.5%	69.1	5.4	\$70,509	0.82%	3.24%
Duncan	2.05	55.0%	4699	29.1	100.0%	39.7%	50.5	14.2	\$39,216	1.06%	3.30%
East Kootenay	27567.8	49.9%	56291	12.8	9.7%	53.6%	66.4	9.6	\$55,468	1.86%	6.16%
Elkford	101.59	46.0%	2589	4.8	12.9%	52.9%	68.1	6.5	\$67,614	0.39%	3.48%
Enderby	4.22	53.1%	2818	24.1	7.8%	35.5%	45.1	12.4	\$34,936	0.89%	2.31%
Esquimalt	7.04	51.0%	16127	15.5	13.1%	55.5%	66.4	7.2	\$51,074	0.78%	5.46%
Fernie	16.05	49.7%	4611	12.4	10.7%	57.8%	70.4	9.8	\$59,422	3.36%	10.63%
Fort Nelson	10.43	46.9%	4188	3.1	4.2%	62.1%	83.5	5.8	\$70,034	0.48%	6.57%
Fort St. James	22.11	48.5%	1927	6.5	9.9%	57.9%	72.9	7.2	\$61,709	1.82%	2.59%
Fort St. John	21.54	48.9%	16034	6.2	5.6%	59.3%	77.9	9.2	\$61,980	0.56%	5.71%
Fraser Lake	3.9	49.7%	1268	7.9	8.7%	55.2%	72.4	15.8	\$58,227	0.00%	4.34%
Fraser Valley	13933.7	50.4%	237550	14.2	18.5%	49.8%	65.0	8.6	\$50,324	0.80%	3.62%
Fraser-Fort George	51998.6	49.3%	95317	7.4	9.8%	56.5%	72.4	11.1	\$60,637	0.91%	4.28%
Fruitvale	2.66	51.6%	2025	12.1	5.7%	47.9%	61.4	7.2	\$55,475	0.00%	3.21%
Gibsons	4.32	54.0%	3906	20.7	19.5%	45.7%	55.9	9.0	\$48,964	1.28%	3.97%

Gold River	10.51	47.8%	1359	7.7	13.2%	54.5%	71.2	18.2	\$61,226	0.74%	1.47%
Golden	11.02	49.1%	4020	10.6	8.7%	54.7%	70.0	8.7	\$55,391	2.11%	10.82%
Grand Forks	10.44	51.4%	4054	23.6	9.4%	46.1%	57.2	6.9	\$41,889	0.62%	4.07%
Granisle	40.21	46.7%	353	25.4	8.5%	45.3%	49.2	31.2	\$32,254	0.00%	2.83%
Greater Vancouver	3395.2	51.0%	1986965	12.2	37.2%	54.0%	66.2	7.2	\$57,926	1.21%	4.10%
Greenwood	2.53	48.8%	656	26.9	10.7%	42.7%	50.0	12.5	\$37,629	1.52%	1.52%
Harrison Hot Springs	5.47	49.5%	1343	18.2	22.3%	48.8%	58.0	4.6	\$49,224	1.86%	10.05%
Hazleton	2.85	47.8%	345	8.8	11.6%	47.8%	71.7	15.2	\$58,444	0.00%	2.90%
Highlands	37.87	50.2%	1674	5.4	8.7%	67.2%	85.2	4.0	\$74,666	1.79%	2.99%
Hope	41.42	49.8%	6184	19.0	14.6%	49.1%	60.4	11.9	\$42,526	1.05%	9.22%
Houston	72.83	46.8%	3577	6.3	12.7%	58.4%	75.7	11.7	\$61,923	0.00%	3.77%
Hudson's Hope	927.03	48.1%	1039	12.5	10.6%	48.1%	59.5	17.0	\$58,301	1.92%	0.96%
Invermere	8.43	51.4%	2858	14.2	11.7%	58.3%	72.7	4.2	\$57,337	4.72%	9.45%
Kamloops	297.57	51.3%	77281	12.2	10.3%	53.8%	66.7	10.2	\$56,188	1.64%	4.74%
Kaslo	2.8	50.9%	1032	18.4	13.6%	48.0%	58.8	12.0	\$38,825	0.97%	12.11%
Kelowna	211.22	52.2%	96288	19.2	13.4%	50.8%	62.4	9.1	\$51,369	1.40%	4.66%
Kent	166.89	44.5%	4926	15.6	14.7%	43.8%	62.0	5.6	\$47,302	0.91%	4.97%
Keremeos	2.11	51.8%	1197	37.7	15.0%	29.2%	33.7	14.5	\$27,908	0.00%	1.67%
Kimberley	58.31	51.6%	6484	20.3	9.6%	50.1%	60.4	10.3	\$51,595	2.78%	6.25%
Kitimat	242.63	48.3%	10285	7.8	22.4%	53.0%	67.9	11.8	\$74,244	0.53%	2.48%
Kitimat-Stikine	98921	48.4%	40876	7.7	12.6%	51.7%	68.1	17.2	\$56,409	0.70%	3.34%
Kootenay-Boundary	8300.7	50.5%	31843	18.5	11.2%	49.5%	60.7	9.7	\$51,647	1.00%	4.11%
Ladysmith	8.43	51.5%	6587	17.9	9.4%	46.9%	59.3	10.8	\$47,782	1.06%	3.04%
Lake Country	122.16	49.6%	9267	13.0	14.5%	53.8%	66.2	6.1	\$53,220	1.46%	3.13%
Lake Cowichan	8.25	50.6%	2827	14.5	10.8%	44.9%	57.1	16.6	\$43,711	0.00%	2.65%
Langford	39.36	51.0%	18840	9.9	10.4%	55.6%	72.1	5.6	\$55,987	1.11%	3.21%
Langley, Township	306.81	50.6%	86896	11.0	15.3%	55.6%	71.8	5.1	\$66,674	1.19%	3.11%
Lillooet	27.18	50.0%	2741	12.2	11.7%	55.3%	69.8	9.2	\$46,136	0.55%	4.74%
Lions Bay	2.55	50.4%	1379	10.5	31.5%	61.3%	73.8	4.1	\$98,588	3.26%	1.81%
Logan Lake	325.36	50.6%	2185	20.6	8.9%	49.9%	58.9	6.4	\$59,252	1.83%	5.95%
Lumby	5.27	51.6%	1618	14.6	6.5%	40.2%	50.6	26.2	\$44,295	0.93%	0.93%

Lytton	6.71	50.2%	319	14.1	9.4%	54.9%	61.8	8.8	\$45,343	3.13%	3.13%	3.13%
Mackenzie	219.39	45.9%	5206	2.2	10.3%	58.4%	77.4	7.7	\$73,953	0.38%	0.38%	2.98%
Maple Ridge	265.69	50.3%	63169	10.7	16.4%	52.9%	69.2	6.2	\$62,293	0.97%	0.97%	3.27%
Masset	19.45	48.6%	926	8.6	9.7%	51.8%	67.1	8.3	\$57,286	1.62%	1.62%	4.32%
McBride	4.43	47.8%	711	10.5	8.4%	53.4%	74.3	6.7	\$44,770	1.41%	1.41%	4.92%
Merritt	24.9	51.2%	7088	13.7	10.7%	47.4%	61.5	13.7	\$52,912	0.71%	0.71%	5.78%
Metchosin	71.32	46.7%	4857	9.9	13.7%	54.8%	68.6	6.4	\$63,753	1.24%	1.24%	2.37%
Midway	12.16	47.9%	658	22.7	6.8%	39.5%	46.4	-	\$59,725	0.00%	0.00%	3.80%
Mission	225.78	49.4%	31272	10.5	14.6%	49.6%	66.2	8.1	\$53,791	1.06%	1.06%	2.96%
Montrose	1.52	48.7%	1067	15.5	8.4%	48.7%	58.8	16.3	\$58,487	0.00%	0.00%	2.34%
Mount Waddington	20248.7	47.9%	13111	5.9	8.4%	57.5%	74.7	10.7	\$57,045	0.99%	0.99%	5.15%
Nakusp	7.42	50.9%	1698	16.8	10.0%	48.3%	61.0	20.1	\$46,690	0.00%	0.00%	5.30%
Nanaimo	89.17	52.0%	73000	16.9	15.9%	49.3%	61.1	11.8	\$50,482	0.98%	0.98%	4.32%
New Denver	1.07	52.0%	538	20.6	17.7%	42.8%	56.8	15.2	\$40,108	1.86%	1.86%	6.51%
New Hazelton	25.64	50.0%	750	9.3	16.7%	48.0%	66.1	22.2	\$41,080	0.00%	0.00%	4.00%
New Westminster	15.4	51.0%	54656	14.2	28.0%	56.5%	67.0	7.7	\$55,399	1.06%	1.06%	3.17%
North Cowichan	193.98	51.9%	26148	16.5	15.2%	48.9%	61.3	9.4	\$52,762	1.05%	1.05%	4.07%
North Okanagan	7901.9	51.6%	73227	17.5	11.3%	48.6%	60.2	10.8	\$46,240	1.43%	1.43%	3.71%
North Saanich	37.14	50.7%	10436	19.6	22.0%	52.5%	61.7	4.3	\$78,683	1.29%	1.29%	2.92%
North Vancouver, City	11.95	52.5%	44303	12.9	33.7%	60.4%	71.2	7.0	\$56,482	1.79%	1.79%	4.64%
North Vancouver, DM	160.47	51.4%	82310	12.0	30.0%	55.7%	69.9	5.1	\$76,525	1.80%	1.80%	3.53%
Northern Rockies	85808.1	46.5%	5720	3.1	4.4%	60.0%	81.5	6.8	\$69,045	0.44%	0.44%	6.12%
Oak Bay	10.38	54.8%	17798	26.2	23.3%	46.6%	55.4	5.6	\$78,168	1.01%	1.01%	2.98%
Okanagan-Similkameen	11017.5	52.0%	76635	25.5	16.8%	44.6%	53.5	9.9	\$43,071	0.80%	0.80%	4.17%
Oliver	4.88	54.1%	4224	33.2	20.1%	36.9%	45.0	8.3	\$39,199	0.47%	0.47%	4.62%
Osoyoos	8.76	52.7%	4295	37.0	22.4%	35.6%	40.2	9.5	\$38,341	0.58%	0.58%	4.66%
Parksville	14.6	53.6%	10323	30.8	16.8%	39.3%	47.5	9.9	\$43,344	1.02%	1.02%	4.89%
Peace River	119336.6	48.9%	55080	7.9	7.1%	55.4%	73.4	9.7	\$58,807	0.80%	0.80%	4.16%
Peachland	15.99	50.9%	4654	23.7	19.8%	43.9%	51.6	9.0	\$42,547	1.83%	1.83%	3.76%
Pemberton	4.41	47.6%	1637	2.4	11.0%	69.0%	87.3	4.8	\$62,585	9.16%	9.16%	16.80%
Penticton	42.42	53.1%	30985	25.1	15.7%	44.9%	54.0	11.2	\$43,505	0.66%	0.66%	3.49%

Pitt Meadows	83.38	51.4%	14670	10.1	19.6%	56.1%	71.5	6.5	\$63,889	1.30%	4.40%
Port Alberni	19.87	50.3%	17,743	16.6	12.5%	45.4%	56.7	15.1	\$48,748	0.76%	3.58%
Port Alice	7.66	44.4%	1126	4.5	10.7%	62.2%	77.8	5.0	\$73,116	1.78%	4.00%
Port Clements	13.59	45.5%	516	7.8	15.5%	63.0%	79.3	12.3	\$73,922	0.00%	4.84%
Port Coquitlam	28.79	50.3%	51257	7.4	26.2%	56.0%	72.6	6.4	\$63,588	0.95%	3.63%
Port Edward	168.12	45.5%	659	7.6	6.1%	41.7%	57.3	29.1	\$41,140	0.00%	1.52%
Port Hardy	40.88	48.9%	4574	5.4	7.5%	59.2%	77.2	7.6	\$55,436	0.66%	5.79%
Port McNeill	7.74	47.1%	2821	4.2	10.1%	61.3%	78.6	7.8	\$73,038	0.35%	7.09%
Port Moody	25.62	50.7%	23816	6.7	26.9%	57.5%	73.5	5.7	\$70,239	1.34%	2.96%
Pouce Coupe	2.06	51.6%	833	21.7	9.0%	36.0%	56.6	15.0	\$44,812	0.00%	4.20%
Powell River	5264.2	50.0%	19765	16.6	13.9%	46.5%	57.4	8.5	\$49,519	0.73%	3.59%
Powell River	29.77	50.5%	12983	17.9	14.4%	45.7%	57.0	8.0	\$53,946	0.89%	3.85%
Prince George	315.99	49.9%	72406	7.6	10.0%	56.3%	72.1	11.4	\$60,578	0.99%	4.41%
Prince Rupert	54.9	49.3%	14643	8.2	14.5%	55.6%	73.4	15.4	\$60,536	0.79%	4.34%
Princeton	10.24	51.5%	2610	23.1	10.0%	43.3%	53.7	13.7	\$41,197	0.00%	5.75%
Qualicum Beach	12.45	53.5%	6921	38.0	25.6%	34.7%	38.9	8.7	\$52,466	1.81%	3.76%
Quesnel	35.34	50.7%	10044	12.4	12.4%	51.5%	66.7	13.4	\$52,372	0.85%	6.02%
Radium Hot Springs	5.48	48.0%	583	11.2	11.1%	54.9%	68.1	3.1	\$56,581	2.57%	18.01%
Revelstoke	30.72	49.9%	7500	12.1	10.1%	54.7%	68.6	10.2	\$56,448	1.53%	8.93%
Richmond	128.69	51.8%	164345	11.8	53.7%	52.1%	63.3	7.2	\$52,454	0.88%	4.47%
Rossland	49.2	50.5%	3646	10.0	12.3%	56.8%	71.8	8.5	\$69,450	3.02%	5.76%
Saanich	103.43	52.1%	103654	17.5	21.1%	52.9%	63.7	6.1	\$62,532	1.03%	4.48%
Salmo	2.38	52.7%	1120	16.5	7.1%	43.3%	55.7	14.4	\$39,397	1.34%	3.57%
Salmon Arm	155.38	52.9%	15210	19.7	10.8%	49.4%	61.4	9.4	\$47,835	0.99%	5.82%
Sayward	4.72	48.8%	379	12.0	23.7%	38.3%	44.6	13.8	\$38,569	0.00%	3.96%
Sechelt	39.71	53.4%	7775	23.0	17.2%	45.6%	55.4	6.9	\$46,694	1.35%	4.57%
Sicamous	14.39	50.4%	2720	22.8	10.1%	45.2%	54.1	18.7	\$41,166	1.47%	5.15%
Sidney	5.04	55.1%	10929	32.6	20.4%	43.6%	52.2	6.1	\$56,115	1.78%	3.80%
Silverton	0.44	54.1%	222	22.2	11.3%	58.6%	65.0	19.2	\$ -	0.00%	22.52%
Skeena-Queen Charlotte	19932.8	48.7%	21693	8.0	12.1%	54.6%	71.9	16.5	\$55,271	0.85%	3.90%
Slocan	0.75	49.1%	336	9.0	4.5%	55.1%	67.3	10.8	\$31,372	2.98%	7.44%

Smithers	15.54	51.1%	5414	9.8	11.8%	55.7%	74.8	9.4	\$62,115	1.02%	4.25%
Sooke	48.76	51.1%	8735	12.7	12.4%	53.7%	67.8	7.0	\$50,096	1.03%	3.72%
Spallumcheen	254.9	50.0%	5134	11.5	8.8%	55.9%	69.2	8.9	\$48,241	0.97%	3.02%
Sparwood	177.71	48.9%	3812	9.1	10.0%	54.6%	69.8	10.3	\$62,521	0.66%	3.93%
Squamish	95.41	49.2%	14247	8.7	19.2%	55.8%	72.7	7.3	\$63,579	1.79%	9.19%
Squamish-Lillooet	16693.7	47.7%	33011	6.6	14.8%	61.9%	77.5	7.9	\$59,943	3.73%	12.30%
Stewart	566.84	47.7%	661	5.3	5.3%	60.5%	74.5	24.1	\$53,723	1.51%	8.32%
Stikine	132496.21	48.6%	1316	8.7	12.5%	56.6%	72.3	18.1	\$47,657	0.00%	5.70%
Summerland	70.02	52.6%	10713	25.9	15.1%	46.1%	56.0	8.0	\$51,559	1.12%	3.31%
Sunshine Coast	3823.9	51.6%	25599	18.8	16.6%	48.2%	59.1	7.2	\$49,388	1.68%	3.52%
Tahsis	5.73	45.8%	600	5.0	13.3%	53.3%	65.3	26.6	\$57,011	0.00%	5.00%
Taylor	16.61	46.8%	1143	5.2	1.3%	57.3%	72.8	4.6	\$58,608	1.75%	3.50%
Telkwa	6.52	48.1%	1371	4.7	7.3%	57.3%	78.1	8.3	\$20,617	0.00%	5.47%
Terrace	41.45	49.6%	12109	8.5	13.8%	53.1%	70.5	13.5	\$59,539	1.20%	4.46%
Thompson-Nicola	45279.7	50.6%	119222	12.9	9.8%	52.8%	65.4	11.3	\$52,841	1.43%	4.89%
Tofino	10.64	49.8%	1466	6.1	10.6%	68.9%	81.8	5.0	\$50,412	2.05%	20.80%
Trail	34.78	52.6%	7675	27.3	14.5%	42.9%	52.6	12.6	\$53,450	0.65%	3.58%
Tumbler Ridge	1574.45	48.1%	1851	4.9	8.6%	57.0%	71.8	10.0	\$65,351	0.54%	3.24%
Ucluelet	6.55	48.4%	1559	7.7	10.3%	62.9%	79.4	9.7	\$48,359	1.92%	11.87%
Valemount	3.92	48.5%	1195	10.9	7.1%	57.3%	74.2	13.8	\$43,969	1.67%	11.72%
Vanderhoof	54.86	50.9%	4390	10.0	11.6%	52.5%	69.5	10.7	\$60,179	0.57%	2.96%
Vernon	77.92	53.1%	33494	20.7	12.4%	46.9%	57.9	10.7	\$44,798	1.61%	4.48%
Victoria	19.68	54.2%	74125	19.9	20.0%	56.4%	65.1	8.5	\$48,514	1.55%	6.43%
View Royal	14.48	50.4%	7271	13.8	14.6%	58.6%	70.3	6.2	\$64,939	1.38%	4.06%
Warfield	1.9	51.2%	1739	14.7	11.8%	51.8%	64.7	5.0	\$64,176	0.00%	2.88%
Wells	159.15	48.9%	235	12.8	4.3%	51.1%	57.1	12.5	\$ -	0.00%	8.51%
West Vancouver	87.43	53.5%	41421	22.0	35.7%	48.2%	57.8	5.3	\$94,986	1.74%	2.34%
Whistler	161.72	45.1%	8896	2.5	13.0%	78.3%	89.4	6.2	\$73,490	8.09%	23.44%
White Rock	5.28	55.5%	18250	30.6	21.8%	50.1%	58.9	4.9	\$62,020	1.42%	3.12%
Williams Lake	33.03	50.9%	11153	10.7	12.1%	55.0%	70.8	13.7	\$57,007	0.31%	5.11%
Zeballos	1.45	42.4%	224	8.9	0.0%	62.5%	75.7	14.3	\$ -	0.00%	0.00%

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