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GAMBLING IN ALBERTA: HISTORY, CURRENT STATUS, AND SOCIOECONOMIC IMPACTS

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ABSTRACT	7
INTRODUCTION	8
Alberta	8
Research Questions	9
Theoretical and Logistical Challenges	10
Organization of the Report	10
RESEARCH APPROACH	12
Following the Money	12
Secondary Analysis of Changes in Economic and Social Indices	12
Direct Investigation of the Known Impacts	13
Population Surveys	14
Key Informant Interviews and Focus Groups	16
THEORETICAL APPROACH	17
Problems with Existing Approaches to Assessing Socioeconomic Impacts	17
Sound Principles for Conducting Socioeconomic Impact Analyses of Gambling	21
HISTORY OF GAMBLING IN ALBERTA	30
Chronology of Events	30
History of Each Type of Gambling	47
Horse Race Betting	47
Raffles	50
Pull Tickets	52
Bingo	54
Lotteries and Instant Win (Scratch) Tickets	58
Sports Betting	60
Video Lottery Terminals (VLTs)	61
Slot Machines, Table Games, and Casinos	64
Regulatory and Organizational History	71
History of First Nations Commercial Gambling	73
CURRENT REGULATION, AVAILABILITY, AND PROVISION OF LEGAL GAMBLING IN ALBERTA	75
Charitable Gambling	76
Raffles	76
Pull-Tickets	77
Bingo	77
Alberta Government Gambling	79
Ticket Lotteries	79
Video Lottery Terminals	80
Slot Machines	80
Casinos	81
Traditional Casinos	81
First Nations Casinos	82
Horse Racing	87
Summary of Current Availability and Provision of Gambling in Alberta	88

AMOUNTS, ORIGINS, AND RECIPIENTS OF ALBERTA GAMBLING REVENUE	91
How Much Money is Involved?	91
Net Gambling Revenue and Gross Domestic Product	91
Gambling Expenditure per Adult Albertan	93
Where is the Money Coming From?	97
Origin of Net Gambling Revenue by Game Type	97
Origin of Net Gambling Revenue by Demographic Characteristics	101
Origin of Net Gambling Revenue by Geography	112
Where is the Money Going?	123
Immediate Recipients	123
Ultimate Recipients	124
Revenue Disbursement from Ultimate Recipients	129
IMPACTS OF LEGAL GAMBLING	131
Impacts on the Provincial Government	131
Financial Impacts	131
Compromise or Facilitation of Regulatory Function?	136
Impacts on Charitable Organizations	138
Financial Impacts	138
Ethical Issues	142
Saliency	142
Impacts on Society	143
Government and Charitable Services	143
Employment	143
Leisure Activity	148
Quality of Life/Public Health/Social Capital/Subjective Well-Being	150
Socioeconomic Inequality	152
Attitudes	154
Problem Gambling and Related Indices	163
Crime	186
Impacts on Private Industry	198
Private Sector Gambling Providers	198
Impacts on Non-Gambling Providers	200
Qualitative Assessment of Impacts	208
Mayoral Perspectives on Local Gambling and Casinos	209
Community Representatives' Perspectives on Local Gambling and Casinos	211
Main Themes	213
Impacts on First Nations	219
First Nations Gambling Revenue and its Disbursement	219
Impacts of First Nations Casinos	233
Focus Group Assessment of Impacts	241
Enoch: River Cree Resort	244
Tsuu T'ina: Grey Eagle Casino	245

Stoney: Stoney Nakoda Resort	247
Alexis: Eagle River Casino	249
Cold Lake: Casino Dene	251
Post-Script: Barriers to Participation	253
SUMMARY	257
Research Approach	257
Theoretical Approach	258
How Much Money is Involved?	258
Where is the Money Coming From?	259
Where is the Money Going?	260
Impacts of Legal Gambling on the Provincial Government	261
Impacts of Legal Gambling on Charitable/Community Organizations	262
Impacts of Legal Gambling on Society	263
Impacts of Legal Gambling on Private Industry	268
Qualitative Assessment of Impacts	269
Impacts of Legal Gambling on First Nations	271
ASSESSMENT OF THE OVERALL IMPACTS	275
Overall Economic Impacts	275
Overall Social Impacts	279
Overall Impacts	281
RECOMMENDATIONS	282
REFERENCES	285
APPENDICES	295
A. 2008 and 2009 Alberta Population Surveys	295
B. Alberta Population Surveys 1992 to 2009	327
C. Alberta Charity Casino Regions	330
D. Alberta Census Divisions	331
E. Problem and Pathological Gambling Measure	332
F. Alberta's Economic Regions	335
G. AGLC Casino Approval Procedure	336

ABSTRACT

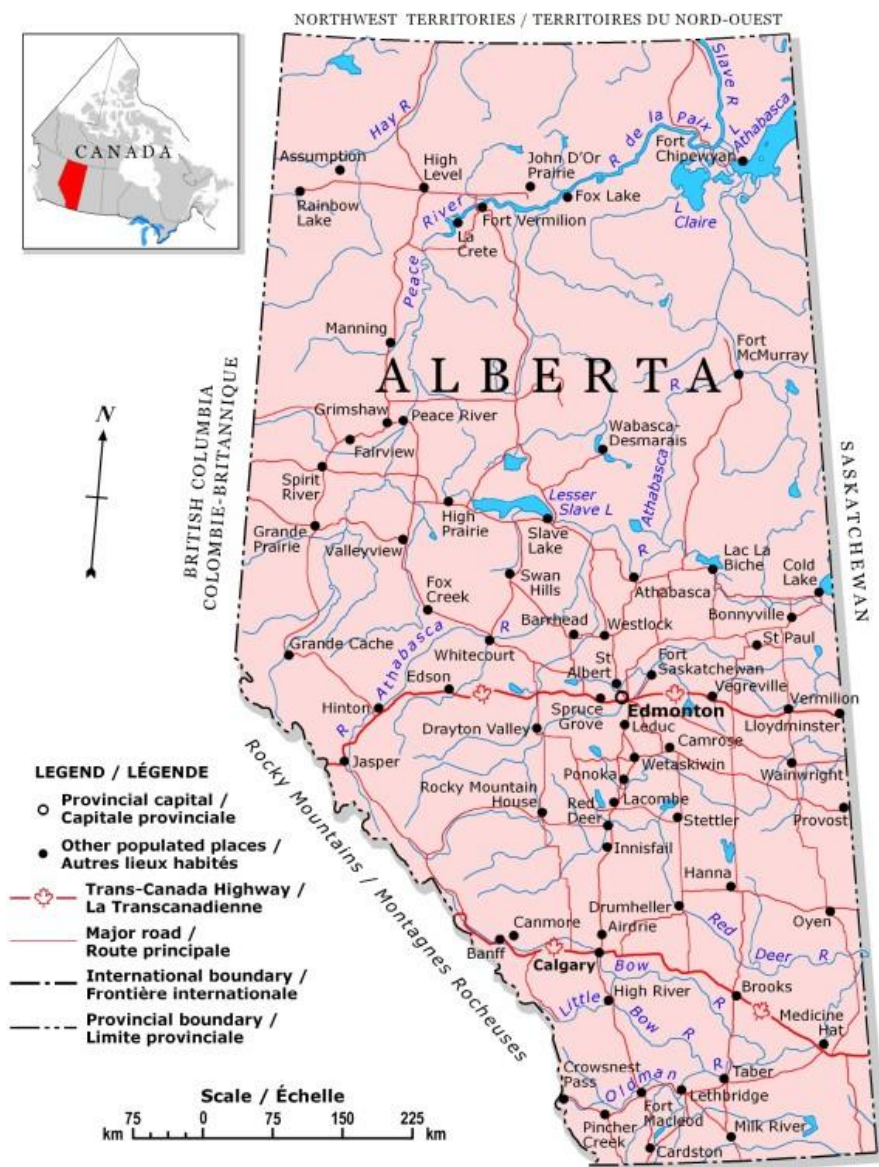
At a provincial level, there would appear to be **minor economic benefits to gambling in Alberta that are offset by minor economic costs**. The main economic *benefits* concern the fact that gambling appears to create additional economic activity without any obvious negative impacts on other business, and gambling is associated with a very small increase in the value of infrastructure. At a community level, however, there are significant and unambiguous economic benefits to First Nations communities that host casinos, because of their ability to retain a large part of the revenue. Although this increased revenue is mostly derived from non-First Nations communities (primarily Edmonton and Calgary), it represents a relatively small cost to these large urban economies. The economic *costs* of gambling in Alberta concern the fact that the creation of domestic gambling opportunities has more likely increased monetary outflow to out-of-province jurisdictions rather than retained it. However, the amount of outflow is small relative to overall Alberta Gross Domestic Product (GDP). It is also worth noting that the model used in Alberta, whereby the provincial government and community groups are the primary beneficiaries of gambling revenue, is a system that best ensures that gambling revenue stays in the province and the economic benefits accrue to Albertans.

From a social/nonmonetary perspective, it can be said that there are **important social benefits of gambling in Alberta that are offset by some serious negative consequences**. The main social *benefit* is the enhanced community services that Albertans receive from charity/community groups and maintained and/or enhanced public services from the provincial government. Other important social benefits are the fact that a) well-regulated legalized gambling has significantly decreased non-regulated illegal gambling, and b) gambling has provided an additional leisure option that is fairly well patronized. Legalized gambling also appears to provide minor employment benefits. Gambling's *negative social impacts* concern the fact that it is slightly regressive, and it creates a small amount of additional crime (that is offset to some extent by a significant decrease in illegal gambling). However, the main negative impact is problem gambling, which directly or indirectly affects 8% to 10% of the population and which involves particularly serious consequences for a small minority of these people (bankruptcy, divorce, unemployment, crime, suicide). For some of these consequences (bankruptcy, suicide) gambling appears to be an important contributor to their overall prevalence within Alberta. However, a) the *legal* availability of gambling is only partly responsible for the prevalence of problem gambling (i.e., problem gambling existed to some extent prior to legal provision, and the relationship between legal gambling availability and problem gambling prevalence in Alberta is weak), and b) problem gambling is only partly responsible for these serious consequences (i.e., the comorbid conditions of problem gamblers are additional contributing factors). A more directly attributable and ethically problematic aspect of legal gambling is the fact the large majority of government and charity gambling revenue is derived from a very small percentage of the population which includes a disproportionate percentage of problem gamblers.

INTRODUCTION

Alberta

Canada consists of 10 provinces and 3 territories. Alberta is one of the western provinces, located just east of the Rocky Mountains. Its neighbors are the province of British Columbia to the west, the North West Territories to the north, the province of Saskatchewan to the east, and the state of Montana to the south. Alberta covers an area of 661,848 square kilometers, roughly the same size as Texas.



Alberta is estimated to have 3,755,317 people in 2011, representing 10.9% of the total Canadian population. It is the fourth most populous province, after Ontario, Quebec, and British Columbia. The 2006 Statistics Canada census determined that approximately 81% of Albertans live in urban areas and 19% in rural areas. The major urban centres are the Calgary census metropolitan area (1,079,310), the Edmonton census metropolitan area (1,034,945), Red Deer (82,772), Lethbridge (78,713), Medicine Hat (56,997), Wood Buffalo (Fort McMurray) (51,496), and Grande Prairie (47,076). Edmonton is the capital of Alberta.

Approximately 80% of the Alberta populace has western European ancestry, with the most common countries of origin being England, Germany, Scotland, Ireland, France, Ukraine, Holland, Poland, and Norway. Aboriginals constitute 5.8% of the Alberta population, with roughly half of these individuals being Métis. The rest of the Alberta population has ancestries that derive from China (3.7%), South Asia (3.2%), the Philippines (1.6%), Africa (1.4%), Southeast Asia (0.9%), and Latin America (0.8%).

Alberta has a strong economy that is based upon the petroleum industry, and to a lesser extent, agriculture and technology. Alberta is the world's second largest exporter of natural gas and has the world's largest deposit of [bituminous sands](#) (oil sands). Alberta's Gross Domestic Product (GDP) in 2009 accounted for 13.9% of Canadian GDP. However, its 2008 GDP per capita of \$81,118 was the highest of any province or state in North America (Canadian average = \$48,013).

The availability of legalized gambling opportunities in Alberta has steadily increased over the years, with almost all forms of gambling now being widely available. This includes charitable raffles, on-site horse race betting (legalized in 1892), bingo (introduced 1920s), lotteries (introduced 1973), casinos offering table games (introduced 1980), instant win scratch tickets (introduced 1986), teletheatre horse racing (introduced 1990), sports betting (introduced 1990), video lottery terminals (introduced 1992), and slot machines within casinos (introduced 1996).

Research Questions

The impetus for the present research project concerns the fact that the introduction and expansion of legalized gambling in Alberta has been made a) in the absence of good scientific evidence concerning the social and economic impacts of legalized gambling in this province, and b) in the absence of good scientific evidence about how best to mitigate the negative impacts and maximize the benefits. The primary purpose of the present research is to provide sound scientific results pertinent to both of these issues.

Several research questions guide this research. Specifically:

1. What is the magnitude of the social and economic impacts of legalized gambling in Alberta?
2. What is the nature of these social and economic impacts?
3. Which sectors, geographic areas, and demographic groups are most impacted and which are least impacted?
4. What are the main positive economic and social impacts and what are the main negative economic and social impacts?
5. What are the policy implications of these results?

Theoretical and Logistical Challenges

Investigating the social and economic impacts of gambling in Alberta is a difficult task. One problem concerns the ongoing debate about the appropriate theoretical framework for analyzing and quantifying the social and economic impacts.

A second problem is that the introduction of legal gambling in Alberta has not been a discrete event lending itself to a traditional before/after analysis. Rather, the legalization and expansion of gambling in Alberta has actually been an ongoing process occurring over the past 119 years, beginning with the legalization of on-site horse race 'bookmaking' in 1892, and continuing to the present day with openings of new casinos and introduction of new forms of gambling. Consequently, the impacts of gambling in Alberta have also been distributed over an extended time period. Furthermore, some of these impacts have presumably long since disappeared, some have changed over time, and most are in some ways shaped by these earlier impacts and events. Compounding this problem is that for much of this time period there is a lack of comprehensive social and economic data available for Alberta that could speak to these potential impacts, thereby precluding a strong empirical approach to investigating this question.

These challenges have helped shaped the structure of this report, which is organized into 4 sections.

Organization of the Report

The First Section of this report elucidates our *Research Approach* to investigating the impacts of gambling in Alberta and our *Theoretical Approach* for assessing the socioeconomic impacts of gambling. This theoretical approach derives from a comprehensive review of the issues involved.

Because of the gradual introduction of gambling and the lack of empirical data for much of this time period, a part of the present socioeconomic analysis must necessarily be descriptive rather

than empirical in nature. Thus, the Second Section of this report contains the *History of Gambling in Alberta*. This history indirectly speaks to the historical impacts of gambling and also provides the necessary context to understand the complex way in which gambling is provided in Alberta today. Further to this end, the second half of this section provides a comprehensive description of the *Current Regulation, Availability and Provision of Legal Gambling in Alberta*.

The Third Section, and the main body of this report, contains the results from a more empirical analysis of the social and economic impacts of gambling. The focus of this empirical analysis is from 1970 to the present time. This is partly because of data unavailability prior to 1970; partly because 1969 was coincident with the beginning of Alberta's ability to independently provide, regulate, and license most forms of gambling; and partly because the most rapid introduction and expansion of gambling in Alberta has occurred between the mid 1980s to the present time. Thus, this is also the period where impacts are most likely to be observed. The first part of this section is an investigation of the *Amounts, Origins, and Recipients of Gambling Revenue*. The second part of this section is an investigation of the *Impacts of Gambling* on the sectors primarily involved in the transfer and receipt of this money: the Provincial Government; Charitable Organizations; the general Alberta Populace (Society); Private Industry; and Alberta First Nations.

The Fourth and final Section of this report provides a comprehensive *Summary* of the findings, an *Assessment of the Overall Impacts*, and policy *Recommendations* deriving from these results.

RESEARCH APPROACH

Following the Money

An essential aspect of our research approach to studying socioeconomic impacts was to ‘follow the money’. Although there are many areas of the economy and society where socioeconomic impacts of gambling might be found, they are much more likely to be observed in the groups/individuals/geographic areas that are responsible for contributing the money and in the groups/economic sectors/geographic areas that are the recipients of the money. The sectors primarily involved in the transfer and receipt of this money are the: Provincial Government; Charitable Organizations; the general Alberta Populace (Society); Private Industry; and Alberta First Nations. We then conducted a detailed examination of the impacts within each of these groups/sectors. The final part of our analysis was the: a) evaluation of the aggregate economic/monetary impacts that were identified against basic principles of economic gain/loss, and b) evaluation of the pattern of social/nonmonetary impacts that were identified against basic principles of societal value/benefit. (The theoretical framework used for evaluation of impacts is described in detail in the next section of this report).

In addition to ‘following the money’, 4 specific research strategies were employed: Secondary Analysis of Changes in Economic and Social Indices; Direct Investigation of the Known Impacts of Gambling; Population Surveys; and Key Informant Interviews. These are described below:

Secondary Analysis of Changes in Economic and Social Indices

Rather than an exhaustive study of the universe of economic and social variables that may have been impacted by gambling introduction, the present research focused on changes in areas that have been identified in previous research as having some potential of being impacted by gambling (Stevens & Williams, 2004; Williams, Rehm, & Stevens, 2011). The specific domains that were investigated were:

- **Employment Rates**
- **Business Revenue and Gross Domestic Product**
- **Business Counts**
- **Commercial Bankruptcy**
- **Crime Rates (with a focus on crimes typically related to gambling)**
- **Problem Gambling Indicators**
 - **Rates of Treatment Provision**
 - **Rates of Personal Bankruptcy (Consumer Insolvency)**
 - **Suicide Rates**

While the above described approach has much utility, it also has several important limitations. For one, as mentioned earlier, most gambling opportunities in Alberta were gradually introduced and gradually expanded. There are actually only a few events that represent a sudden and significant change in gambling availability that would potentially allow a clearer before/after comparison (with casino openings being the best example of this¹). Consequently, many of our analyses are correlational and/or descriptive in nature, which is a weaker basis for identifying causal relationships. Furthermore, in a dynamic and complex economy there are a myriad of economic and social forces at work that influence things such as employment, bankruptcy, crime, business counts, etc., making the disentanglement of these impacts and their attribution to gambling very difficult.

Another limitation is that almost all forms of gambling in Alberta (i.e., lottery, instant win tickets, sports betting, VLTs, Bingo, horse race betting) have been pervasively introduced and evenly distributed, which does not permit the use of control regions/groups. The only types of gambling with some degree of regional variation in Alberta are casinos and racing entertainment centres (RECs) (racetracks with slot machines).

Direct Investigation of the Known Impacts

The above approach investigates *potential* impacts of gambling as reflected in changes in general socioeconomic indicators. Our second strategy is the direct examination and documentation of the immediate and *known* impacts of gambling. Specifically:

- **Direct Employment** as a result of new gambling facilities or types of gambling (i.e., number of new employees; wages; residency; comparison to previous employment status to determine extent to which these jobs are ‘new’ rather than just shifted from other industries).
- **Direct Revenue** as a result of this new form of gambling.
- **Disbursement of Direct Revenue**
 - Percentage and amount to: Provincial Government, Federal Government, Charity/Community Groups, Private Sector Venue Operators, First Nations Groups
 - Disbursement of revenue within each of these sectors.
- **Infrastructure Investment** made by casinos and other major venues.
- **Infrastructure Costs** to municipal, First Nation, and provincial governments (i.e., road development and maintenance, utilities (power, water, sewage), fire services, police services).

¹ Unfortunately, the introduction of casinos and Racing Entertainment Centres (RECs) is often not a discrete event either, as many of them undergo significant expansion after opening.

These data provide another layer of useful information concerning the impacts of gambling. Furthermore, these data are not beset to the same degree with the issues of causal attribution and disentanglement.

Population Surveys

Population surveys provide several additional unique sources of information relevant to the impact of gambling. One of these is **Public Attitudes**. An argument can be made that the general public's current support or non-support of gambling is as important as gambling's objective beneficial or detrimental effects. Current **Gambling Behaviour** of the general public is another critical piece of information relevant to impacts that can be determined through population surveys. More specifically: who patronizes the various forms of gambling; where they live; what specific games they spend their money on; how much they spend; how frequently they gamble; and whether they have developed problems as a result of their gambling. This data is directly relevant to the nature and magnitude of gambling impacts; the demographic features of these impacts (age, gender, ethnicity, socioeconomic class); their geospatial distribution; and how impacts vary as a function of game type. Finally, population surveys are also the only way to establish the overall population **Prevalence of Problem Gambling**, a particularly important impact of gambling.² Supplemental questions to the problem gamblers asking them about certain direct consequences of their gambling can also be used to establish the population prevalence of gambling-related: *bankruptcy; treatment utilization; attempted suicides; domestic violence; separation or divorce; child neglect; involvement of child welfare; lost work productivity; school failure/drop-out; employment dismissal; unemployment or welfare benefits; illegal activity; and incarceration*.³ Some of these problem-gambling indicators can be triangulated with findings on these same variables identified in our first research strategy (i.e., secondary analysis of changes in crime rates, bankruptcy, treatment provision, suicides).

Two General Population surveys were conducted in the present study, one in the summer of 2008 ($n = 3,001$) and the second in the summer of 2009 ($n = 1,004$). The response rates were 25.5% and 33.1% respectively. To better match the obtained sample to the population the data was weighted by household size as well as actual age x gender distributions in the 2006 Alberta

² This is a better measure of problem gambling compared to the aggregate number of people presenting to treatment, help-line calls, self-exclusion agreements, etc., in that only a very small fraction of problem gamblers ever access treatment, and these numbers are influenced by changes in treatment availability and media promotion.

³ These supplemental questions specifically asked problem gamblers to indicate whether their gambling had directly led to a suicide attempt, bankruptcy, etc. This permits a somewhat stronger causal inference than just comparing the prevalence of these things in problem gamblers vs. non-problem gamblers. However, these figures will be slight underestimates as they do not include a small amount of gambling-related bankruptcies, divorces, etc. from non-problem gamblers.

census. A supplemental Online General Population sample was also collected via email solicitation to Alberta online panellists⁴ who were members of [NetPanel](#). The purpose of collecting an online sample was to investigate whether prevalence rates obtained with this method would approximate the rates obtained with telephone surveys and potentially supplement or replace telephone surveys (in light of their steadily declining response rates). The size of the online sample was 2,019 in the summer of 2008 and 1,006 in the summer of 2009. The actual surveys themselves as well as comprehensive details about the methodology used to conduct them are contained in Appendix A.

Changes in population attitudes, behaviour, and problem gambling prevalence rates over time also provide an indirect way of gauging the impact of the introduction/expansion of the various forms of gambling. Fortunately there have been several different population surveys of gambling beginning in 1992 that permit this type of analysis (see Appendix B).

In addition to General Population surveys of adult Albertans, we also conducted 'Targeted Population Surveys' where we examined the changes in attitudes, gambling behaviour, and problem gambling in the summer of 2008 versus 2009 in 4 geographic areas that did not have casinos prior to their introduction in late 2007/early 2008 ('New Casino Areas'): Cold Lake area; Whitecourt area; Camrose area; Morley area. To control for changes that might have occurred simply as a function of time, we compared changes in the New Casino Areas to changes observed in 5 geographic areas with well-established casinos ('Established Casino Areas'): Fort McMurray area; Grande Prairie area; Red Deer area; Medicine Hat area; Lethbridge area. (Note also that these 5 control regions represent 'rural' areas, similar to the 4 New Casino areas). The

⁴ In recent years Survey Research firms have created 'online panels' composed of hundreds of thousands of individuals who have agreed to receive online solicitations to participate in various online surveys in return for compensation (most often, a collection of 'points' that have some cash value) (Göritz, 2007; Göritz et al., 2002). When an individual joins one of these panels, information is collected concerning his/her demographics. Subsequently, when a group is needed for a particular survey (e.g., 'representative sample of Alberta adults'), the survey is only sent out to this selected subsample. Online panels are now commonly used in market research, but have rarely been used in academic studies. The advantages of online panel surveys are that a) the validity of answers to 'sensitive questions' (e.g., gambling) tends to be higher in self-administered formats (Tourangeau & Smith, 1996; van der Heijden et al., 2000); b) everyone has agreed to be and expects to be contacted (unlike telephone surveys); c) the results can be obtained in a much shorter period of time; and d) they are roughly one-third the cost of telephone surveys. However, there are several unanswered questions concerning online panels. One concern is the degree to which panels are representative of the population. One obvious problem is that a significant nonrandom minority of people still do not use the Internet. The most recent data for Canada shows that 27% of Canadians 16 and older did not use the Internet in 2007, with nonusers significantly more likely to be located in rural areas, have lower income, be older, and have less education (Statistics Canada, 2008). Furthermore, although online panelists are structured to be demographically representative, other differences likely exist, as only a small minority of people invited to be part of an online panel agree to participate (Sparrow, 2006). Concerns have also been expressed about the data quality when using 'professional respondents' who may do dozens of surveys within the span of a few months (Göritz, 2007; Toepoel, Das & van Soest, 2008). Other questions concern the optimal way of creating online panels, the effects of different types and magnitudes of rewards, the appropriate number of contact/request attempts, appropriate deadline for questionnaire completion, and the effects of nonresponse.

sample size of the Targeted Population Survey in 2008 was 4,512, with a response rate of 23.3%. The sample size in 2009 was 3,624 with a response rate of 24.1%.

A final strategy is to use data obtained from the population surveys to conduct multivariate statistical analysis (logistic regression) to determine which things best differentiate problem gamblers from nonproblem gamblers, with a particular interest in the relative importance of residential proximity to gambling compared to the other known correlates of problem gambling (e.g., age, gender, ethnicity, presence of other addictions, mental health problems, etc.). However, while this technique will identify the relative importance of gambling availability/proximity as a predictor of gambling and problem gambling, the causal connection is still ambiguous because of the correlational nature of the data set. In most jurisdictions, including Alberta, the presence and concentration of gambling opportunities is directly related to their utilization. Video lottery terminals (VLTs) are a good example of this in that every year VLTs in the locations producing the lowest revenue are removed and relocated to locations having greater revenue potential.

Key Informant Interviews and Focus Groups

As we have indicated, a focused examination of changes occurring in communities receiving new casinos is both an important methodological strategy by which to measure impacts, as well as being one of the more important results within our larger mandate. While much of this data will be available from our first three methodological strategies, there was value in supplementing this with qualitative information obtained through key informant interviews and focus groups.

Thus, we met with representatives of each of these 20 communities that host casinos in Alberta (mayors; municipal/band council; police; social services) to solicit and record their general thoughts about the nature and magnitude of any impacts they have observed. Particular attention was given to communities that recently received casinos. In addition, focus groups were held on the Alexis First Nation and the Cold Lake First Nation to ascertain community sentiments about their new casino.

THEORETICAL APPROACH

PROBLEMS WITH EXISTING APPROACHES TO ASSESSING SOCIOECONOMIC IMPACTS

The specific theoretical approach used to study the effects of gambling is a fundamentally important determinant of the results obtained, as well as the validity of these results. Unfortunately, there is considerable controversy about the appropriate theoretical and methodological approach to studying gambling impacts. These issues have been the focus of conferences ('Whistler Symposium' in British Columbia in 1999, the 'Social and Economic Costs and Benefits of Gambling' conference in Banff, Alberta in 2006); special issues of the *Journal of Gambling Studies* (June 2003) and the *Managerial and Decision Economics Journal* (June 2004); books (Grinols, 2004; Morse & Goss, 2007; Walker, 2007); and many individual articles (Anielski & Braatan, 2008; Australian Productivity Commission, 1999; Azmier, Kelley, Todosichuk, 2001; Barretta, 2004; Centre for Social & Health Outcomes Research & Evaluation, 2006; Collins & Lapsley, 2003; Committee on the Social and Economic Impact of Pathological Gambling, 1999; Eadington, 2003; Gerstein, Volberg, Harwood, & Christiansen, 2004; Grinols, 2007; Grinols & Mustard, 2001; 2008; Grinols & Omorov, 1996; Hawke, 2000; Hayward & Colman, 2004; Henriksson, 2001; Kindt, 2003; Marfels, 1998; McGowan, 1999; O'Neil, Chandler, & SA Centre for Economic Studies, 2009; Persky, 1995; Single, 2003; Stevens & Williams, 2004; Victorian Gambling Research Panel, 2001; Walker, 2003a, 2004, 2008a, 2008c, 2008d; Williams, 2011; Wynne & Shaffer, 2003).

Despite all of this work there is still not an agreed upon approach for assessing the socioeconomic impacts of gambling. There remain several contentious issues, with one of the central ones being how to capture and quantify the social impacts (Collins & Lapsley, 2003; Eadington, 2003; Walker, 2003a, 2008a, 2008b, 2008c).

Some impact studies of gambling have simply ignored social impacts, choosing to only measure the most apparent and obvious economic benefits that are easily quantifiable (e.g., gambling revenue, tax revenue, employment numbers). Examples include Arthur Anderson's (1997) study of U.S. casino gambling, Littlepage et al.'s (2004) study of riverboat gambling in Indiana, studies of the economic impacts of racinos in Ontario (Brinkman & Weersink, 2004; Econometric Research Limited, 2005), and the Canadian Gaming Association's analysis of the impacts of gambling in Canada (HLT Advisory, 2008). However, this creates a very unbalanced analysis in that the positive economic impacts are not evaluated in the context of the negative social impacts. By way of example, it would be inappropriate if socioeconomic analyses of the effects of alcohol or tobacco just focused on the tax revenues, employment gains, support to the agricultural sector, and failed to mention the negative social impacts caused by consumption. However, failing to measure social impacts is not an infrequent occurrence in the socioeconomic analysis of gambling.

Better quality socioeconomic impact studies have cast a wider net and included important social impacts such as problem gambling and crime. Further to this end, Anielski & Braatan (2008) have recently proposed a framework for analyzing the social and economic impacts of gambling that comprehensively assesses gambling's impact in 6 areas: Health and Well-Being; Economic and Financial; Employment and Education; Recreation and Tourism; Legal and Justice; and Culture. Within each of these areas there are specific costs and benefits of gambling that need to be addressed (a total of 34 variables/indicators).

The more problematic issue has been how to directly compare the social impacts with the financial/economic ones so that an overall determination of the positive or negative nature of gambling can be made. Some studies have attempted to do this by estimating the monetary value of these social impacts so that they can be combined with the monetary/economic impacts in other areas. This is the cost-benefit analysis (CBA) approach to gambling that is best illustrated by the work of the economist Earl Grinols (2004).

However, while determining the financial costs of some social impacts is reasonably straightforward (e.g., costs of treating problem gamblers, or the costs of prosecuting and incarcerating gambling-related crime), estimating costs for many other social impacts is not. This includes the costs of suicides, divorces, loss of social capital⁵, the leisure benefit of gambling, as well as the psychic trauma of being a problem gambler. Most often these latter types of social impacts are excluded from cost-benefit analyses. However, this exclusion seriously limits the comprehensiveness and fairness of the overall analysis. The alternative is to try to establish an approximate financial cost. For example, by asking people "how much would you pay not to be a problem gambler"; or tabulating the direct and indirect financial ramifications of gambling-related suicides (funeral costs, lost productivity, etc.); or trying to financially quantify the leisure benefit of gambling by calculating 'consumer surplus' (i.e., difference between what people would be willing to pay for gambling versus what they actually pay). Other examples of how to monetize social impacts are provided in Anielski & Braatan (2008) and Anielski & Wynne (2009) (this general approach being described as 'full-cost-benefit-accounting' by these investigators).

Unfortunately, the figures obtained from this approach are somewhat arbitrary and fairly unreliable, making them subject to widely different estimates. It also continues to remain unclear how to create a monetary value for some variables (e.g., loss of social capital). Even the strongest supporters of this full-cost-benefit approach acknowledge these serious difficulties. For example, Anielski & Wynne (2009) ended up abandoning this strategy in their socioeconomic impact study of gambling in Nova Scotia.⁶

⁵ Roughly defined as the degree of societal interconnectedness and shared interest.

⁶ In turn, this incomplete analysis and inability to present a summative result may have been a contributing factor to the Nova Scotia government rejecting the Anielski & Wynne (2009) report, due to what they considered to be 'methodological flaws' (Jackson, 2010).

Aside from these practical issues, an argument can be made from a theoretical standpoint that it is inappropriate to apply an arbitrary monetary amount to something that is clearly nonmonetary in its value or consequences to the participant. Furthermore, doing so simply reinforces the erroneous notion that money is the appropriate and important metric upon which to judge the impact and/or the overall value of gambling.

This latter issue is not restricted to gambling. Widespread dissatisfaction with reliance on financial measures such as [gross domestic product](#) (GDP)⁷ or CBA to measure societal progress or impacts on overall societal well-being has existed for many years (e.g., Atkinson, 2000; Daly & Cobb, 1989; Dasgupta & Maler, 2000; Tinbergen & Huetting, 1992). This situation has directly led to the development of several alternative measures to assess progress/impacts in a more comprehensive fashion. These measures include the United Nations [Human Development Index](#), the [Quality of Life Index](#), [Full Cost Accounting](#), the [Happy Planet Index](#), the [Canadian Index of Wellbeing](#), the [Index of Sustainable Economic Welfare](#), the [Green National Product](#) and the [Genuine Progress Indicator](#) (GPI). Most of these measures recognize economic productivity (e.g., GDP) as an important aspect to be considered, but they do not make it the central basis upon which a judgement about progress or societal well-being is made.

Unfortunately, while these approaches are more theoretically satisfying, they have practical problems of their own. First, although they all have similar goals, their specifics are markedly different from each other. This illustrates the fact that determining which indicators contribute to societal well-being is a very value-laden task that is not well agreed upon. Second, most of these approaches have the same problem as cost-benefit analysis in that they aspire to combine impacts into a single index, usually just by adding up the number of beneficial indicators against the detrimental ones. This is problematic because it makes all impacts equivalent in value and/or requires a subjective judgement about the relative value/weight of one impact against the others.

Unfortunately, the reality is that there is no reliable way of combining social impacts with monetary impacts to produce a single summative measure. *Instead, assessing the overall positive or negative nature of an enterprise that has wide ranging social and economic impacts (such as gambling) will always be a subjective judgement about the relative importance of the observed social impacts compared to the observed economic impacts.*

However, this fact does not preclude conducting meaningful socioeconomic analyses of gambling. Rather, there are many basic **principles for conducting socioeconomic impact studies** that can ensure that the obtained results are comprehensive, balanced, and scientifically rigorous. The purpose of the next section of this paper is to outline these

⁷ GDP is defined as the dollar value of all goods and services produced in a jurisdiction over a one year time period (primarily measured by the aggregate volume of monetary transactions/sales that occur). This measure has been critiqued because although it provides a rough measure of the magnitude of economic activity, it does not measure whether this economic activity is sustainable, efficient, or conducive to societal well-being.

principles. These principles are very much in the spirit of the Anielski & Braatan (2008) framework as they ensure there is a meaningful accounting of the social impacts of gambling. At the same time, they address the critiques of the Anielski & Braatan framework (e.g., Walker, 2008d), and of socioeconomic research more generally, by a) proposing a simpler and more user-friendly categorization of impacts, b) providing a clearer description of how these impacts are to be evaluated and combined, c) enshrining basic principles of economic gain/value in the evaluation (Walker 2003, 2008a, 2008d; Walker & Barnett, 1999), and d) outlining scientifically rigorous strategies to better ensure things such as attributional fractions⁸ and causal direction of the impacts can be better established.

⁸ The term 'attributional fractions' has a couple of different meanings. In the present context the issue concerns how to appropriately proportion costs attributable to gambling, when many problem gamblers have comorbid disorders (e.g., substance abuse, mental health problems) that contribute to the negative consequences problem gamblers have, such as suicide, divorce, and crime (Australia Productivity Commission, 1999; Crockford & el-Guebaly, 1998; Walker, 2008d).

SOUND PRINCIPLES FOR CONDUCTING SOCIOECONOMIC IMPACT ANALYSES OF GAMBLING

Measure 'Impacts' rather than 'Costs and Benefits'

While many gambling impacts are clearly negative (e.g., increased problem gambling) or positive (e.g., employment gains), the positive or negative nature of several other changes is less clear and somewhat subjective (e.g., changed societal pattern of leisure pursuits, cannibalization of competing industries, increase in tax revenue). 'Impact' is often a better term as it conveys the fact that a change has occurred without having to necessarily characterize it as positive or negative. Use of this term also avoids confusion with the CBA use of the terms 'cost' and 'benefit'.

Comprehensively Assess all Potential Economic and Social Impacts

It is self evident that all impacts of gambling have to be included in an impact analysis. There are many different and equally legitimate ways of organizing and categorizing these impact areas. The Anielski & Braatan (2008) framework is one such organization, but there are many others. The important thing is not the overall organization, but ensuring that a) all of the potential impact areas are covered, and b) economic/monetary impacts are given equal prominence to the social/nonmonetary impacts. The following is a suggested organization of the impact areas which capitalizes on the economic/monetary versus social/nonmonetary distinction that is often made. It is also the organization used in the present study.

ECONOMIC IMPACTS (i.e., impacts that are primarily monetary in their nature)	
Government Revenue	Government revenue received directly from gambling provision or indirectly from taxation of businesses providing gambling. Taxes come in the form of licensing fees, property tax, corporate income tax, and goods and services taxes. It is also important to consider whether taxes may have risen if government had not received additional revenue from gambling.
Public Services	Changes in the quantity or quality of government or charity provided services (e.g., health care, education, social services, infrastructure, etc.) as a direct or indirect result of increased government revenue from gambling. <i>Note: this category could also be put in the Social Impacts section but is kept in the Economic Impacts section because of its close association with Government Revenue and because these services usually have a clear monetary value.</i>
Regulatory Costs	Changes in the amount of government revenue directed to ensuring that the new form of gambling operates according to government regulation.
Infrastructure Value	The introduction of any buildings (e.g., casino), roads, and infrastructure upgrades which add to the capital wealth of the community and which are directly or indirectly attributable to the introduction of gambling.

Infrastructure Costs	The amount of revenue allocated by various levels of government to support the infrastructure needed to service new gambling facilities (i.e., road maintenance, utilities, fire services, police services). This does not include regulatory services or services specific to problem gambling.
Business Starts and Failures	The number of new businesses as well as business failures (commercial bankruptcy) associated with gambling introduction. Certain businesses should receive particular attention because research has shown them to be more likely impacted by gambling introduction. Specifically, these are other forms of gambling (i.e., bingo, horse racing, lotteries); the hospitality industry (i.e., hotels, restaurants, lounges); the construction industry; pawnshops; cheque cashing stores; horse breeding and training operations; tourism; and other entertainment industries.
Business Revenue	Changes in overall business revenue/sales in industries that are typically affected by the introduction of gambling. This does not include revenue received by the new forms of gambling.
Personal Income	Changes in average personal income or rates of poverty associated with gambling introduction.
Property Values	Changes in property values in areas proximate to new gambling venues.
SOCIAL IMPACTS (i.e., impacts that are primarily non-monetary in their nature)	
Problem Gambling	Changes in the prevalence of problem gambling and the main indices potentially associated with problem gambling (i.e., personal bankruptcy rates, divorce rates, suicide rates, treatment numbers). There are also monetary costs associated with changes in problem gambling that should be tabulated (and included in the Economic Impact section). Specifically, these are the amount of money spent on a) treatment and prevention; b) policing, prosecution, incarceration, and probation for gambling-related crime; c) child welfare involvement for gambling-related family problems; and d) unemployment and welfare payments and lost productivity because of gambling-related work problems.
Crime	Change in the rate of crime and gambling-related crime. This would include any observed decreases in illegal gambling with the introduction of a legalized form.
Employment	The number of full and part time jobs that are directly or indirectly created as a result of gambling introduction and the percentage of the general workforce that this represents.
Socioeconomic Inequality	Evidence that the introduction of gambling has a differential financial impact on people of different socioeconomic levels (e.g., potentially making it more or less 'regressive').
Leisure Activity	Changes in leisure behaviour associated with gambling introduction.
Public Attitudes	Change in public attitudes associated with gambling introduction. This could include changed attitudes about gambling (e.g., perceived benefits/harms), or changed attitudes about government or the role of government for allowing/providing gambling, etc.
Quality of Life/Public Health/Social Capital/Values	Change in the general quality of life, state of public health, societal interconnectedness, societal values, and related indices. These indices are often difficult to measure and also difficult to attribute to the introduction of gambling. Nonetheless, they are relevant impacts if they exist, and if they can be captured.

Again, other ways of organizing and reporting these impacts are possible and may be better suited for different purposes. Because of the importance of First Nations gambling in Alberta, in the present report impacts are organized according to sector: Government; Charity Groups; Private Operators; Society (i.e., general Alberta populace); and First Nations.

Avoid Applying Arbitrary Monetary Values to Impacts that are Non-Monetary in Nature

As mentioned earlier, it is a mistake not to capture social impacts that do not have significant monetary consequences. However, it is also a mistake to try to capture them within a cost-benefit economic framework by applying an arbitrary monetary value to them. This approach is an overextension of an economic worldview that fails to recognize that the true nature of the impact is largely non-monetary/economic in nature.

In most cases, social impacts are best quantified and reported *simply by means of percentage change in the variable and/or the actual number of people impacted (e.g., % change in rate of problem gambling, % change in crime, change in pattern of leisure behaviour, etc.)*.

Create a Profile of the Economic and Social Impacts

The advantage of a common metric (e.g., money) is that it potentially allows for the combination of all impacts into an overall aggregate value. However, as mentioned, this approach is problematic because of a) difficulties applying monetary values to many social impacts, b) the need to construe everything as either a cost or benefit, c) the inappropriateness of using money as a way of characterizing the nature and magnitude of some social impacts (e.g., suicide).

Thus, in most cases the best way of treating these impacts is to simply list them and to create a profile of impacts. For most social impacts, reporting the percentage change in the variable and/or the percentage of people impacted is most descriptive. For many of the economic impacts a monetary value can be used to quantify the magnitude of the effect within each impact area. There can also be value in aggregating the monetary amounts within and/or across economic impact areas.

Apply Basic Economic Principles to Evaluate the Positive or Negative Nature of the Economic Impacts

One of the critiques of many socioeconomic approaches to gambling is that they fail to adequately consider important economic principles in judging the overall impacts (Walker 2003, 2008a, 2008d; Walker & Barnett, 1999). For example, several costs of gambling in the Anieski & Braatan (2008) framework (e.g., theft, unemployment, costs of treating problem gamblers) are unlikely to result in any real reduction in the economic wealth within a society/jurisdiction; rather, just transfers of wealth within society (Eadington, 2003; Walker,

2003, 2008a; Walker & Barnett, 1999). There is no doubt that theft and treatment for problem gamblers are important negative impacts that need to be identified and well documented. However, the point being made is that these types of impacts have relatively little influence on the overall economic vitality/wealth of a jurisdiction.

Rather, for something to have a meaningful economic/monetary impact one of the following needs to be present:

1. *The economic activity causes either an influx of money/assets from outside the jurisdiction or a loss of money/assets to an outside jurisdiction.* For gambling, an influx occurs when the primary patronage base is from outside the jurisdiction, or capital investments are made in the community by outside agencies (e.g., casino developer, private businesses, government).
2. *The economic activity increases or decreases the value of existing assets.* This impact generally does not apply to gambling, or to entertainment industries more generally, as gambling primarily involves a transfer of wealth rather than a creation of wealth⁹. However, it can occur when the introduction of a new gambling venue either increases or decreases the market value of neighbouring property. It can also occur in the manufacture of gambling equipment (e.g., electronic gambling machines) that can be sold for an amount worth more than the sum of its parts.
3. *The economic activity produces increased or decreased utilization of existing money.* Money that sits dormant has very little economic utility to the broader economy. It has much greater utility if it is spent on gambling, this gambling revenue is then spent on employee wages, and these wages are then used to buy local goods and services. In general, money has increased economic value as a function of the number of people that use the money and the speed of the cash flow from one person to the next (Walker, 1999, 2007). Increased utilization of existing money is more likely to occur if gambling patronage comes from individuals who are not financing their gambling by reducing their spending on other activities (i.e., the income class of the patronage potentially speaks to this). Evidence of increased utilization of existing money is seen if the increased revenues and employment in the gambling industry (and supporting/complementary industries) occurs without there being offsetting declines in the revenues and employment in other industries. There is good evidence that adding a new and interesting service/good to the economy (e.g., gambling) can at least temporarily create increased monetary flow without negative impacts on other businesses (Walker & Jackson, 1998; 2007).

⁹ Wealth creation is more typical of manufacturing industries. For example, a car manufacturing industry creates wealth by making things that are worth more than the sum of their constituent parts. Most entertainment industries, in contrast, simply redirect monetary flow from one sector of the economy to another (which still has economic value in most cases).

4. *The transfer of wealth and changed monetary flow caused by the new economic activity strengthens or weakens sectors of the economy capable of producing an influx/outflow of wealth, increased/decreased value of existing assets, or increased/decreased utilization of money.* One of the potential concerns with gambling is that it may redirect money from wealth-producing sectors (i.e., private business) to sectors not known for wealth creation (i.e., government, charity) (e.g., Gwartney, Holcombe & Lawson, 1998).
5. *The failure to implement the economic activity would have resulted in an influx/outflow of wealth, increased/decreased value of existing assets, or increased/decreased utilization of money.* Even if there is not a clear economic gain, an economic benefit still exists if the gambling activity prevented assets or money from leaving the jurisdiction, prevented a decrease in the value of existing assets, or prevented decreased utilization of existing money.

Assessing the Overall Positive or Negative Nature of the Observed Impacts is a Qualitative Assessment Involving some Subjectivity

The judgement about whether the overall impacts of gambling are positive or negative (and the degree to which they are positive or negative), requires a joint qualitative assessment of a) the profile of social impacts, and b) the judged overall positive or negative economic value of the economic impacts. When these things are in alignment, then this assessment is straightforward (i.e., mostly positive social impacts and positive economic value; mostly negative social impacts and negative/no economic value).

However, the assessment is inherently subjective when these things are not in alignment (e.g., net economic gains but mostly negative social impacts). In this situation, the overall assessment will depend on the importance one assigns to the economic versus social impacts. In particular, whether one believes that the net economic value of the activity adequately offsets any negative social impacts.¹⁰

One potential way of reducing the individual subjectivity of this determination is simply to present the results and let the reader decide whether he/she considers the positives to outweigh the negatives. Another solution is to present the profile of results to a representative group of individuals from the jurisdiction and seek their opinion about whether they judge the overall impacts to be positive or negative.

Identify How Much Money is Involved, Where it is Coming From, and Where it is Going

The principles listed up to this point have been focused primarily on resolving the central methodological issue of how to handle the social impacts of gambling. The following principles

¹⁰ Other areas of subjectivity also exist; for example, how some of the ambiguous impact categories are construed (e.g., is increased government revenue a positive or negative thing). Another example concerns whether you consider the micro (community-level) benefits more important than the macro (regional-level) benefits.

are focused more on some of the practical issues involved in conducting socioeconomic analyses of gambling and ensuring optimal scientific rigour.

Gambling is an economic activity characterized by a transfer of wealth. There are groups and sectors that are winners and there are groups and sectors that are losers, and *most of the impacts are seen in these groups/sectors*. Thus, the first step in a socioeconomic analysis of gambling is to document a) how much money is being transferred (a rough gauge of the magnitude of the potential impacts); b) where the money is coming from; and c) where the money is going. The demographic characteristics of the gamblers are particularly important, with the most important socioeconomic variables being age, gender, ethnicity, income, and problem gambling status. The geographic origin of the gamblers is also very important because it speaks to a) whether the revenue is an infusion of new wealth or just local money that has been redirected, and b) the geographic range in which to expect (and therefore, measure) impacts.

Next, it is important to clearly document which groups/sectors are the primary recipients of gambling revenue (i.e., private operator, different levels of government, charity, local community) as well as the geographic location of each of these groups. It is also essential to document how these groups then disburse or spend the money so as to identify all the downstream beneficiaries. The geographic origin of the operating expenses to run the new type of gambling, as well as the origin of any equipment purchased are also relevant to a socioeconomic accounting. (Note: if gambling revenues are primarily collected at the state or federal level (rather than at the municipal level) and are redistributed provincially or federally, then there is a good chance that there will be a net outflow of money from the local municipality hosting the gambling venue).¹¹

Establish both the Micro and Macro Geographic Impacts

Most socioeconomic impact studies have only focused on the changes in the community that received the new form of gambling. However, for a full understanding of the impacts, it is necessary to go beyond these boundaries, as financial inflow/benefits in one region usually come at the expense of financial outflow or loss of benefits in adjoining regions. Thus, one should aspire to assess both the micro (community specific) impacts and the macro (greater regional) impacts. As mentioned, the geographic origin of the patronage is a good indication of the regional scope of the impacts. Once the boundary of this larger region/jurisdiction is established, it is important to clearly identify the impacts within the community of interest as well as regionally.

¹¹ Some jurisdictions compensate for this by providing municipalities with a guaranteed fixed percentage of the profits (e.g., British Columbia).

Compare Changes to those Observed in Control Communities/Regions

It is important to be able to disentangle the unique influence of gambling on observed socioeconomic changes (Walker, 2008c, 2008d). Most socioeconomic impact studies simply examine the pre- and post-changes in a community after the introduction of a new gambling venue/format. However, there are a multitude of economic and social forces at work that account for social/economic changes in a community. Furthermore, gambling often represents only a small fraction of total economic activity within a community.

Similarly, many of the adverse effects of problem gambling cannot be uniquely attributed to the introduction of a single new gambling venue/activity, as most problem gamblers engage in a wide variety of gambling activities and also have comorbid conditions that contribute to their constellation of problems (e.g., substance abuse, mental health problems) (Australia Productivity Commission, 1999; Crockford & el-Guebaly, 1998; Lorains, Cowlshaw, & Thomas, 2011; Walker, 2008d).¹²

A much stronger methodology is a matched control comparison where changes in the region receiving the new form of gambling are compared against changes in an economically, socially, and demographically similar region that did not receive this new form of gambling. This approach does not eliminate the contributing role of comorbidities to people's problems, but it does show the unique impact that the introduction of legalized gambling has in exacerbating these problems. This approach has some of its own complications, however, as there may be baseline attitudinal differences in regions that opt to have the new form of gambling versus communities that have opted not to have it. Also, the control region must be far enough away so as not to be secondarily impacted by the introduction of the new form of gambling. This geographic separation makes it more difficult in finding a region that is a good match.

Speculate on What the Situation would have been Without the Introduction of the New Form of Gambling

Most studies compare economic and social indicators after the introduction of gambling to what these indicators were before the introduction of gambling. However, often the justification for the introduction of a new form of gambling is the desire to stem the outflow of gambling dollars to neighbouring jurisdictions that already offer this new form of gambling. Thus, an even more relevant comparison than 'baseline', is what the likely economic and social situation would have been if gambling had not been introduced (i.e., the 'counterfactual situation') (Walker, 2008c). The extent to which the introduction of domestic gambling opportunities has prevented losses to neighbouring jurisdictions is very difficult to judge, but nonetheless merits speculation.

¹² The latest research shows that the conditions having the high comorbidity to problem and pathological gambling are: nicotine dependence (60.1%), substance use disorder (57.5%), mood disorder (37.9%), and anxiety disorders (37.4%) (Lorains, Cowlshaw, & Thomas, 2011).

Use Longitudinal Designs when Possible

Most impact studies collect yearly statistical ‘snapshots’ of a community’s socioeconomic indicators. Attempts are then made to attribute any changes to the introduction of the new gambling activity (e.g., a problem gambling increase after one year being responsible for a corresponding bankruptcy rate increase after one year). However, two data points provide no information concerning whether problem gambling caused the bankruptcies, the bankruptcies caused the problem gambling, or whether they were independent events. Even if one event precedes the other (e.g., problem gambling increase in year 1 followed by bankruptcy increase in year 2), causal attributions are weak unless it can be established that increased bankruptcies occurred primarily within the problem gamblers.

A related problem with cross-sectional designs is that there is no way of knowing the exact meaning of a stable prevalence rates from Time 1 to Time 2. For example, although severe levels of problem gambling appear to be reasonably stable over time (e.g., Slutske, 2006; Williams, Hann, Schopflocher et al., 2011), less severe forms (which are much more common) are not. A couple of studies have found that the large majority of moderate problem gamblers are no longer problem gamblers at 1-year follow up (Wiebe et al., 2003) or 7-year follow up (Abbott et al., 1999). Thus, stable rates of problem/pathological gambling from Time 1 to Time 2 imply the existence of a large group of newly affected individuals roughly equivalent to the number of individuals who have recovered or remitted (meaning that gambling is producing a cumulatively wider impact on the general population than would have otherwise been known). The ability to make causal attributions within individuals and establish problem gambling *incidence* (i.e., rate of new cases) is strengthened with use of a longitudinal design that documents the temporal sequence of events in ‘real time’ within individuals. (LaPlante et al., 2008).

Assess Impacts for Years Before and for Years After the Introduction of New Gambling Venues/Opportunities

The length of time it takes for all economic and social impacts of gambling to manifest themselves is unknown. Some of the economic impacts (e.g., revenues, employment, etc.) appear to be fairly immediate. On the other hand, it may take a few years for competing industries to fail or for increased utilization of roads, sewers, etc. to result in repairs. Some economic impacts will also reverse themselves in a resilient economy as industry repositions itself. Social impacts may take longer to appear than economic impacts. While some individuals experience rapid onset of gambling problems, others gamble safely for several years before problems develop (Committee on the Social and Economic Impact of Pathological Gambling, 1999). There is also evidence that rates of gambling and problem gambling may decline with extended exposure (LaPlante & Shaffer, 2007; Shaffer, LaBrie & LaPlante, 2004). It is also very important to realize that new gambling opportunities are always added to existing gambling opportunities (even if they are illegal). Thus, lag effects of these pre-existing opportunities can easily be mistaken for immediate impacts of the new forms. It is important

to document prior gambling opportunities and socioeconomic effects for several years before as well as for several years after the introduction of a new form of gambling.

Report the Limitations and Parameters of these Results

The final principle is to clearly recognize and report that the results obtained are very much a function of the context in which the study was conducted. More specifically:

Impacts are Dependent on the Magnitude of the Change in Gambling that has Occurred for the Population

Adding a large casino to a small community without prior gambling opportunities will usually have a much larger impact than adding an additional casino to a large city that already has existing casinos and other gambling opportunities.

Impacts are Somewhat Specific to the Type of Gambling Studied

Different types of gambling have different profiles of impacts in terms of their potential to contribute to problem gambling (e.g., EGMs vs. lotteries), the number of jobs they produce (horse racing vs. EGMs), and their likelihood of cannibalization of other industries, etc. Hence, it is necessary to qualify results as being specific to the type of gambling studied.

Impacts are Somewhat Specific to the Jurisdiction Studied

Jurisdictions differ widely in how gambling revenue is distributed, pre-existing availability of gambling, the strength of policy and educational initiatives to prevent problem gambling, baseline levels of poverty and unemployment, and the vulnerability of the population to addiction. Hence, it is important to recognize that the results will be somewhat dependent on the conditions that exist in the particular jurisdiction being studied.

Impacts are Somewhat Specific to the Time Period Studied

The time period that impacts are studied is critical, as gambling availability and gambling policy can change rapidly within a jurisdiction. Furthermore, there is evidence that populations with extended exposure to gambling may have different rates of problems compared to places with more recent introduction of gambling (LaPlante & Shaffer, 2007; Shaffer et al. 2004). Hence, it is also important to qualify results as being specific to the time period studied.

HISTORY OF GAMBLING IN ALBERTA

CHRONOLOGY OF EVENTS

The following chart chronicles the changes that have occurred in the legal/regulatory organization, availability, and participation in gambling in Alberta. This information was derived from examination of the original Statutes, Acts, and reports referenced; a comprehensive online search of digitized Alberta newspaper and legislative records; and multiple secondary sources.

The shaded areas summarize the changes that have occurred across longer time frames. The first introduction of a particular form of gambling is noted by red font.

<p>First Nations gambling prior to European contact</p>	<p>Traditional First Nations gambling games (i.e., contests of physical skill, guessing games, and ‘dice’ games ¹³) were commonly engaged in among indigenous people of Western North America. First Nations people believed that supernatural forces influenced the outcomes of unpredictable events. Consequently, gambling games were sometimes used to divine the future or to ascertain the appropriate course of action. It was also a common practice to do things to try to cultivate favour with these supernatural forces, and for gambling success to be interpreted as evidence of having this spiritual support (Binde, 2007; Culin, 1907).</p> <p>Gambling was also believed to activate and promote the gathering of these supernatural spirits. Consequently, gambling was a frequent part of ceremonies associated with ensuring a good harvest or hunt, producing rain, or marking the changing of the seasons. For similar reasons, gambling games were engaged in to help cure sickness, expel demons, aid in fertility, and to facilitate passage to the afterlife after death (Culin, 1907; Salter, 1974, 1980).</p> <p>Gambling games were also an important element of inter-tribal interaction as it provided a forum for nonviolent competition (although injuries were not uncommon in some of the physical competitions), as well as an opportunity for socializing and trade. It also promoted tribal interaction, as it was common practice for one tribe to challenge another to a contest and for the loser to rechallenge to regain their honour (Belanger, 2011a).</p> <p>Finally, gambling was also a popular recreational pastime. However, Aboriginal oral tradition contains the message that gambling outside of its appropriate ritualistic/ceremonial context was frowned upon and could lead to excess (something often remarked upon by early European observers) (Williams, Stevens, & Nixon, 2011).</p>
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¹³ *Contests of physical skill* involved things such as archery, spearing moving objects, foot races, wrestling, sliding sticks on snow/ ice for distance, and several different types of ball games including lacrosse. *Guessing games* involved guessing which person, or container, or hand was concealing the hidden object (bone, stone, stick), or whether the person was holding an even or odd number of sticks, or which hand held the ‘marked’ object, or the relative position of the hidden objects. *Dice games* were played with several 2 sided dice made of shells, pits, bone, stone, or wood that were either tossed or contained in a bowl/basket that was struck with scores kept by means of counters that were exchanged (Williams, Stevens, & Nixon, 2011).

Mid 1700s to late 1800s	<p>Gambling was also common among the relatively small number of Europeans (explorers, fur traders, soldiers, ranchers) in Western Canada. However, these games were engaged in purely for recreational purposes. Primary forms of gambling among European-Canadians were: card games (poker, blackjack, faro); dice games; betting on horse racing, cock fights, prize fights; and lotteries/raffles. First Nations people began engaging in some of these recreational forms of gambling as well.</p> <p>In order to bring law and order to the West, the federal government created the North-West Mounted Police in 1873. The peace and stability this helped to achieve in the region set the stage for the introduction of cattle ranches, expansion of the Canadian Pacific Railway, and a significant influx of settlers. Although gambling was generally frowned upon by many elements of this new society, it was still commonly engaged in by certain segments of the male population. There were very few active efforts to curb gambling, as there were more pressing 'law and order' concerns. More concerted efforts to curb gambling occurred later.</p>
1869 - 1892	<p>The foundational federal laws concerning gambling are established, culminating in the 1892 Criminal Code. These laws essentially prohibit all forms of gambling with minor exceptions for social gambling between individuals, small raffles for charitable purposes, and on-site horse race betting.</p>
1869 - 1870	<p>Newly formed Canadian Parliament begins enacting various laws, some of which existed in pre-confederation provinces and most of which ultimately derived from British common law. Laws are passed to prohibit and penalize:</p> <ul style="list-style-type: none"> • Cheating at gambling (Chapter (c) 21 Larceny and other Similar Offences, Section (s) 97) • Professional gamblers (c.28 Vagrants, s.1). • Anyone who encourages/facilitates the fighting of animals (c.29 Cruelty to Animals, s.1). <p>Acts of the Parliament of the Dominion of Canada Relating to Criminal Law Passed in the 1st, 2nd, and 3rd Parliament of Canada 1867 - 1874</p>
1868	<ul style="list-style-type: none"> • Rupert's Land and Northwest Territories (includes modern-day Alberta) transferred from Hudson's Bay Company to the government of Canada.
1875 - 1877	<p>Canadian Parliament passes laws to prohibit and penalize:</p> <ul style="list-style-type: none"> • Operation or being found in a 'common gaming house' (c.41 Suppression of Gaming Houses, s.1-6) • Registering or taking bets ('bookmaking') on elections, races, or any contest of skill or endurance (c.31 Repression of Betting and Pool-Selling¹⁴, s.1-3). <ul style="list-style-type: none"> ○ Note: betting between individuals is still permitted. • Gambling aboard a railway car or steamboat used as a public conveyance (c.32 Prevention of Gambling Practices in Public Conveyances, s.1-5) <p>Acts of the Parliament of the Dominion of Canada relating to Criminal Law Passed in the 3rd Parliament of Canada 1874 - 1878</p>
1879	<p>Edmonton Agricultural Society (precursor to Northlands Park) holds first exhibition in Fort Edmonton. Annual exhibitions are held in most subsequent years and horse racing begins to be included as an event. Permanent site for the exhibition obtained in 1900. Exhibition relocated to its current site in 1910.</p>

¹⁴ Pool selling is a form of pari-mutuel wagering whereby the person's return on a winning bet is determined by the amount that is wagered on the other horses/candidates/etc. after a commission for taking these wagers is taken.

1886	Calgary and District Agricultural Society (precursor to Calgary Exhibition and Stampede) holds its first fair. Current site for Calgary Exhibition and Stampede obtained in 1888 and racetrack subsequently built.
1887	<p>The Revised Statutes of Canada 1887 prohibit and penalize the previously passed laws concerning professional gamblers (c.157,s.8); operating or being found in a common gaming house (c.158,s.1-10); registering or taking bets on elections, races or any contest of skill or endurance (c.159,s.9); gambling on a railway car or steamboat used as a public conveyance (c.160,s.1-6); cheating at gambling (c.164,s.80); encouraging the fighting of animals or establishment of a cockpit (c.172, s.2-7). In addition, they now prohibit:</p> <ul style="list-style-type: none"> • Conducting, participating in, or advertising chance based lottery schemes or raffles (c.159 Lotteries, Betting and Pool Selling, s.1-8). This includes all situations where goods are disposed of by any chance-based means (regardless of whether a participant has purchased a ticket, e.g., sweepstakes).¹⁵ <ul style="list-style-type: none"> ○ An exemption existed for a) raffles at bazaars with prizes worth \$50 or less held for a charitable purpose as long as the event had municipal approval and the item being raffled is first offered for sale, b) raffles involving art.
1892	<ul style="list-style-type: none"> • Canada enacts its first Criminal Code that codifies common law and gives the federal government exclusive power to legislate criminal offenses in Canada. It prohibits and penalizes the following areas, which, for the most part, continue to be the areas addressed in current law: • Operating or being found in a ‘common gaming house’ or ‘common betting house’ (now defined as an establishment where the owner receives some gain for allowing gambling or betting, or where a bank is kept by one or more of the players, or where the odds are not identical among all players) (Part XIV Nuisances, s.196-200). <ul style="list-style-type: none"> ○ Social gambling between individuals allowed as long as a) there is no financial benefit to the owner of the premises, and b) the nature of the game does not confer any advantage to any player. • Betting on the rise or fall of stocks or commodities without the intent of actually purchasing these shares, goods, etc., or frequenting establishments (‘bucket shops’) where this activity occurs (Part XIV Nuisances, s.201-202). • Gambling on a railway car or steamboat used as a public conveyance (Part XIV Nuisances, s.203). • Registering or taking bets (bookmaking) on elections, races, or any contest of skill or endurance (Part XIV Nuisances, s.204). <ul style="list-style-type: none"> ○ Betting between individuals still allowed. ○ Registering or taking bets (bookmaking) is now allowed for on-site horse-race betting at government-chartered racetracks.¹⁶ • Conducting, participating in, or advertising chance based lottery schemes or raffles (Part XIV Nuisances, s.205) <ul style="list-style-type: none"> ○ Exemption continued to exist for a) raffles at bazaars with prizes of less than \$50 value held for a charitable purpose as long the raffle had municipal approval and is first offered for sale, b) raffles involving art. • Professional gamblers (Part XV Vagrancy, s.207) (i.e., individuals who support themselves primarily from gambling)

¹⁵ Historically, the terms ‘lottery’, ‘raffle’, and ‘sweepstake’ have not been used in a consistent way. Today, lotteries and raffles are generally recognized as systems that involve purchase of a ticket for potential monetary prizes in the case of lotteries, or merchandise in the case of raffles. Sweepstakes are generally recognized as a promotional tool used by businesses to generate interest in their product. In a sweepstakes, no ticket purchase is generally required to be eligible for the money or goods that are awarded as prizes (although product purchase may be required).

¹⁶ The rationale for this legal change was that a) encouraging the breeding and development of high quality horses served military objectives, b) people who could attend a race-track during the day could afford to gamble.

	<ul style="list-style-type: none"> Cheating at gambling (Part XXVIII Fraud, s.395) Encouraging/facilitating the fighting of animals or the establishment of a cockpit (Part XXXVII Mischief, s.512-513) <p>1892 Criminal Code of Canada</p>
1894	<ul style="list-style-type: none"> Cochrane Racing Association formed and a horse race track built. Horse racing began in the Cochrane area in the 1880s and continued until 1931 (horse racing began to be reinstated in most U.S. states by this time).
1900 - 1910	<p>The same general pattern of gambling that existed in the 1800s continued in the early 1900s (i.e., gambling on card games; dice games; lotteries/raffles; and betting on horse racing, cock fights, and prize fights, with most of the gambling being done by males).</p> <p>Horse racing particularly flourished, as antigambling coalitions closed most horse race tracks in the U.S. in this period, resulting in some shift of operations to Alberta.</p> <p>Slot machines start appearing in Alberta bars and pool rooms. Their legality is unclear with some courts contending that their use constituted operating a common gaming house, as the owner of the slot machine gains financially from their presence. Other legal opinions consider them to be illegal lottery contrivances.</p> <p>Alberta population in 1901 is estimated to be 73,022.</p>
1900	<ul style="list-style-type: none"> Criminal Code amended to permit raffles that are conducted for charitable <u>or</u> religious purposes. Criminal Code amended to no longer allow the distribution of art by raffles as cash value was often substituted in place of art, and there were concerns that companies were conducting art raffles primarily for financial gain. The exceptions to this repeal were the Art unions of London, Great Britain, and Ireland.
1905	<ul style="list-style-type: none"> Alberta becomes a province of Canada. Millarville Race Club forms (now Millarville Racing & Agriculture Society) and first race held June 23.
1906	<p>New sections 985 & 986 added to Criminal Code indicating that if any instruments or contrivance of unlawful gaming or mechanisms to conceal unlawful gaming are found on a premise it is assumed that the premise is a common gaming house.</p> <p>1906 Revised Criminal Code</p>
1910s	<p>Greater restrictions on gambling are enacted in the later part of the decade, partly to require more focus on the war effort (WWI). Despite its very restricted legal availability and general negative societal attitudes toward it, gambling is still fairly common among certain segments of the male population (especially the wealthy, the poor, the adventurous, and the young). First Nations people continue to be avid gamblers.</p> <p>Illegal off-track horse race betting becomes more common as does betting on organized sports (e.g., baseball, football, hockey).</p>
1910	<p>Criminal Code amendment introduces more detailed information on how a legal pari-mutuel horse race betting system should operate and designates the federal Ministry of Agriculture as the overseer of this betting system (s.235).</p>

1917	Horse race betting is suspended for the duration of WWI as it was believed that gambling was not compatible with the war effort. (Alcohol prohibition in Alberta had occurred in the previous year). Nonetheless, there is a perceived general increase in (illegal) gambling during the war, some of which involved fundraising for wartime charities.
1918	<ul style="list-style-type: none"> • Criminal Code amendment (s.226) made it clear that receiving even indirect benefit from hosting gambling (e.g., a hotel being able to sell more drinks) constituted operating a 'common gaming house', as does taking a portion of the pot to pay for refreshments. • The wording of s.985 in Criminal Code amended to make it clear that any gambling devices found in a premise make the premise an illegal 'common gaming house' (i.e., the devices did not have to be for 'unlawful gaming'). 1919 Revised Criminal Code
1919	<ul style="list-style-type: none"> • Alberta regulation introduced to prohibit gambling in pool/billiard rooms and bowling alleys. 1919 Statutes of the Province of Alberta • A Royal Commission in Racing and Inquiry recommends that horse race betting should be permitted. On-site horse-race pari-mutuel wagering is reinstated.
1920s	<p>Using their exemption under the Criminal Code to conduct small raffles, charitable and religious organizations begin offering the relatively new game of bingo in community halls and church basements. Although the proceeds go toward charitable or religious purposes, the legal status of this enterprise is unclear as courts have ruled that bingo constitutes a violation of the prohibition against 'common gaming houses', as the operator receives a financial gain from its provision.</p> <p>The popularity of horse racing grows as does off-track betting via bookmakers. These same bookmakers also offer illegal sports betting. Illegal slot machines and lotteries are also available. Card playing for money is not uncommon. Among First Nations people, traditional gambling games are still played, although there is increased recreational involvement in Western forms.</p>
1921	Criminal Code amendment to the Cheating at Play section prohibiting either playing or offering ' Three-card monte ' or any variant of this game.
1922	<ul style="list-style-type: none"> • Criminal Code amendment to prohibit sending information via <i>telephone or telegraph</i> relating to bookmaking, pool-selling, betting or wagering (s.235). • Criminal Code section on 'lottery schemes and raffles' broadened to prohibit not just games of chance, but <u>mixed games of skill and chance</u> in which a person has paid money or something of value (s.236). • Criminal Code amendment prohibited inducing people to gamble on dice games, shell games (variant of three-card monte), punch boards (early versions of 'instant win tickets'), wheel of fortune, and coin tables ¹⁷ (as these games were subject to cheating) (s.236).
1923	Alberta introduces the Slot Machine Tax Act requiring a \$50 annual licence for each automated or mechanical machine that required the insertion of money or tokens of value in return for merchandise, playing a game, or playing music. (Many municipalities had slot machine licensing fees in place prior to 1923). (Note: slot machines are not unambiguously made illegal by the Canadian government until 1924). Slot Machine Tax Act 1923

¹⁷ It is uncertain what a 'coin table' is, despite its inclusion in the Criminal Code for the past 88 years.

1924	<ul style="list-style-type: none"> • Criminal Code amendment to s.986 to indicate that an automated machine ('slot machine') that produces uncertain outcomes is deemed to be a contrivance for playing a game of chance and therefore the premises in which it is located is deemed to be an illegal common gaming house. 1927 Revised Criminal Code • Alberta enacts the 'Slot Machine Act' banning automated machines that provided potential monetary prizes or something intended to be exchanged for money, regardless of whether the machine also provided goods (e.g., gum) or services (e.g., music). (This latter condition was intended to prohibit slot machines that tried to circumvent the law by also providing goods or services). The Slot Machine Act 1924 • Alberta prohibits the operation of any gambling device in areas where beer is licensed to be kept, sold, and consumed (alcohol prohibition in Alberta is repealed in this same year). Government Liquor Control Act of Alberta 1924
1925	<ul style="list-style-type: none"> • Alberta prohibits anyone under age 18 from visiting any place where any gambling device exists. The Child Welfare Act 1925 • Criminal Code amended (s.236) to allow 'lottery schemes' (including wheel of fortune) at agricultural fairs and exhibitions. 1927 Revised Criminal Code
1930s	<p>Gambling starts achieving a small degree of respectability due to a) bingo being regularly offered by certain religious and charitable groups; b) 'gambling' now being available in the form of various types of carnival games at midways at agricultural fairs and exhibitions (e.g., wheel of fortune; target games involving shooting or throwing darts, coins, balls or hoops); and the c) increased overall participation in these religious/charitable/agricultural offered forms of gambling, particularly by demographic groups that had relatively little previous involvement (e.g., women). This greater tolerance led to several private bills being introduced into the House of Commons proposing a legal lottery. However, these bills were defeated as there was still a strong sentiment that lotteries potentially undermined work ethic, as they were an attempt to get by chance what should be earned by hard work (a position supported by Protestant & Anglican churches, women's groups, employers, and business owners (who felt that gambling diverted money from their businesses)).</p> <p>Horse race betting (both legal on-site and illegal off-track) continues its popularity. 'Social clubs' that provide opportunities to gamble between individuals (primarily on card games) are common. Although more discreet, illegal slot machines are increasingly common in some locations, as are bookies to take sports bets and/or off-track horse racing. Illegal sweepstakes and foreign lotteries more openly thrive (e.g., Irish Sweepstakes). Across Canada, organized crime becomes more involved in providing illegal forms of gambling (especially following the repeal of alcohol prohibition, as alcohol provision had been an important source of revenue for organized crime).</p>
1938	<p>Criminal Code amended (s.168) to clarify that a place is <u>not</u> a 'common gaming house' if:</p> <ul style="list-style-type: none"> • It is '<u>occasionally</u>' used by charitable or religious groups and the proceeds from the games go to charitable or religious causes. • It is used by a 'bona fide social club' and the owner of the establishment does not financially gain from the gambling and if the fee for participating is less than 10 cents an hour or 50 cents a day.
1940s	<p>Many trends from the 1930s continue into the 1940s. There is increased availability of legal forms of gambling as well as participation in both legal and illegal forms. There is also continued societal ambivalence about gambling, although polls show that most people favour a legal lottery.</p>

1950s	<p>Gambling is a popular activity, as a 1950 poll by the Canadian Institute of Public Opinion shows that 80% of Canadians gamble. There is fairly widespread violation of gambling laws. Unlicensed instant win tickets ('pull tickets') are common (e.g., Lucky 7 jar tickets). Licensed lotteries, raffles and sweepstakes are commonly held for <u>community</u> purposes (e.g., building a new rink) or <u>commercial</u> purposes (sales promotion contests) rather than strictly for charitable and/or religious purposes. Charitable and religious organizations operate <u>regular</u> rather than occasional bingo events. Prizes for lotteries, raffles, and bingo typically far exceed the \$50 limit and are rarely first offered for sale (as required). Rigged carnival games are common. Fraudulent lotteries and fixed bingo games are not uncommon. Off-track horse race betting and sports betting are discreetly available at some barber shops, tobacco shops, pool halls, bowling alleys and via the local bookie. The general public sees some arbitrariness in what is legal (horse racing, stock market, gambling at private social clubs) and what is not (lotteries, regular bingo).¹⁸ Polls show Canadians to be increasingly in favour of legal lotteries.</p> <p>There is also lax and inconsistent enforcement of gambling laws. Police forces and provincial Attorneys General advocate the federal government for clarification of existing lottery laws as well as relaxation of prohibitions because of public nonsupport. However, church groups (Protestant & Anglican) and the Canadian Welfare Council advocate for continued prohibition of lotteries and strict enforcement as 'obtaining something for nothing' set a bad example; expanded licensing and control would encourage further involvement of criminal elements; it would undermine charitable giving; and because lotteries preyed disproportionately on the poor. 1956 Report on Lotteries</p>
1952	<ul style="list-style-type: none"> • Further refinement of the definition of a slot machine in the Alberta Slot Machine Act to specifically exclude vending machines and juke boxes from the definition (however, 'pinball machines' were included (and therefore prohibited) as they did not provide anything back) 1952 Alberta Slot Machine Act • A Royal Commission reviewing the Criminal Code found inconsistencies in the gaming laws, but did not recommend any substantive changes, "because of the controversial nature of the matters involved". Report of Royal Commission on the Revision of Criminal Code • Harness racing becomes a regularly scheduled event at some tracks.
1953	<ul style="list-style-type: none"> • Criminal Code amendment (s.179) indicating that any place with a slot machine shall be conclusively presumed to be a common gaming house (and therefore, illegal). • Criminal Code amendment (s.180) to indicate that gambling in any vehicle, aircraft, or vessel used as a public conveyance is illegal (previously indicated that gambling on just railway cars or steamboats was illegal). 1953/54 Criminal Code of Canada
1956	<p>A Joint Committee of the Senate and House of Commons recommended: continued prohibition and effective enforcement of all lotteries; continued exemption for charitable/religious purposes and agricultural organizations; a significant increase in the allowable size of prizes; the existing exemption for providing 'occasional' games of chance by charitable or religious organizations to be replaced with a maximum yearly limit on prizes by any one organization; bingo to be treated as a type of lottery; continued prohibition of lottery advertising; and no provincial or federal lottery as the appropriate role of government is to regulate gambling, not provide it. 1956 Report on Lotteries</p>

¹⁸ Partly underlying the legality of some forms and the illegality of others was a historical belief that gambling was an acceptable past-time for the rich, but not for the working class.

1957	<ul style="list-style-type: none"> Western Canadian Racing Association (WCRA) is created as the regulatory body for horse racing in Alberta. The WCRA was eventually replaced with the Alberta Racing Corporation in 1996 and then Horse Racing Alberta in 2002. The Edmonton Exhibition took over the management of thoroughbred racing when they volunteered to host the Canadian Derby, which subsequently became a regular event at Northlands Park. Quarter Horse racing becomes a regular event at the Millarville track. Quarter horse racing will soon expand to the other established tracks.
1960s	<p>Gambling is increasingly seen as a recreational form of entertainment coincident with society's more liberal attitudes toward things that have been historically seen as 'immoral' (drugs, abortion, birth control, homosexuality, prostitution). This would eventually culminate in an amendment to the Criminal Code in 1969 that permitted government-run lotteries. Casino table games are offered for the first time by agricultural fairs/exhibitions.</p>
1967	<p>Casino table games are offered for the first time by Edmonton's Northlands Park in the Silver Slipper Saloon during the week-long Klondike Days fair (using the long-standing Criminal Code exemption of agricultural fairs/exhibitions being able to offer lottery schemes).</p>
1968	<p>S.168 of Criminal Code is amended so that the exact amount of money charged is no longer a criterion by which something is a 'bone fide social club', but rather that any fees charged are in accordance with the terms of the licence issued by the Attorney General of the province.</p>
1969	<ul style="list-style-type: none"> Criminal Code amendment (s.190) to permit the operation of lottery schemes by the federal government or provincial governments either alone or in combination with other provincial governments (with continued prohibition of dice games, three card monte, coin tables, and punch boards). Provincial governments, in turn, could issue a gaming licence to charitable or religious organizations, agricultural fairs or exhibitions, or any individual. However: <ul style="list-style-type: none"> Charitable/religious organizations are permitted to operate lottery schemes only if proceeds used for charitable or religious purposes, tickets cost no more than 50 cents, and the prize does not exceed \$100. Individuals must conduct the lottery scheme at a public place of amusement and with tickets costing no more than 50 cents, and prizes not exceeding \$100. Agricultural fairs/exhibitions have no restrictions on prize or ticket amounts.¹⁹ 1970 Revised Criminal Code The Calgary Stampede provides casino table games at its Frontier Casino during the annual fair. (By this time both the Calgary Stampede and Edmonton Northlands operated up to 3 casinos per year, with revenues split between the agricultural exhibition boards and the gaming operators who were contracted to supply the equipment).
1970s	<p>The sense of gambling as a form of recreation is more firmly entrenched. There is fairly widespread participation in both legal and illegal forms with lax enforcement of the laws.</p> <p>The boundaries of legal gambling continue to expand. Lotteries begin to be offered by agricultural fairs/exhibitions, the federal government, and provincial governments. Agricultural fairs in Lethbridge, Red Deer, and Medicine Hat begin providing casino table games. Multi-day casino licences begin to be also granted to charities and agricultural fairs.</p>

¹⁹ This important legislation was originally introduced in 1967 by Pierre Trudeau (Minister of Justice) as a part of an omnibus bill to update laws concerning abortion, gun control, divorce, homosexuality, gambling and birth control. The changes in the lottery provisions were partly instigated by Quebec politicians because of the cost of Expo 67. The Bill died when Parliament dissolved for an election and it was reintroduced in January 1969 by John Turner.

	The infrastructure to regulate legal gambling becomes better developed. Between 1970-1973 gaming licensing was very informal and issued by local police and there were also no formal requirements to provide financial records. This changed with the Alberta Attorney General's creation of the Lotteries Licensing Section in 1973.
1970	Edmonton's Northlands Park and the Calgary Exhibition and Stampede start holding lotteries/sweepstakes.
1973	<ul style="list-style-type: none"> In Alberta, all gambling licence functions are transferred to the newly created Lotteries Licensing Section of the Attorney General's Department. Eligible charitable/religious groups are now required to submit documentation of their financial returns. The Olympic Lottery Corporation of Canada receives permission from the Canadian government to hold national lotteries to raise money for the 1976 Olympics being held in Montreal. The first national lottery is held, with tickets costing \$10.
1974	Western Canada Lottery Foundation (WCLF) is formed by the provinces of British Columbia, Alberta, Saskatchewan, and Manitoba, with the Yukon Territory being an associate member. The Edmonton Exhibition and the Calgary Exhibition and Stampede partner to form the provincial marketing and sales organization for the Alberta Division of the WCLF (with each association relinquishing their own individual lotteries). On June 21, 1974 the first provincial lottery ticket went on sale (\$2.50 each with a maximum prize of \$250,000). Roughly 50% of the proceeds went to the Commonwealth Games Foundation (games slated for 1978) with the remaining funds split between the Edmonton Exhibition and Calgary Stampede.
1975	<ul style="list-style-type: none"> Alberta Attorney General begins to grant multi-day casino licences to charities. The Edmonton Kinsmen Club holds Alberta's first multi-day charity casino event (providing table games). WCLF offers the first 'bearer ticket' for "The Western" lottery (previously people had simply registered their name when participating in a lottery). Instant win (pull tickets) are legally offered for the first time by charity groups.
1976	<ul style="list-style-type: none"> Alberta Attorney General creates the Gaming Control Branch to provide more comprehensive regulation of gambling (replacing the Lotteries Licensing unit) and to better handle the large number of new casino event applications from charities. Its first set of regulations established that one casino of 2 days duration could be held in a community at any given time and that event workers and managers have to be screened and licensed. When the national Olympic lottery expired after the games, Lotto Canada, a federal lottery agency, began operating in its place. However, at the same time, the Interprovincial Lottery Corporation is established by the provincial lottery corporations (including WCLF) to operate national lotteries on behalf of the provinces (providing direct competition to Lotto Canada).
1977	Alberta's Gaming Control Branch issues further rules regarding financial reporting requirements, auditing and how casino and bingo proceeds could be used.
1978	Laycraft Public Inquiry reports that rigged carnival games are entrenched in Alberta.
1979	<ul style="list-style-type: none"> Because of conflict with the provinces, the newly elected Conservative federal government withdraws from offering 'lottery schemes' in Canada (ending the operation of Lotto Canada) in return for \$24 million annually from the provinces indexed to inflation. 3 dedicated bingo halls are in operation in Edmonton (Rainbow Bingo Hall; K of C Hall; Jasper Place Bingo). The individual charities providing bingo in these venues eventually developed 'bingo associations' to coordinate their activities.

1980s	<p>There is a major expansion of legal gambling coincident with a significant increase in per capita gambling expenditures. There is a significant increase in the number of dedicated bingo halls operated by bingo associations (groups of charities). There is a significant increase in lottery revenues. Horse race betting begins to decline despite the introduction of phone-in and off-track betting. Legal sports betting is introduced. <i>Permanent</i> casinos offering table games are introduced with private casino owners being contracted to provide space and services for charity, religious or agricultural ‘casino events’.</p> <p>The Alberta Gaming Control Branch uses a more liberal interpretation of what constitutes a ‘charitable or religious organization’ and ‘charitable or religious object or purpose’ in order to be eligible to provide raffles, lotteries, bingos, and casino events. It is no longer restricted to groups whose primary purpose is to provide money, goods, or service to the less fortunate (the technical meaning of ‘charity group’). Rather, it is expanded to include a wide range of community organizations whose purpose is to promote local sports, education, culture, arts, health, etc. Rules are also loosened regarding the allowable number of casino-events per week, allowable number of blackjack tables per casino, and betting limits.</p> <p>A conflict between the federal and provincial governments occurred over the federal government’s involvement in lotteries and sports betting, eventually leading to an agreement permitting exclusive provincial control in 1985.</p>
1980	<ul style="list-style-type: none"> • The newly elected federal Liberal government reinstates Lotto Canada and begins investigating sports betting as an additional offering. • The Alberta government adopts some of the Citizens’ Advisory Committee’s recommendations regarding gambling. The most important of these are that a) no eligible organization would be refused a casino licence, and b) a new Alberta Gaming Commission would be created with the responsibilities of licensing, public information, and policy recommendations. • The \$10 Super Lotto ticket is launched by WCLF. • Alberta’s first permanent casino (Cash Casino) opens in Calgary. This is a privately owned venue that is contracted to provide space and services for short-term charity, religious or agricultural casino events. This arrangement becomes the operational template for all subsequent permanent casinos in the province up to the present time.
1981	<ul style="list-style-type: none"> • A new Alberta regulatory structure is established with the Gaming Control Branch of the Attorney General’s office being responsible for administration and enforcement (including audits and the investigation of licence applications) and the new Alberta Gaming Commission being responsible for licensing, appeals, public information, public consultation and policy recommendations. • Random draws are held every 2 months to determine the dates when an eligible charity could hold a casino event. • Alberta’s second permanent casino opens in Edmonton (Casino ABS, also known as Casino Edmonton).
1982	<ul style="list-style-type: none"> • Criminal Code is amended (s.204) allowing people to phone-in horse racing bets to the horse race course of an authorized race-track association (if the person has an account at that track) and to permit people at a horse race track to bet on races occurring at other tracks (‘intertrack betting’). • 2 dedicated bingo halls are in operation in Calgary (Bingo Palace; Odgen Road Bingo). It becomes a requirement that bingo associations have to be formed (by groups of charities) to coordinate bingo in these dedicated ‘commercial’ halls before the granting of licences. • Lotto 6/49 is launched as a national lottery game by the Interprovincial Lottery Corporation. First lottery game where players can choose their own numbers. This will prove to be the most successful of all lottery products.

1983	<ul style="list-style-type: none"> • Federal government passes the Athletic Contests and Events Pool Act effecting an amendment to the Criminal Code (s.205) allowing the federal or provincial governments to offer a “pool system of betting on any combination of 2 or more athletic contests or events” and creating the Canadian Sports Pool Corporation (CSPC). 1985 Revised Criminal Code. This initiative was actively opposed by the provincial governments and Major League Baseball. • 10 new bingo associations are formed bringing the provincial total to about 15. • WCLF ticket lottery proceeds were reallocated as follows: 15% to Calgary Stampede (up to \$2.5 million), 15% to Edmonton Northlands (up to \$2.5 million), 5% to the Wild Rose Foundation, 32.5% to cultural foundations and 32.5% to sports foundations.
1984	<ul style="list-style-type: none"> • Alberta’s Gaming Control Branch develops terms and conditions for bingo associations. • Alberta government creates the Wild Rose Foundation to provide grants from lottery revenue to volunteer, non-profit organizations. • Canadian Sports Pool Corporation begins offering legal sports betting in May on North American major professional sports leagues (‘Sports Select’). Bettors are required to pick the winner of 2 or more games. Funds raised are slated for the 1988 Calgary Olympics. However, sales are poor. CSPC ceased operation in September and is dissolved in 1985.
1985	<ul style="list-style-type: none"> • In December, the federal government makes an amendment to the Criminal Code (s.207) to: <ul style="list-style-type: none"> ○ Give exclusive ability to operate ‘lottery schemes’ to the provinces (in accordance with any provincial law) in exchange for \$100 million to support the 1988 Olympics, plus the indexed annual contribution agreed to in 1979. ○ Broaden the definition of a ‘lottery scheme’ to “a game or proposal, scheme, plan, means, device, contrivance or operation whether or not it involves betting, pool selling or a pool system of betting” <u>other than</u>: <ul style="list-style-type: none"> ▪ Bookmaking, pool selling, or the making or recording of bets on any race, fight, or single sporting event (i.e., federal government retains control of horse racing) ▪ 3-card monte, punch boards, and coin tables ○ Limit the ‘conduct and management’ of lottery schemes operated on or through a computer, video device or slot machine just to provincial governments. ○ Eliminate the monetary limits on lottery scheme prizes and tickets operated by authorized charitable or religious organizations and increase the maximum ticket price to \$2 and the prize limit to \$500 for authorized individuals (agricultural fairs/exhibitions had these limits removed in 1969). • A government lottery review gathers Albertans’ views on the disbursement of unused lottery revenue. • British Columbia withdraws from the WCLF and forms its own lottery corporation. • Due to the popularity of Lotto 6/49, draws for this lottery are increased to twice a week.
1986	<ul style="list-style-type: none"> • WCLF becomes the Western Canada Lottery Corporation (WCLC). • Casino ABS South opens in Edmonton (now Casino Edmonton), becoming Alberta’s third permanent casino. • Instant win (scratch) tickets are sold for the first time by the WCLC. Tickets cost \$1 and prizes range from \$2 to \$10,000.
1988	<ul style="list-style-type: none"> • Alberta Gaming Commission increases the number of allowable casinos per week (4 to 8), the betting limit (now \$50), and the number of blackjack tables permitted in a casino. • Another permanent casino opens in Calgary (Frontier Casino on the grounds of Stampede Park, now Stampede Casino).

1989	<ul style="list-style-type: none"> • In June the Criminal Code of Canada is amended (s.204) to permit off-track horse race betting in specially designated betting theatres owned or leased by an approved race track association in a province that has issued a licence to that association for the betting theatre. Bets are transmitted electronically to the track. • Interprovincial Lottery Amendment Act establishes the Alberta Lottery Fund with all net revenue from lottery schemes now being deposited into this fund, with funds to be disbursed for purposes supporting recreation or culture or any other purpose the Minister considers being in the public interest. In practice, the bulk of this money goes to government ministries and the rest goes to various granting agencies and foundations. • The first horseracing simulcast is run at Calgary's Trout Springs. • Alberta's first casino expressly built for the purpose of providing casino gambling opens in Calgary (now Elbow River Casino).
1990s	<p>The 1990s sees a continued major expansion of legal gambling coincident with a major increase in per capita gambling expenditures. Legal sports betting is re-introduced by the Western Canada Lottery Corporation. Satellite bingo is introduced. Video lottery terminals are introduced into licensed bars across the province and immediately generate significant revenues. Slot machines are introduced into casinos and racetracks. There is a significant increase in the number and size of permanent casinos. There is an expanded number of instant win and traditional lottery games although some flattening of per capita lottery expenditures. Rules are loosened concerning casinos serving liquor on the gambling floor and operation on Sundays. Horse racing declines further in popularity and horse racing revenues are increasingly derived from simulcast betting rather than live Alberta races. First Nations groups express interest in establishing casinos.</p> <p>There are increased concerns about problem gambling. The first 'backlash' against gambling occurs when plebiscites vote VLTs out of some communities.</p>
1990	<ul style="list-style-type: none"> • In October the Western Canada Lottery Corporation offers legal sports betting on 3 or more major league football or hockey games ('Sports Select'). This initiative is opposed by the National Hockey League. • Teletheatre (off-track horse race) betting is introduced in Alberta. • Sandman Inn Casino in Edmonton opens but closes after only seven months of operation. • Palace Casino in Edmonton opens. • Mini Baccarat is a new table game permitted in casinos.
1991	<ul style="list-style-type: none"> • All gambling-related agencies in the province fall under the responsibility of the Attorney General (Alberta Lotteries, WCLC-Alberta Division, Alberta Gaming Commission). • Video lottery terminals (VLTs) are tested at summer fairs in Edmonton and Calgary. • POGO (Pick One, Get One) lottery introduced. • Casino opened in the base of the Calgary Tower. It closes several years later.
1992	<ul style="list-style-type: none"> • First prevalence study of Albertan gambling behaviour and attitudes shows that 89% of adult Albertans gambled in past year and people are evenly divided about whether there is too much or not enough legal gambling available (Gambling Attitudes and Behaviour of Albertans) • Additional \$2 (Bingo) and \$5 (Western Adventure) instant win games introduced. • VLTs are introduced to Alberta bars/lounges beginning in March.

1993	<ul style="list-style-type: none"> • Alberta government grants permission to the Tsuu T'ina First Nation and the Enoch Cree First Nation to hold super-bingos with jackpots exceeding \$10,000. • Second prevalence study of Albertan gambling behaviour and attitudes and first study of problem gambling prevalence (Gambling and Problem Gambling in Alberta). • Approximately 65 bingo associations now operating. • Additional \$1 (The Western) and \$2 (Keno) instant win games introduced. • Slot machines are tested at the Calgary Stampede, Edmonton Klondike Days, and rural fairs. • Casino ABS opens permanent casino in Lethbridge.
1994	<ul style="list-style-type: none"> • The Alberta Alcohol and Drug Abuse Commission (AADAC) begins to receive dedicated funding for problem gambling treatment, prevention and research and begins to provide these services for the first time. • Super 7 and Extra lotteries introduced. • Gold Dust Casino opens in St. Albert. • Casino opens in Fort McMurray (now Boomtown Casino).
1995	<ul style="list-style-type: none"> • All provincial gambling activities, with the exception of horse racing, are brought under the management of the new Alberta Gaming and Liquor Commission (AGLC) (an amalgamation of the Alberta Gaming Commission, Gaming Control Branch, Alberta Lotteries, and Alberta Liquor Control Board). • VLTs capped at 6,000. • Cash Casino in Red Deer opens. • Cash Casino in Lethbridge opens. • Poker was introduced to casinos.
1996	<ul style="list-style-type: none"> • The Alberta Racing Corporation is formed to help revitalize the declining horse racing industry in Alberta (replacing the Western Canadian Racing Association). • The Alberta Gaming and Liquor Act is enacted providing the regulatory framework for issuing gaming licences and gaming worker registration. • The MLA Committee on Native Gaming recommends that there be no more than four First Nations casinos and that these casinos operate on the same terms as non-First Nations casinos. • AGLC mandates that casino proceeds from different charity casino events has to be pooled and evenly divided to even out revenue differences occurring between different casino events at the same casino facility. AGLC also now begins to license casino facilities (in addition to casino events). • First prevalence study of adolescent gambling and problem gambling in Alberta: Adolescent gambling and problem gambling in Alberta: Final Report • Slot machines and electronic horse racing games²⁰ are introduced into Alberta's casinos. • Slot machines are also introduced to Northlands Park in Edmonton as part of an initiative to revitalize the horse racing industry. This is the province's first 'Racing Entertainment Centre' (REC). • Satellite bingo (one large bingo event that links several bingo halls by satellite) is introduced into bingo halls for the first time in February. • Baccarat Casino opens in Edmonton. • Frank Sisson's Silver Dollar Casino opens in Calgary. • Casino by Vanshaw opens in Medicine Hat.

²⁰ A miniaturized horse race game made by Sega Corporation. There are 10 seats around the machine where people place their bets on the (random) outcomes of the horses who move around an oval track.

1997	<ul style="list-style-type: none"> • AGLC allows the number of slot machines in casinos to be doubled, the hours for table games to be extended by one hour to a maximum of 14, for alcohol to be served on the gaming floor, and for casinos to operate on Sundays. • VLTs are removed from Rocky Mountain House and Sylvan Lake following local plebiscites. Plebiscites are also held in Barrhead, Wood Buffalo (including Fort McMurray) and Lacombe. Barrhead votes to keep VLTs. Wood Buffalo votes to remove VLTs, but retailers take legal action to stop this. The courts declare Lacombe's vote invalid. • Casino Calgary opens. • Jackpot Casino opens in Red Deer. • Slots installed in a racetrack facility (Whoop-Up Downs/Bully's Sport & Entertainment Centre) in Lethbridge.
1998	<ul style="list-style-type: none"> • The Alberta government accepts and eventually enacts almost all recommendations from the Alberta Lotteries and Gaming Summit 1998. Specifically these recommendations were: more gambling research; age 18 required for all forms of gambling; charitable model for casinos and bingos be maintained; gaming profits not be put into the General Revenue Fund; all profits directed to charitable or nonprofit community initiatives; increase in gambling addiction prevention and treatment; better accountability and disclosure of gaming activity as well as costs/benefits. • Alberta Racing Corporation restricts horse race betting to people 18 and older. • Community Lottery Boards are established by the Alberta government to oversee the distribution of \$50 million/year in lottery funds. • Adult Albertans are determined to have an 87% past year prevalence of gambling and 4.7% prevalence rate of problem gambling (Adult Gambling and Problem Gambling in Alberta, 1998) • VLT plebiscites are held in 36 Alberta municipalities during the October 19 civic elections. Six municipalities vote to have their VLTs removed. VLT retailers take legal action to stop this and courts rule that AGLC cannot remove VLTs from municipalities unless there is specified legislation in place.
1999	<ul style="list-style-type: none"> • Alberta government passes legislation to remove VLTs from communities that voted to have them removed. However, a court injunction stops them pending a constitutional challenge to this new legislation (not decided until 2003). • Amendment made to the Criminal Code (s.207.1) permitting 'lottery schemes' on international cruise ships as long as the ship is not within 5 nautical miles of a Canadian port. Another Criminal Code amendment eliminates the prohibition against dice games. • AGLC announces a moratorium on new casinos or further gambling expansion pending the results of the Gaming Licensing Policy Review. AGLC also launches a Bingo Industry Review. • The Ministry of Gaming is created, which includes the Department of Gaming, the Alberta Gaming and Liquor Commission, the Community Lottery Program Secretariat, the Alberta Gaming Research Council and Alberta Racing Corporation. • An agreement between the Government of Alberta and the province's three major universities results in creation of the Alberta Gaming Research Institute. • The Western 649 was launched in February. • Great Northern Casino (Grande Prairie) opens. • Cash Casino (Lethbridge) closes. • Casino Edmonton expands its facility to accommodate more slot machines, as did the Cash Casino facilities in both Red Deer and Calgary. • The dice game 'craps' is introduced to some casinos.

2000s	<p>Continued growth of casino gambling (new facilities and expansion of existing facilities) coincident with continued growth in per capita gambling expenditures. There is a significant increase in number of slot machines along with significant increase in slot machine expenditure and revenue. The large majority of Alberta gambling revenue now comes from Electronic Gambling Machines (EGMs) such as VLTs and slots. First Nations casinos are established for the first time. There is continued decline in the popularity of horse racing and a beginning in the decline in the popularity of bingo.</p> <p>There is increased public and government concern about problem gambling and greater efforts to address it.</p>
2000	<ul style="list-style-type: none"> • AGLC implements the majority of recommendations from the Bingo Review Committee (e.g., provincial bingo manager, criteria for granting bingo licences, clearer definition of ‘charitable organization’ and ‘charitable purpose’, age 16 for non-association bingo) • Casino self-exclusion program implemented, as is casino employee staff training to promote responsible gambling. • ABS Casino closes its downtown Edmonton casino and opens Casino Yellowhead to become Alberta’s largest facility at 75,000-square-feet. • Boomtown Casino in Fort McMurray relocates to a larger facility. • Casino Calgary expands its gaming floor. • Casino by Vanshaw in Medicine Hat renovates its existing location.
2001	<ul style="list-style-type: none"> • AGLC introduces a First Nations Gaming Policy, allowing the potential development of First Nations casinos to be located on reserve land and that would operate under the same terms and conditions as off-reserve casinos. A portion of slot revenue would be allocated to a First Nations Development Fund for the purpose of fostering economic, social and community development within Alberta First Nations groups. • Adult Albertans are determined to have a past year gambling prevalence of 82% and a problem gambling prevalence of 5.2% (Measuring gambling and problem gambling in Alberta using the Canadian problem gambling index) • Palace Casino (Edmonton) under goes a major expansion, doubling square footage from 30,000 to 60,000 and increasing number of slots from 277 to 672.
2002	<ul style="list-style-type: none"> • Moratorium on new casinos is removed on March 1 after AGLC develops a new 8-step process for casino approval and expansion consistent with the recommendations of the Gaming Licensing Policy Review. • Efforts begin to reduce the number of bars with VLTs by 10% to 15% over the next 3 years by concentrating them in fewer locations (i.e., ‘Video Gaming Entertainment Rooms’ (separate room within a retail outlet containing at least 15 VLTs)). • The Alberta Racing Corporation is replaced with Horse Racing Alberta (HRA), whose mandate is to both regulate and revitalize the horse racing industry. • Casino Self-Exclusion program expanded to include RECs. • Northlands Park Race Track in Edmonton adds 238 more slots (to a total of 500). • Whoop-Up Downs in Lethbridge adds 37 more slots to a total of 99.

2003	<ul style="list-style-type: none"> • Federal agriculture minister makes a rule change permitting horse-racing bets to be placed, not just by telephone, but also by “any telecommunication device.” As a consequence, in January 2004, Woodbine Entertainment, a Toronto based horse-racing track operator, began accepting online horse race bets from across Canada (HorsePlayer Interactive). • AGLC honors the 1997/1998 plebiscite results and removes nearly 200 VLTs from seven communities across the province after bar owners give up their legal efforts to block the move. • Digital (DIGI) Bingo²¹ and electronic Keno²² are introduced into bingo halls across the province in order to help revitalize the bingo industry. • 25 slot machines are added to the Evergreen Park racetrack facility in Grande Prairie, making this Alberta’s third Racing Entertainment Centre. • Great Northern Casino (Grande Prairie) undergoes a major expansion.
2004	<ul style="list-style-type: none"> • Alberta’s 6,000 VLTs are replaced with new machines with new games and some responsible gaming features. • AGLC adds a Social Responsibility Division. • Casino Calgary undergoes a major expansion. • Casino ABS in Lethbridge relocates, expands, and becomes Casino Lethbridge.
2005	<ul style="list-style-type: none"> • Deerfoot Inn & Casino opens in Calgary on November 21. • Elbow River Casino in Calgary undergoes major expansion. • Electronic keno introduced to 46 Video Gaming Entertainment Rooms and 9 casinos.
2006	<ul style="list-style-type: none"> • The Alberta Government abolishes the Ministry of Gaming in December with most of these responsibilities devolving to the Solicitor General and the Alberta Gaming and Liquor Commission. • River Cree Resort and Casino opens October 26 on the Enoch Reserve adjacent to the City of Edmonton. It is the province’s 1st First Nations casino. • Century Casino & Hotel opens in Edmonton in November. • Boomtown Casino in Grande Prairie undergoes another major expansion. • Responsible Gambling Information Centres (RGICs)²³ introduced at Deerfoot Casino (Calgary); Palace Casino (Edmonton) and River Cree Casino (expanded to 15 casinos and 1 REC by 2009). • The last electronic horse race game is removed from all casinos and RECs.
2007	<ul style="list-style-type: none"> • Coinless slot machines implemented in all Edmonton casinos and RECs • Century Casino & Hotel in Edmonton starts offering 24hr non-stop poker tournaments. • Camrose Resort Casino opens in June. • Casino Dene opens on the Cold Lake First Nation (near Cold Lake) on September 26. • Grey Eagle Casino & Bingo opens on the Tsuu T’ina First Nation (SW Calgary) on December 19.
2008	<ul style="list-style-type: none"> • Calgary’s Stampede Park closes for horse racing on November 28 after 118 years of operation. • Eagle River Casino & Travel Plaza opens on the Alexis Nakota First Nation (near Whitecourt) on January 31. • Stoney Nakoda Casino Resort opens on the Stoney reserve (Morley) on June 10. • All slot machines made coinless by March 2008. • Electronic table games introduced into casinos (e.g., blackjack; poker; roulette)

²¹ DIGI bingo is a hand-held electronic device that replaces paper cards. It can hold 42 bingo cards; players enter the called number into the unit, which automatically marks all cards containing that unit.

²² A bingo-like game played every 5 minutes.

²³ Staffed by an AGLC representative, these kiosks provide public education materials to promote responsible gambling.

2009	<ul style="list-style-type: none">• AADAC ceases operations on April 1, 2009 pursuant to the <i>Health Governance Transition Act</i>. Its programs are transferred to the Alberta Health Services Board (Mental Health and Addiction division).• Alberta Downs racetrack opens in Lacombe on April 18.• Lotto Max replaces the Super 7 lottery.
2011	<ul style="list-style-type: none">• Release of the present report on the History, Current Status, and Socioeconomic Impacts of Gambling in Alberta.

HISTORY OF EACH TYPE OF GAMBLING

The primary time period of focus in this section is 1970 to present, as 1969 was coincident with the beginning of Alberta's ability to independently provide, regulate, and license most forms of gambling. The information reported herein is derived from the following sources: Alberta Gaming Commission Annual Reviews (1980 – 1994); Western Canada Lottery Alberta Division Annual Reports (1983 – 1994); Alberta Lotteries Annual Reports (1992 – 1997); Alberta Gaming and Liquour Commission Annual Reports (1995 – 2010); Alberta Gaming Annual Reports (2000 – 2006); and Horse Race Alberta Annual Reports (2001 – 2009). Data availability was limited for certain forms of gambling (e.g., horse racing), and for certain time periods.

Horse Race Betting

Private bets between individuals on the outcome of a horse race have always been legal and have been commonly engaged in within western North America since the mid 1700s. The earliest races were match races between two horses, or sometimes three, with the owners being the riders as well as providing the purse for the winner. The main changes concerning gambling on horse racing in terms of legal regulation and provision have been as follows:

Late 1880s	Permanent horse race tracks established at Northlands Park in Edmonton and the Calgary Exhibition/Stampede.
1892	Registering or taking bets (bookmaking) is now allowed for <u>on-site</u> horse-race betting at government-chartered racetracks.
1894	Cochrane establishes a permanent horse race track.
1905	Millarville establishes a permanent horse race track.
1910	Criminal Code amendment introduces detailed information on how a legal pari-mutuel horse race betting system should operate and designates the federal Ministry of Agriculture as the overseer of this betting system.
1917	Horse race betting is suspended for the duration of WWI as it was believed that gambling was not compatible with the war effort.
1919	A Royal Commission in Racing and Inquiry recommends that horse race betting should be permitted. On-site horse-race pari-mutuel wagering is reinstated.
1931	Cochrane race track closes.
1952	Standardbred/Harness racing becomes a regularly scheduled event at some race tracks.
1957	<ul style="list-style-type: none"> Western Canadian Racing Association (WCRA) is created as the regulatory body for horse racing in Alberta. Its office was located at Northlands Park. The WCRA was eventually replaced with the Alberta Racing Corporation in 1996 and then Horse Racing Alberta in 2002. The Edmonton Exhibition took over the management of thoroughbred racing when they volunteered to host the Canadian Derby, which subsequently became a regular event at Northlands Park. Quarter Horse racing becomes a regular event at the Millarville track. Quarter horse racing will soon expand to the other tracks.

1982	Criminal Code amended allowing people to phone-in horse racing bets to the horse race course of an authorized race-track association and to permit people at a horse race track to bet on horse races occurring at other tracks ('intertrack betting').
1989	Criminal Code amended to permit off-track horse race betting in specially designated betting theatres owned or leased by an approved race track association in a province that has issued a licence to that association for the betting theatre. Bets are transmitted electronically to the track.
1990	Teletheatre horse race betting first introduced in Alberta. The revenue from this 'simulcast' betting (especially foreign simulcast) soon overtakes revenue from live horse race betting.
1996	<ul style="list-style-type: none"> The Alberta Racing Corporation Act creates the Alberta Racing Corporation (ARC) (replacing the Western Canadian Racing Association) whose mandate is to manage and regulate the Alberta horse racing industry as well as to revitalize it. Slot machines are introduced to Northlands Park in Edmonton as part of the Racing Industry Renewal Initiative. This is the province's first 'Racing Entertainment Centre' (REC). Slots are later added to Whoop-Up Downs in Lethbridge in 1997 and Evergreen Park in Grande Prairie in 2003. The financial viability of horse racing becomes very much dependent on this revenue.
1998	Alberta Racing Corporation restricts horse race betting to people 18 and older.
2002	The Alberta Racing Corporation is replaced with Horse Racing Alberta (HRA), an expanded and restructured governing body whose mandate continues to be to both regulate and revitalize the horse racing industry.
2003	Federal agriculture minister makes a rule change permitting horse-racing bets to be placed, not just by telephone, but by "any telecommunication device." As a consequence, in January 2004, Woodbine Entertainment, a Toronto based horse-racing track operator, began accepting online bets from across Canada (HorsePlayer Interactive).
2008	Calgary's Stampede Park closes for horse racing on November 28 after 118 years of operation.
2009	Alberta Downs racetrack opens in Lacombe on April 18.

The main indices that speak to changes in the actual availability of horse race betting over time concern the: a) total number of horse race tracks; b) total number of live race days per year; and c) total number of teletheatres in operation.

Number of Horse Race Tracks

Formal 'course' racing began in the late 1880s with the establishment of permanent tracks in Northlands Park in Edmonton and the Calgary Exhibition/Stampede. Cochrane added a horse race track in 1894 and Millarville added one in 1905. 'Community tracks' or 'bush tracks' have existed in many other locations throughout the province, particularly for quarter horse racing: Drumheller, Enoch, Grande Prairie, Hannah, High River, Hobbema, Lethbridge, Medicine Hat, Milo, Olds, Red Deer, Standoff, Stettler, Taber, Teepee Creek, Vegreville, Westlock. However, most of these tracks are no longer operational.

For the past 10 years there have only been 5 tracks holding regular racing: Northlands Park in Edmonton, Calgary Stampede Park (closed to horse racing in 2008); Whoop-Up Downs in Lethbridge; Evergreen Park in Grande Prairie; and the Millarville track (operational only on Canada Day). A new track opened in Lacombe in 2009. Financial problems have impeded the development of another potential track near Balzac (Cross Iron Mills).

Number of Live Race Days per Year

Information on this topic is incomplete. It is known that there were 382 live race days in 1991 and that this number has decreased in recent years, with 308 in 2001, 305 in 2002, 329 in 2003, 342 in 2004, 334 in 2005, 345 in 2006, 326 in 2007, 311 in 2008, and 260 in 2009.

Number of Teletheatres in Operation Each Year

Here again, information is incomplete. What is known is that there were 35 teletheatres in 1998, 30 in 2002, 43 in 2003, 44 in 2004, 40+ in 2005, and 38 in 2010.

Raffles

Small raffles for charitable purposes have never been specifically prohibited and have always been a relatively common form of gambling. The main changes concerning raffles in terms of legal regulation and provision have been as follows:

1887	The Revised Statutes of Canada prohibit lottery schemes or raffles but specifically exempt a) raffles at bazaars with prizes worth \$50 or less held for a charitable purpose as long as the event had municipal approval and the item being raffled is first offered for sale, b) raffles involving art.
1900	Criminal Code amended to permit raffles that are conducted for charitable <u>or religious purposes</u> and to no longer allow the distribution of art by raffles.
1969	Criminal Code amendment to permit the operation of lottery schemes by the federal government or provincial governments. Provincial governments, in turn, could issue a gaming licence to charitable or religious organizations, agricultural fairs or exhibitions, or any individual. However charitable/religious organizations are permitted to operate lottery schemes only if proceeds used for charitable or religious purposes, tickets cost no more than 50 cents, and the prize does not exceed \$100.
1985	Criminal Code amendment eliminates the monetary limits on raffle prizes and tickets operated by authorized charitable or religious organizations.

The main index that speaks to changes regarding the actual availability of charity raffles concerns the total number of raffle licences issued each year. These are reported in Table 1. Data was not available prior to 1979 and between 1996 and 2006. Figure 1 shows these same figures over time adjusted for increases in the Alberta population.²⁴

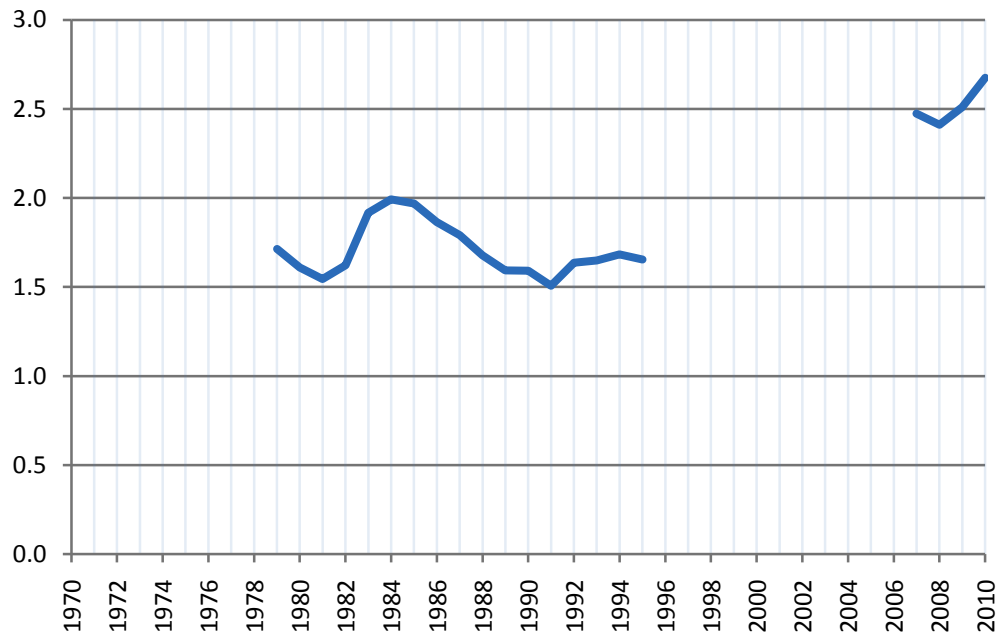
As can be seen, raffle licences per adult were relatively steady between 1977 and 1993, but have increased in recent years.

²⁴ The Alberta adult population increased from approximately 1 million in 1970 to 2.9 million in 2010.

Table 1: Total Raffle Licences per Year.

Year	#	Year	#	Year	#	Year	#
1970	NA	1980	2,467	1990	2,927	2000	NA
1971	NA	1981	2,506	1991	2,822	2001	NA
1972	NA	1982	2,735	1992	3,112	2002	NA
1973	NA	1983	3,277	1993	3,182	2003	NA
1974	NA	1984	3,413	1994	3,302	2004	NA
1975	NA	1985	3,397	1995	3,295	2005	NA
1976	NA	1986	3,263	1996	NA	2006	NA
1977	NA	1987	3,142	1997	NA	2007	6,635
1978	NA	1988	2,973	1998	NA	2008	6,616
1979	2,486	1989	2,873	1999	NA	2009	7,062

Figure 1: Total Raffle Licences per 1000 Adults.



Pull Tickets

Pull tickets are a type of instant win ticket offered by charity/religious groups with sealed windows or pull tabs that open to reveal symbols, letters, or numbers that correspond to a specific prize. Prior to 1922 instant-win tickets offered by charitable/religious groups could theoretically be subsumed under the legal provisions for charitable raffles. However, this exemption was more doubtful after the 1922 prohibition of 'punch boards', which were the earliest version of a genuine instant win ticket. The main changes concerning pull-tickets in terms of legal regulation and provision have been as follows:

1922	Criminal Code amendment prohibited punch boards as these devices were often rigged.
1969	Criminal Code amendment to permit the operation of lottery schemes by the federal government or provincial governments. Provincial governments, in turn, could issue a gaming licence to charitable or religious organizations, agricultural fairs or exhibitions, or any individual. However charitable/religious organizations are permitted to operate lottery schemes only if proceeds used for charitable or religious purposes, tickets cost no more than 50 cents, and the prize does not exceed \$100.
1975	The provision of instant win (pull tickets) offered by charity/religious groups is sanctioned by the Alberta government.
1985	Criminal Code amendment eliminates the monetary limits on raffle prizes and tickets operated by authorized charitable or religious organizations.

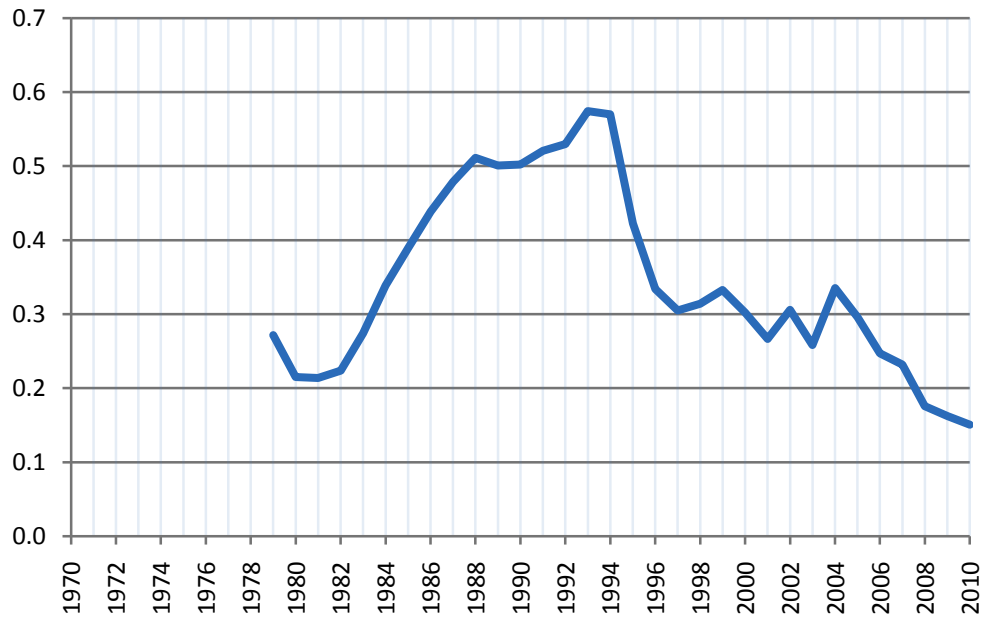
The main index that speaks to changes concerning the actual availability of pull tickets is the total number of pull ticket licences issued each year, as reported in Table 2. Data was not available for 1975 to 1978. These same figures, adjusted for population increases, are shown in Figure 2.

As can be seen, per adult pull ticket licences increased significantly from 1978 to their peak in 1993. Since 1993 there has been a significant and steady decline.

Table 2: Total Pull-Ticket Licences per Year.

1970	0	1980	330	1990	924	2000	677
1971	0	1981	347	1991	975	2001	611
1972	0	1982	377	1992	1008	2002	719
1973	0	1983	469	1993	1109	2003	620
1974	0	1984	580	1994	1118	2004	820
1975	NA	1985	671	1995	842	2005	743
1976	NA	1986	767	1996	678	2006	640
1977	NA	1987	840	1997	634	2007	622
1978	NA	1988	906	1998	672	2008	482
1979	394	1989	903	1999	729	2009	457

Figure 2: # Total Pull Ticket Licences per 1000 Adults.



Bingo

Charitable and religious groups have provided bingo in Alberta since the 1920s, using their exemption under the Criminal Code to conduct small raffles. The main changes concerning bingo in terms of legal regulation and provision have been as follows:

1920s	Courts rule that bingo constitutes a violation of the prohibition against 'common gaming houses', as the operator receives a financial gain from its provision.
1938	Criminal Code amended to clarify that a place is not a 'common gaming house' if it is 'occasionally' used by charitable or religious groups and the proceeds from the games go to charitable or religious causes.
1969	Criminal Code amendment to permit the operation of lottery schemes by the federal government or provincial governments either alone or in combination with other provincial governments. Provincial governments, in turn, could issue a gaming licence to charitable or religious organizations, agricultural fairs or exhibitions, or any individual. However charitable/religious organizations are permitted to operate lottery schemes only if proceeds used for charitable or religious purposes, tickets cost no more than 50 cents, and the prize does not exceed \$100.
1979	Dedicated bingo halls begin operation (3 in Edmonton).
1982	With the creation of dedicated bingo halls it becomes a requirement that groups of charities have to form 'bingo associations' so as to coordinate bingo events in these venues. In subsequent years the large majority of bingo revenue derives from 'Association' bingo.
1985	Criminal Code amendment eliminates the monetary limits on raffle prizes and tickets operated by authorized charitable or religious organizations.
1993	Alberta government grants permission to the Tsuu T'ina First Nation and the Enoch Cree First Nation to hold super-bingos with jackpots exceeding \$10,000.
1996	Linked Satellite Bingo is introduced into some bingo halls by a private provider.
2000	AGLC implements the majority of recommendations from the Bingo Review Committee : creation of a provincial bingo manager, explicit criteria for granting bingo licences, clearer definition of 'charitable organization' and 'charitable purpose', 16 and 17 year olds able to participate in non-association bingo events.
2003	Digital (DIGI) Bingo (hand-held electronic device that replaces paper cards) and electronic Keno are introduced into bingo halls.

The main indices that speak to changes concerning the actual availability of bingo are the: a) total number of bingo licences issued each year, as reported in Table 3, with these same figures adjusted for population increases seen in Figure 3; b) total number of licensed bingo halls each year as reported in Table 4, with these same figures adjusted for population increases in Figure 4; c) total number of bingo events each year as reported in Table 5, with these same figures adjusted for population increases in Figure 5.

As can be seen, per adult bingo availability steadily increased until the mid 1990s but has declined since that time to levels not seen since the 1970s.

Table 3: Total Bingo Licences per Year.

1970	NA	1980	1,334	1990	2,646	2000	3,351
1971	NA	1981	1,299	1991	2,709	2001	2,428
1972	NA	1982	1,391	1992	2,953	2002	2,526
1973	NA	1983	1,536	1993	2,923	2003	2,456
1974	NA	1984	1,858	1994	2,867	2004	2,301
1975	NA	1985	2,001	1995	2,789	2005	2,201
1976	NA	1986	2,160	1996	2,632	2006	2,329
1977	NA	1987	2,396	1997	3,469	2007	2,189
1978	NA	1988	2,452	1998	3,534	2008	2,019
1979	1,341	1989	2,578	1999	3,521	2009	1,774

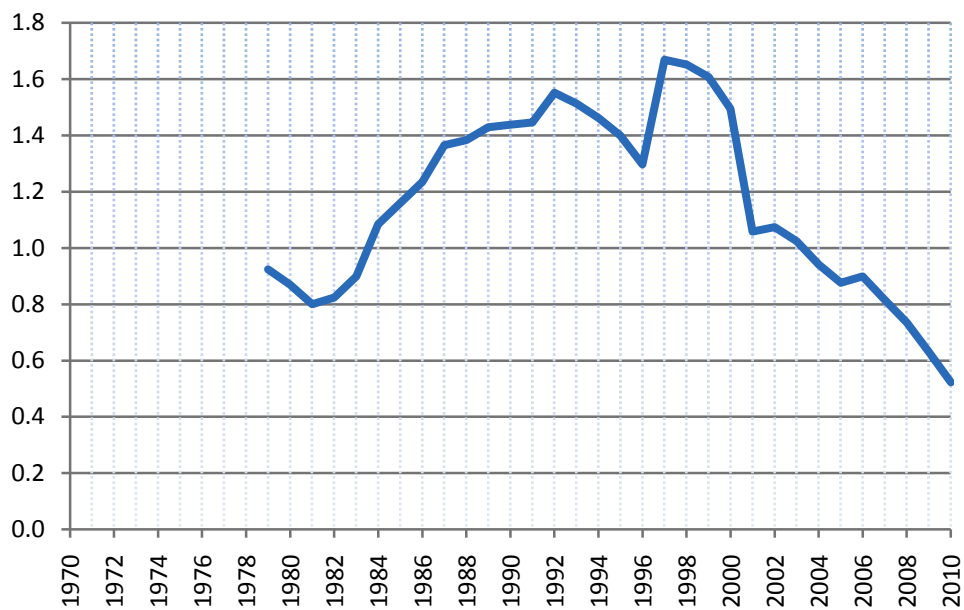
Figure 3: Total Bingo Licences per 1000 Adults.

Table 4: Total Licensed Bingo Halls per Year.

1970	0	1980	3	1990	56	2000	NA
1971	0	1981	3	1991	NA	2001	59
1972	0	1982	5	1992	65	2002	57
1973	0	1983	15	1993	65	2003	56
1974	0	1984	20	1994	NA	2004	53
1975	0	1985	26	1995	NA	2005	52
1976	0	1986	37	1996	NA	2006	47
1977	0	1987	52	1997	62	2007	44
1978	0	1988	56	1998	64	2008	42
1979	3	1989	57	1999	64	2009	34

Figure 4: Total Licensed Bingo Halls per 1000 Adults.

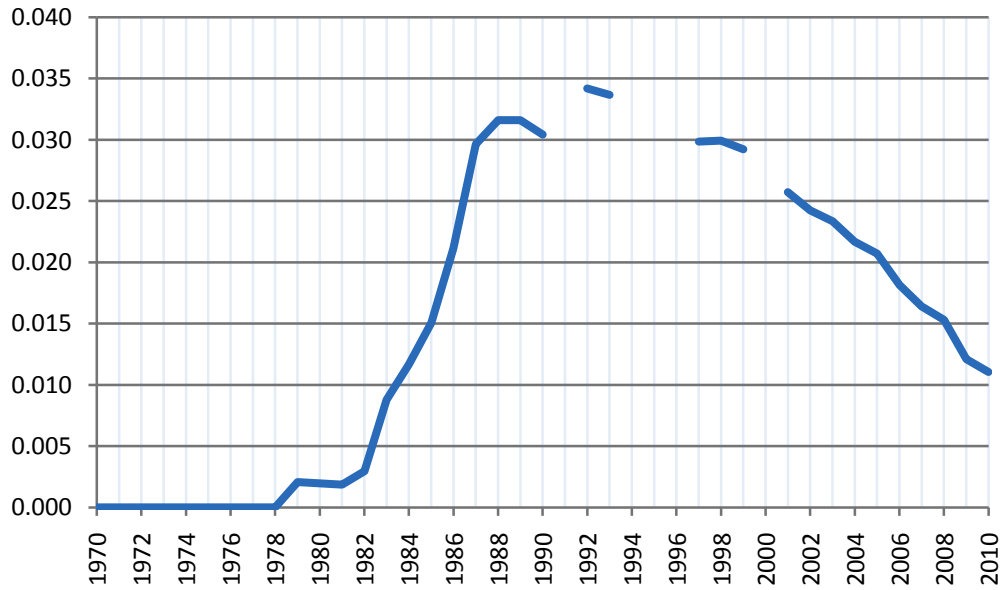
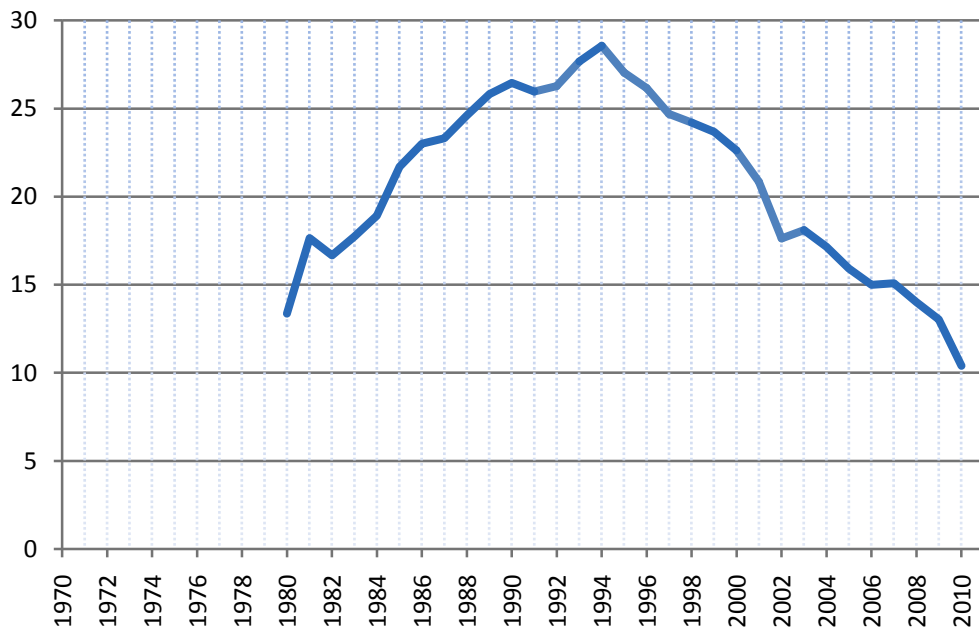


Table 5: Total Bingo Events per Year.

1970	NA	1980	27,051	1990	47,798	2000	46,707
1971	NA	1981	27,042	1991	49,210	2001	40,428
1972	NA	1982	29,933	1992	52,641	2002	42,560
1973	NA	1983	32,345	1993	55,170	2003	41,131
1974	NA	1984	37,158	1994	53,045	2004	38,936
1975	NA	1985	39,720	1995	52,117	2005	37,661
1976	NA	1986	40,788	1996	50,141	2006	39,059
1977	NA	1987	43,188	1997	50,288	2007	37,567
1978	NA	1988	45,743	1998	50,654	2008	35,778
1979	19,382	1989	47,715	1999	49,570	2009	29,284

Figure 5: Total Bingo Events per 1000 Adults.



Lotteries and Instant Win (Scratch) Tickets

The traditional distinction between a lottery and a raffle is that the prizes in raffles consist of merchandise rather than cash. However, in Alberta the way this distinction is made concerns the fact that raffles are operated by ‘charity’ groups, and lotteries are offered by provincial and federal governments. The government of Alberta also designates instant win scratch tickets and sports betting as a form of lottery in their annual reports. The main changes concerning government provided lotteries in terms of legal regulation and provision have been as follows:

1969	Criminal Code amendment permits the operation of lottery schemes by the federal government or provincial governments either alone or in combination with other provincial governments.
1973	The federal government holds the first national lottery.
1974	The Western Canada Lottery Corporation (WCLF) (acting on behalf of Alberta, BC, SK, MB, YU) is formed and offers the first provincial lottery.
1975	WCLF offers the first ‘bearer ticket’ for “The Western” lottery (previously people had registered their name when participating).
1976	The Interprovincial Lottery Corporation is created by the provincial lottery associations (currently consisting of the Western Canada Lottery Corporation, British Columbia Lottery Corporation, Atlantic Lottery Corporation, Ontario Lottery and Gaming Corporation, and Lotto-Quebec) to operate <i>national</i> lotteries on behalf of the provinces (providing direct competition to Lotto Canada).
1979	The federal government withdrew from offering lotteries in return for \$24 million annually from the provinces indexed to inflation.
1982	Lotto 6/49 is launched as a national lottery game by the Interprovincial Lottery Corporation. First lottery game where players can choose their own numbers. This will prove to be the most successful of all lottery products and will comprise the majority of all Ticket Lottery revenue in subsequent years.
1985	Criminal Code amendment gives exclusive ability to operate ‘lottery schemes’ to the provinces in exchange for \$100 million, plus the indexed annual contribution agreed to in 1979. This same legislation limits the conduct and management of lottery schemes operated on or through a computer, video device or slot machine just to provincial governments.
1986	Instant win (scratch) tickets are sold for the first time by the Western Canadian Lottery Corporation.

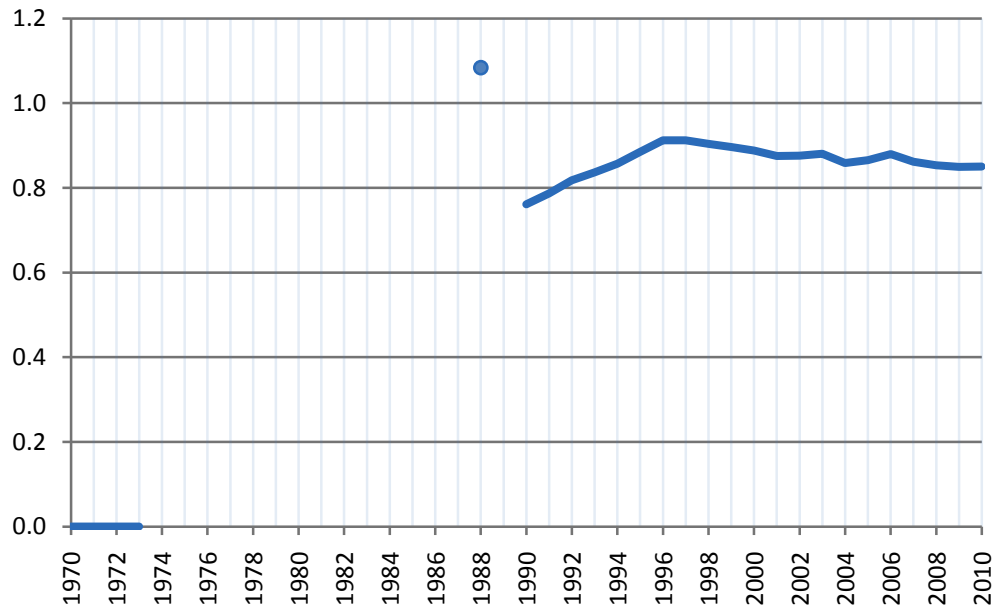
The most readily available index that speaks to changes concerning the actual availability of lotteries concerns the total number of lottery ticket retailers as reported in Table 6. These same figures, adjusted for population increases, are displayed in Figure 6. Data was not available from 1974 to 1987.

As can be seen in Figure 6, the per adult availability of lottery ticket retailers has been fairly steady since the early 1990s.

Table 6: Total Lottery Ticket Retailers per Year.

1970	0	1980	NA	1990	1,400	2000	1,990
1971	0	1981	NA	1991	1,473	2001	2,007
1972	0	1982	NA	1992	1,555	2002	2,060
1973	0	1983	NA	1993	1,616	2003	2,111
1974	NA	1984	NA	1994	1,681	2004	2,100
1975	NA	1985	NA	1995	1,763	2005	2,173
1976	NA	1986	NA	1996	1,852	2006	2,280
1977	NA	1987	NA	1997	1,896	2007	2,310
1978	NA	1988	1,920	1998	1,934	2008	2,342
1979	NA	1989	NA	1999	1,964	2009	2,392

Figure 6: Total Lottery Ticket Retailers per 1000 Adults.



Sports Betting

The main changes concerning government provided sports betting in terms of legal regulation and provision have been as follows:

1983	An amendment to the Criminal Code permits betting on any combination of 2 or more athletic contests or events.
1984	Canadian Sports Pool Corporation (CSPC) begins offering sports betting on North American major professional sports leagues ('Sports Select'). Bettors are required to pick the winner of 2 or more games. CSPC ceases operation in September and is dissolved in 1985.
1985	Criminal Code amendment gives exclusive ability to operate 'lottery schemes' (interpreted to include sports betting) to the provinces in exchange for \$100 million, plus the indexed annual contribution agreed to in 1979. This same legislation limits the conduct and management of lottery schemes operated on or through a computer, video device or slot machine just to provincial governments.
1990	The Western Canada Lottery Corporation begins offering sports betting. Each 'bet' requires people to choose the winner of 3 or more major league football or hockey games ('Sports Select').

The most readily available index that speaks to changes concerning the actual availability of sports betting concerns the total number of lottery ticket retailers as reported in Table 6 (as sports betting tickets are exclusively sold by these retailers). These same figures, adjusted for population increases, are displayed in Figure 6. Data was not available from 1974 to 1987.

As can be seen in Figure 6, the per adult availability of lottery ticket retailers has been fairly steady since the early 1990s.

Video Lottery Terminals (VLTs)

In Alberta the term ‘Video lottery terminal’ refers to an electronic gambling machine that is located in an age-restricted licensed venue (bar) outside of a casino or horse race track. Because they are electronic devices they have to be directly managed by the provincial government (AGLC). The main changes concerning government provided video lottery terminals in terms of legal regulation and provision have been as follows:

1969	Criminal Code amendment permits the operation of ‘lottery schemes’ by the federal government or provincial governments.
1985	Criminal Code amendment gives exclusive ability to operate ‘lottery schemes’ to the provinces in exchange for \$100 million, plus the indexed annual contribution agreed to in 1979. This same legislation limits the conduct and management of lottery schemes operated on or through a computer, video device or slot machine just to provincial governments.
1992	VLTs are introduced to Alberta bars/lounges beginning in March.
1995	Policy enacted to limit the total number of VLTs to 6,000.
1997	VLTs are removed from Rocky Mountain House and Sylvan Lake following local plebiscites. Plebiscites are also held in Barrhead, Wood Buffalo/Fort McMurray, and Lacombe. Barrhead votes to keep VLTs. Wood Buffalo votes to remove VLTs, but retailers take legal action to stop this. The courts declare Lacombe’s vote invalid.
1998	VLT plebiscites are held in 36 Alberta municipalities during the October 19 civic elections. Six municipalities vote to have their VLTs removed (County of Lethbridge No. 26; Town of Lacombe; Municipal District of Opportunity No. 17; Town of Canmore; Town of Coaldale; Town of Stony Plain; and the Regional Municipality of Wood Buffalo). VLT retailers take legal action to stop this and courts rule that AGLC cannot remove VLTs from municipalities unless there is specified legislation in place.
1999	Alberta government passes legislation to remove VLTs from communities that voted to have them removed. However, a court injunction stops them pending a constitutional challenge to this new legislation (not decided until 2003).
2002	Efforts begin to reduce the number of bars with VLTs by 10% to 15% over the next 3 years by concentrating them in fewer locations (i.e., ‘Video Gaming Entertainment Rooms’ (separate room within a retail outlet containing at least 15 VLTs)).
2003	AGLC honours the 1997/1998 plebiscite results and removes nearly 200 VLTs from seven communities across the province after bar owners give up their legal efforts to block the move.
2004	Alberta’s 6,000 VLTs are replaced with new machines with new games and some responsible gaming features.
2005	Electronic keno is introduced to 46 Video Gaming Entertainment Rooms.

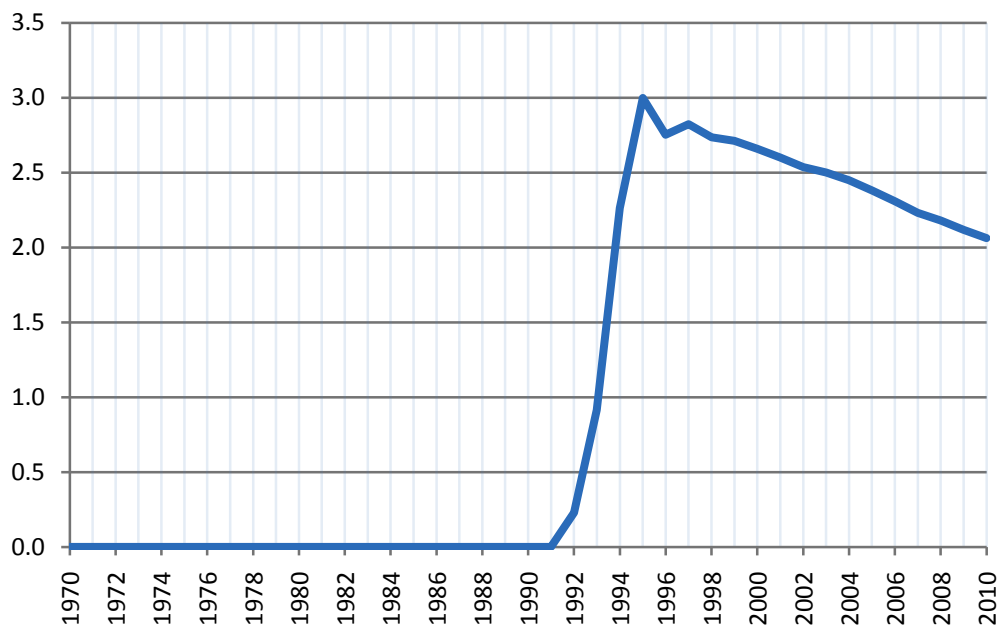
The main indices that speak to changes concerning the actual availability of video lottery terminals concerns the: a) Total number of VLTs, as reported in Table 7 and adjusted for population increases in Figure 7; b) Total number of VLT locations, as reported in Table 8 and adjusted for population increases in Figure 8; and the c) Total number of video gaming entertainment rooms (VGERs), as reported in Table 9 and adjusted for population increases in Figure 9.

As can be seen, there was a very rapid increase in the per capita number of VLTs from their introduction in 1992 to when their numbers were capped in 1996. Since 1996, VLTs per capita have slowly declined. The number of VLT locations per capita peaked in 1997 and has been slowly falling ever since. This is coincident with a greater concentration of machines in fewer venues (i.e., the increasing number of VGERS per capita from 2003 to present).

Table 7: Total Video Lottery Terminals per Year.

1970	0	1980	0	1990	0	2000	5,959
1971	0	1981	0	1991	0	2001	5,965
1972	0	1982	0	1992	435	2002	5,967
1973	0	1983	0	1993	1,767	2003	5,995
1974	0	1984	0	1994	4,438	2004	5,992
1975	0	1985	0	1995	5,975	2005	5,978
1976	0	1986	0	1996	5,586	2006	5,981
1977	0	1987	0	1997	5,866	2007	5,981
1978	0	1988	0	1998	5,852	2008	5,986
1979	0	1989	0	1999	5,943	2009	5,964

Figure 7: Total Video Lottery Terminals per 1000 Adults.



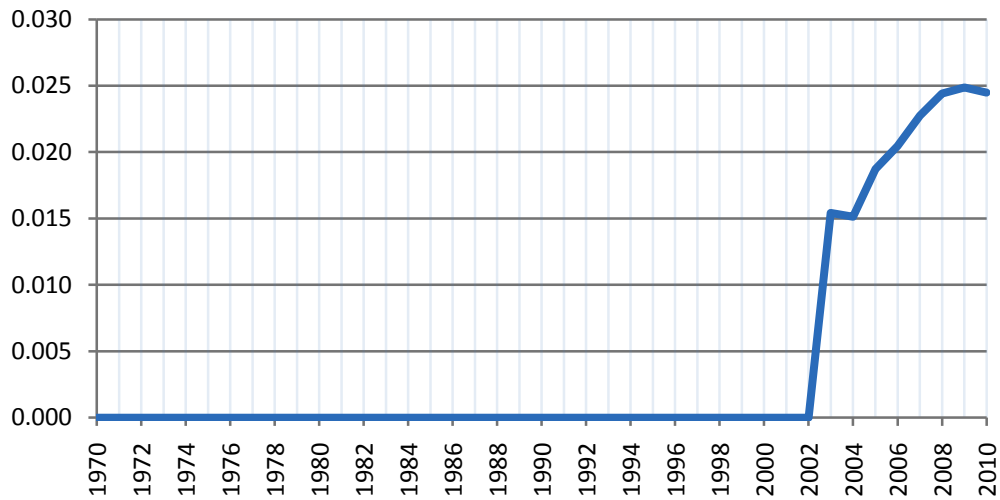
**Table 8: Total Video Lottery Locations per Year
(including VGERs, but excluding casinos).**

1970	0	1980	0	1990	0	2000	1,238
1971	0	1981	0	1991	0	2001	1,266
1972	0	1982	0	1992	84	2002	1,272
1973	0	1983	0	1993	376	2003	1,179
1974	0	1984	0	1994	864	2004	1,139
1975	0	1985	0	1995	1,080	2005	1,110
1976	0	1986	0	1996	1,098	2006	1,079
1977	0	1987	0	1997	1,221	2007	1,060
1978	0	1988	0	1998	1,225	2008	1,051
1979	0	1989	0	1999	1,223	2009	1,030

Table 9: Total Video Gaming Entertainment Rooms per Year.

1970	0	1980	0	1990	0	2000	0
1971	0	1981	0	1991	0	2001	0
1972	0	1982	0	1992	0	2002	0
1973	0	1983	0	1993	0	2003	37
1974	0	1984	0	1994	0	2004	37
1975	0	1985	0	1995	0	2005	47
1976	0	1986	0	1996	0	2006	53
1977	0	1987	0	1997	0	2007	61
1978	0	1988	0	1998	0	2008	67
1979	0	1989	0	1999	0	2009	70

Figure 9: Total Video Gaming Entertainment Rooms per 1000 Adults.



Slot Machines, Table Games, and Casinos

In Alberta, ‘slot machines’ are primarily defined as electronic gambling machines that are located in casinos or horse race tracks (REC). Because they are electronic devices they have to be directly managed by the provincial government (AGLC). However, charity groups are able to directly manage casino table games. The main changes concerning slot machines, table games, and casinos in terms of legal regulation and provision have been as follows:

1900 - 1910	Slot machines start appearing in Alberta bars and pool rooms. Their legality is unclear with some courts contending that their use constituted operating a common gaming house, as the owner of the machine gains financially from their presence. Some other legal opinions consider them to be illegal lottery contrivances.
1923	Alberta introduces the Slot Machine Tax Act requiring a \$50 annual licence for each automated or mechanical machine. (Many municipalities had slot machine licensing fees in place prior to 1923).
1924	<ul style="list-style-type: none"> • Criminal Code amendment to indicate that an automated machine (‘slot machine’) that produces uncertain outcomes is deemed to be a contrivance for playing a game of chance and therefore the premises in which it is located is an illegal common gaming house. • Alberta enacts the ‘Slot Machine Act’ banning automated machines that provide monetary prizes or something intended to be exchanged for money, regardless of whether the machine also provided goods (e.g., gum) or services (e.g., music). (This latter condition intended to prohibit slot machines that tried to circumvent the law by also providing goods or services)
1952	Further refinement of the definition of a slot machine in the <i>Alberta Slot Machine Act</i> to specifically exclude vending machines and juke boxes from the definition (however, ‘pinball machines’ were included (and therefore prohibited) as they did not provide anything back).
1953	Criminal Code amendment indicating that any place with a slot machine shall be conclusively presumed to be a common gaming house (and therefore, illegal).
1967	Casino table games offered for the first time by Edmonton’s Northlands Park in the Silver Slipper Saloon during the week-long Klondike Days fair (using the long-standing Criminal Code exemption of agricultural fairs/exhibitions being able to offer lottery schemes).
1969	Criminal Code amendment to permit the operation of lottery schemes by the federal government or provincial governments. Provincial governments, in turn, could issue a gaming licence to charitable or religious organizations, agricultural fairs or exhibitions, or any individual.
1975	Alberta Attorney General begins to grant multi-day casino licences to charities. The Edmonton Kinsmen Club holds Alberta’s first multi-day charity casino event (providing table games).
1980	Alberta’s first permanent casino (Cash Casino) opens in Calgary. This is a privately owned venue contracted to provide space and services for short-term charity, religious or agricultural casino events (this becomes the operational template for all subsequent permanent casinos in the province).
1985	Amendment to the Criminal Code gives exclusive ability to operate ‘lottery schemes’ to the provinces. This same legislation limits the conduct and management of lottery schemes operated on or through a computer, video device or slot machine just to provincial governments.
1988	Alberta Gaming Commission increases the number of allowable casinos per week (4 to 8), the betting limit (increased to \$50), and the number of blackjack tables permitted in a casino.
1989	Alberta’s first casino expressly built for the purpose of providing casino gambling opens in Calgary (now Elbow River Casino).
1995	Poker introduced to casinos.

1996	Slot machines and electronic horse racing games ²⁵ are introduced into Alberta's casinos. Slot machines are also introduced to Northlands Park in Edmonton as part of an initiative to revitalize the horse racing industry. This is the province's first 'Racing Entertainment Centre' (REC).
1997	AGLC allows number of slot machines in casinos to be doubled, hours for table games to be extended by 1 hour to maximum of 14, for alcohol to be served on the gaming floor, and for casinos to operate on Sundays.
1999	<ul style="list-style-type: none"> • Moratorium on new Alberta casinos or further gambling expansion pending the results of the Gaming Licensing Policy Review. • Criminal Code amendment ends the prohibition against dice games. The dice game 'craps' is introduced to some casinos.
2000	Casino self-exclusion program implemented, as is casino employee staff training to promote responsible gambling.
2001	AGLC introduces a First Nations Gaming Policy, allowing the potential development of First Nations casinos located on reserve land that would operate under the same terms and conditions as off-reserve casinos. A portion of slot revenue is to be allocated to a First Nations Development Fund to foster economic, social and community development within Alberta First Nations groups.
2002	Moratorium on new casinos removed on March 1 after AGLC develops a new 8-step process for casino approval and expansion.
2005	Electronic keno introduced to 9 casinos.
2006	<ul style="list-style-type: none"> • River Cree Resort and Casino opens October 26 on the Enoch Reserve adjacent to the City of Edmonton. It is the province's 1st First Nations casino. • Responsible Gambling Information Centres (RGICs) first introduced (expanded to 15 casinos and 1 REC by 2009). • The last electronic horse race game is removed from all casinos and RECs.
2008	<ul style="list-style-type: none"> • All slot machines made coinless by March 2008 (a process that had begun the previous year). • Electronic table games introduced into casinos (e.g., blackjack; poker; roulette)

A more detailed chronology of the introduction of casinos to Alberta and their cumulative numbers is provided in Table 10. This table shows the introduction of 'Traditional Casinos (T)', 'Racing Entertainment Centres (REC)' (racetracks with slot machines, also known as 'racinos'), and 'First Nations Casinos (FN)'.

²⁵ A miniaturized horse race game made by Sega Corporation. There are 10 seats around the machine where people place their bets on the (random) outcomes of the horses who move around the oval track.

Table 10: Casino Introduction to Alberta.

YEAR	T	REC	FN	TOTAL	VENUE
1979	0	0	0	0	
1980	1	0	0	1	Cash Casino opens in Calgary.
1981	2	0	0	2	Casino ABS opens in Edmonton (also known as Casino Edmonton).
1982	2	0	0	2	
1983	2	0	0	2	
1984	2	0	0	2	
1985	2	0	0	2	
1986	3	0	0	3	Casino ABS South opens in Edmonton (now Casino Edmonton).
1987	3	0	0	3	
1988	4	0	0	4	Frontier casino opens in Calgary (now Stampede Casino).
1989	5	0	0	5	Alberta's first purpose-built casino opens in Calgary (now Elbow River Casino).
1990	6	0	0	6	<ul style="list-style-type: none"> Sandman Inn Casino in Edmonton opens but closes after only 7 months. Palace Casino in Edmonton opens.
1991	7	0	0	7	Casino opened in the base of the Calgary Tower. It closes several years later.
1992	7	0	0	7	
1993	7	0	0	7	Casino ABS opens casino in Lethbridge.
1994	9	0	0	9	<ul style="list-style-type: none"> Gold Dust Casino opens in St. Albert. Casino opens in Fort McMurray (now Boomtown Casino).
1995	11	0	0	11	<ul style="list-style-type: none"> Cash Casino in Red Deer opens. Cash Casino in Lethbridge opens.
1996	14	1	0	14	<ul style="list-style-type: none"> Baccarat Casino opens in Edmonton. Frank Sisson's Silver Dollar Casino opens in Calgary. Casino by Vanshaw opens in Medicine Hat. Slots introduced to Northlands Park in Edmonton (first REC).
1997	16	2	0	18	<ul style="list-style-type: none"> Casino Calgary opens. Jackpot Casino opens in Red Deer. Slots installed in a racetrack facility (Whoop-Up Downs) in Lethbridge.
1998	16	2	0	18	
1999	16	2	0	18	<ul style="list-style-type: none"> Great Northern Casino (Grande Prairie) opens. Cash Casino (Lethbridge) closes. It had operated for approximately 4 years.
2000	16	2	0	18	ABS Casino closes its downtown Edmonton casino and reopens to become Casino Yellowhead.
2001	16	2	0	18	
2002	16	3	0	19	
2003	16	3	0	19	Slot machines to the Evergreen park racetrack facility in Grande Prairie.
2004	16	3	0	19	Casino ABS in Lethbridge relocates, expands, and becomes Casino Lethbridge.
2005	17	3	0	20	Deerfoot Inn & Casino opens in Calgary.
2006	18	3	1	22	<ul style="list-style-type: none"> Century Casino & Hotel opens in Edmonton. River Cree First Nations Casino opens on the Enoch Cree Nation.
2007	19	3	3	25	<ul style="list-style-type: none"> Camrose Resort Casino opens. Casino Dene First Nations opens on the Cold Lake First Nation. Grey Eagle First Nations Casino & Bingo opens on the Tsuu T'ina First Nation.
2008	19	3	5	27	<ul style="list-style-type: none"> Eagle River First Nations Casino & Travel Plaza opens on the Alexis Nakota First Nation (near Whitecourt). Stoney Nakoda First Nations Casino opens on the Stoney Nakoda reserve
2009	19	3	5	27	
2010	19	3	5	27	
2011	19	3	5	27	

The main indices that speak to changes concerning the actual availability of casinos and slot machine venues in Alberta are the: a) Total number of permanent casinos and RECs, reported in Table 10, and adjusted for population increases in Figure 10; b) Total number of slot machines, as reported in Table 11 and adjusted for population increases in Figure 11; c) Total number of charitable casino licences, as reported in Table 12 and adjusted for population increases in Figure 12; and d) Total number of casino events, as reported in Table 13 and adjusted for population increases in Figure 13.

As can be seen, since 1980 there has been a steady and significant increase in the per adult availability of all of these indices. There has been a particularly significant rise in the number of slot machines per adult since their introduction in 1996.

Figure 10: Total Casinos & RECs per 1000 Adults.

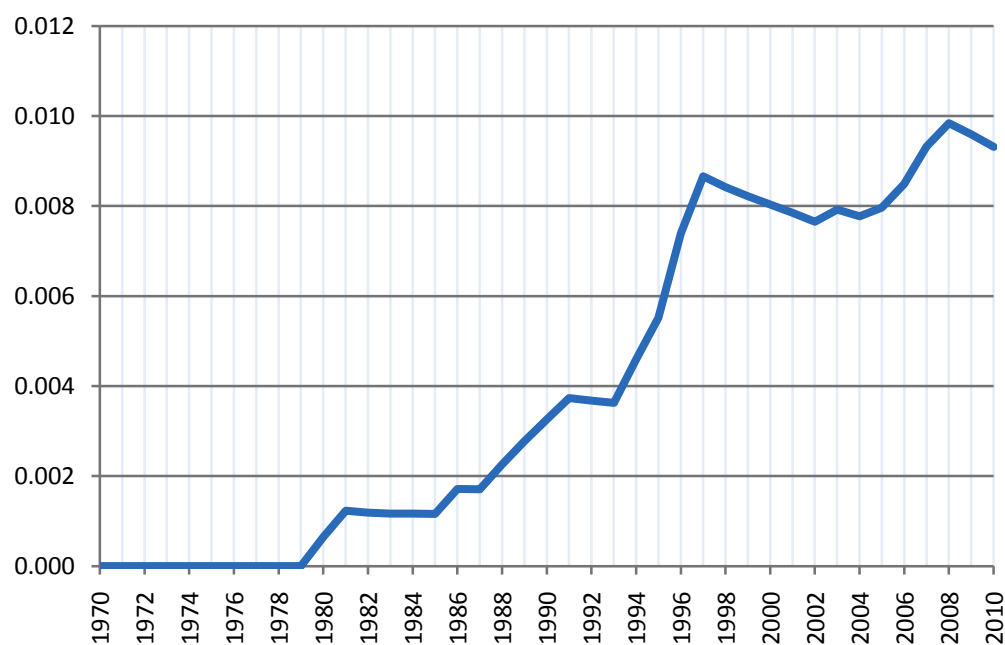


Table 11: Total Slot Machines per Year.

1970	0	1980	0	1990	0	2000	3,742
1971	0	1981	0	1991	0	2001	4,352
1972	0	1982	0	1992	0	2002	5,035
1973	0	1983	0	1993	0	2003	6,347
1974	0	1984	0	1994	0	2004	6,513
1975	0	1985	0	1995	0	2005	7,055
1976	0	1986	0	1996	225	2006	8,658
1977	0	1987	0	1997	765	2007	10,232
1978	0	1988	0	1998	1,680	2008	11,859
1979	0	1989	0	1999	2,851	2009	12,680

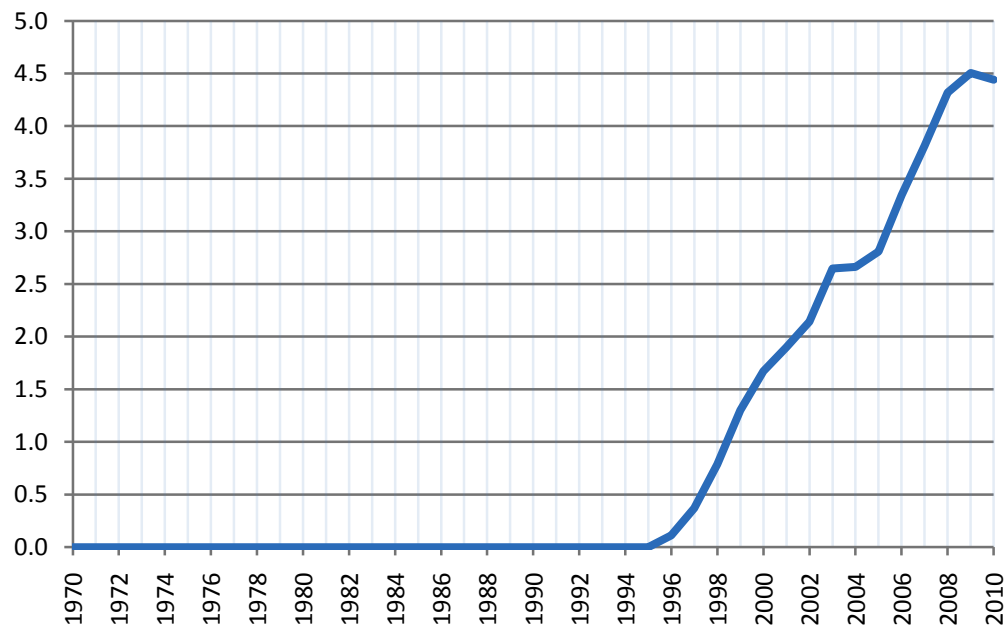
Figure 11: Total Slot Machines per 1000 Adults.

Table 12: Total Charitable Casino Licences per Year.

1970	NA	1980	429	1990	954	2000	2,695
1971	NA	1981	476	1991	997	2001	2,743
1972	NA	1982	483	1992	1,041	2002	2,828
1973	NA	1983	544	1993	1,159	2003	2,893
1974	158	1984	552	1994	1,176	2004	2,924
1975	NA	1985	575	1995	1,172	2005	2,893
1976	NA	1986	590	1996	1,367	2006	2,968
1977	NA	1987	611	1997	1,769	2007	3,303
1978	NA	1988	690	1998	2,291	2008	3,412
1979	420	1989	997	1999	2,534	2009	3,426

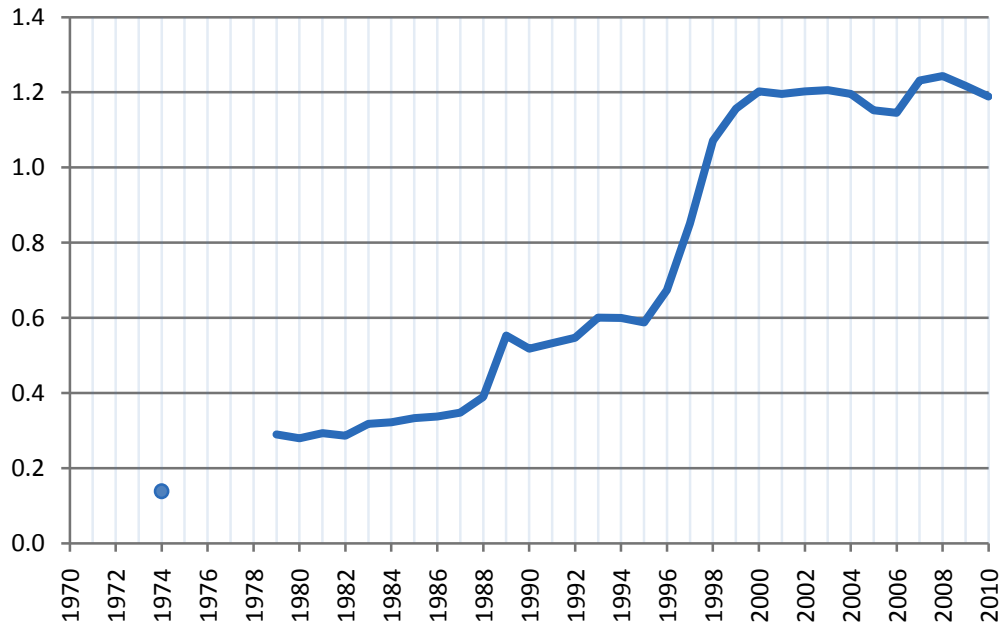
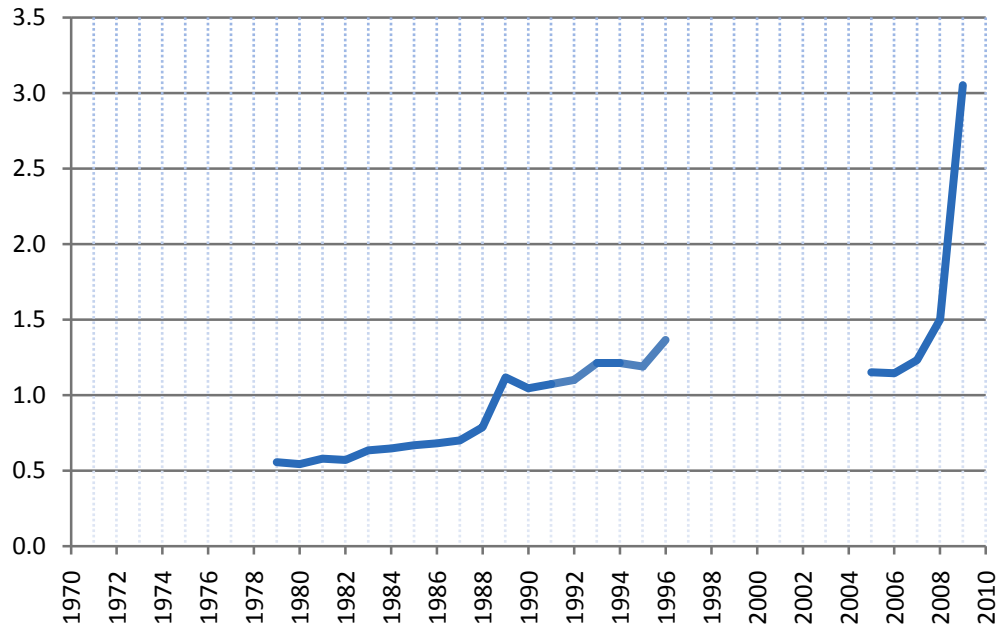
Figure 12: Total Charitable Casinos Licences per 1000 Adults.

Table 13: Total Number of Casino Events (days) per Year.

1970	NA	1980	833	1990	1,925	2000	NA
1971	NA	1981	941	1991	2,012	2001	NA
1972	NA	1982	961	1992	2,092	2002	NA
1973	NA	1983	1,086	1993	2,344	2003	NA
1974	NA	1984	1,108	1994	2,378	2004	NA
1975	NA	1985	1,154	1995	2,372	2005	2,893
1976	NA	1986	1,190	1996	2,773	2006	2,968
1977	NA	1987	1,230	1997	NA	2007	3,303
1978	NA	1988	1,396	1998	NA	2008	4,123
1979	808	1989	2,017	1999	NA	2009	8,592

Figure 13: Total Casino Events (days) per 1000 Adults.



REGULATORY AND ORGANIZATIONAL HISTORY

The main historical changes in the regulation, organization, and provision of legal gambling in Alberta are as follows:

1869 - 1892	The foundational federal laws governing gambling in Canada are established, culminating in the 1892 Criminal Code. These laws prohibit all forms of gambling with the exception of social gambling between individuals, small raffles for charitable purposes, and horse race betting that occurs at the track.
1910	Criminal Code introduces detailed information on how pari-mutuel horse race betting should operate and designates the federal Ministry of Agriculture as the overseer of this betting system.
1925	Criminal Code amended to allow 'lottery schemes' at agricultural fairs and exhibitions.
1969	Criminal Code amended to permit lottery schemes by the federal or provincial governments. Provincial governments, in turn, could issue a gaming licence to charitable or religious organizations, agricultural fairs or exhibitions, or any individual.
1973	All Alberta gambling licencing is transferred to the newly created Lotteries Licensing Section of the Attorney General's Department.
1974	Western Canada Lottery Foundation (WCLF) is formed by the provinces of British Columbia, Alberta, Saskatchewan, and Manitoba, to begin providing provincial lottery tickets.
1976	Alberta Attorney General creates the Gaming Control Branch to provide more comprehensive regulation of gambling (replacing the Lotteries Licensing unit) and to better handle the large number of new casino event applications from charities.
1979	The federal government withdraws from offering lottery schemes in return for \$24 million annually from the provinces indexed to inflation.
1981	The Gaming Control Branch of the Attorney General's office becomes responsible for administration and enforcement duties, and the new Alberta Gaming Commission becomes responsible for licensing, appeals, public information, public consultation and policy recommendations.
1983	Amendment to Criminal Code permits the federal or provincial governments to accept 'pool betting' on 2 or more sporting events.
1984	Wild Rose Foundation created to provide grants from lottery revenue to volunteer, non-profit organizations.
1985	Criminal Code amendment gives exclusive ability to operate 'lottery schemes' to the provinces. This same legislation limits the conduct and management of lottery schemes operated on or through a computer, video device or slot machine just to provincial governments.
1989	<ul style="list-style-type: none"> • Criminal Code amended to permit off-track horse race betting. • Alberta Lottery Fund established with all revenue from lottery schemes now being deposited into this fund, with funds to be disbursed for purposes supporting recreation or culture or any other purpose the Minister considers being in the public interest. In practice, the bulk of this revenue goes to government ministries and the rest goes to various granting agencies and foundations.
1991	All gambling-related agencies in the province fall under the responsibility of the Attorney General (Alberta Lotteries, WCLC-Alberta Division, Alberta Gaming Commission).
1995	All provincial gambling activities, with the exception of horse racing, are brought under the management of the new Alberta Gaming and Liquor Commission (AGLC) (an amalgamation of the Alberta Gaming Commission, Gaming Control Branch, Alberta Lotteries, and Alberta Liquor Control Board).

1996	<ul style="list-style-type: none"> • Alberta Racing Corporation is formed to help revitalize the declining horse racing industry in Alberta (replacing the Western Canadian Racing Association). • The Alberta Gaming and Liquor Act is enacted providing the regulatory framework for issuing gaming licences and gaming worker registration.
1999	Alberta Ministry of Gaming is created, which includes the Department of Gaming, the Alberta Gaming and Liquor Commission, the Community Lottery Program Secretariat, the Alberta Gaming Research Council and Alberta Racing Corporation.
2001	First Nations Gaming Policy introduced, allowing potential development of First Nations casinos on reserve land.
2002	<ul style="list-style-type: none"> • The 1999 moratorium on new casinos removed after AGLC develops 8-step process for casino approval and expansion consistent with the recommendations of the Gaming Licensing Policy Review. • The Alberta Racing Corporation is replaced with Horse Racing Alberta (HRA), whose mandate is to both regulate and revitalize the horse racing industry.
2006	The Alberta Government abolishes the Ministry of Gaming with most of these responsibilities devolving to the Solicitor General and the Alberta Gaming and Liquor Commission.

HISTORY OF FIRST NATIONS COMMERCIAL GAMBLING

Alberta First Nations entry into the provincial gambling industry dates to 1993 when provincial officials granted the Tsuu T'ina First Nation (southwest of Calgary), and the Enoch Cree First Nation (west of Edmonton) licenses to hold super-bingos with jackpots exceeding \$10,000. The Tsuu T'ina profits of \$100,000 led to calls for the creation of an independent First Nations Gaming Commission (Stewart, 1993). First Nations leaders developed a tentative policy model that ensured all bands would benefit equally from any reserve casino developments. They also sponsored a Chiefs' Summit in November 1993 attended by several provincial ministers and officials, the Minister of Indian and Northern Affairs Canada (INAC), and all provincial First Nations chiefs. Although little came from the meeting, a second Summit held in March 1995 witnessed the Minister of Family and Social Services, Mike Cardinal, encourage First Nations leaders to "take a leading role" to determine "if a casino industry will exist." If this support was not sufficient, he added, "I think Native leaders should propose what they'd like to see in Alberta and then we'll negotiate" (Edmonton Journal, 1995).

The third Summit held in November 1995 led to the 'Understanding on First Nations-Canada Relations' signed by Minister of Indian Affairs Ron Irwin and the Chiefs of Alberta, to which recently elected Premier Ralph Klein and Minister Cardinal later added their signatures. The agreement was somewhat surprising, considering that 2 months earlier the First Nations Gaming Congress, representing all Alberta bands, had demanded \$100 million from the provincial government in exchange for halting their construction of casinos. Later that December Tsuu T'ina band members voted 73% in favour of casino development prompting a January 1996 meeting between Premier Klein, Alberta Lotteries Review Committee chair Judy Gordon, Chief Roy Whitney, and the Tsuu T'ina band council, at which time all parties agreed that final arrangements about "casino size, location, construction dates, and revenue-sharing possibilities still needed to be discussed" (Calgary Herald, 1996, A6).

A provincial First Nations gaming policy was announced in 1997. The new policy permitted the construction and operation of 4 casinos to be located on First Nation reserves. With the exception of being located on reserves, the First Nations casinos were expected to operate under the same charity model and have the same revenue distribution as non-First Nations casinos (i.e., the majority of revenue going to the Alberta Lottery Fund rather than being retained by the First Nation community).

First Nation leaders were not pleased with this proposal, arguing that the standard charity casino model would provide them with insufficient revenue retention to attract the initial capital investment needed to develop a casino. They also pointed out that they have not shared in the oil and gas revenue that has benefited the rest of Alberta. Enoch and Louis Bull First Nations, 2 communities that had plans in place to develop large destination-type casinos, ended their relationships with a Las Vegas developer. Tsuu T'ina officials also temporarily halted their casino plans. Other First Nations threatened to ignore the proposed provincial First Nations gaming policy and simply build and operate their own casinos and bingo halls. Enoch

officials even struck a deal with a new corporate partner (Edmonton Journal, 2000). However, very little action on this front occurred.

In 1999 it appeared that the First Nations casino process would be indefinitely stalled with a moratorium on all provincial casino construction. A 20-month review of licensing policies followed in response to concerns about unsustainable industry growth and lobbying by provincial groups demanding greater government accountability of gambling's social impact. In 2001, a report containing 61 recommendations led to the creation of new provincial gaming policies intended to be based on the existing charitable gaming model.

As part of this initiative, provincial officials announced a revised First Nations Gaming Policy, with a different pattern of revenue distribution more favourable to First Nations. Under the new policy, 15% of slot-machine revenue was to be given to the casino owner, 15% to the host First Nation (which needed to register as a charitable entity), 30% to the Alberta Lottery Fund, and 40% to a new First Nation Development Fund (FNDF) that was to be used for the benefit of all provincial First Nations. Table game revenue would be divided between the casino owner and the host First Nation charity. The final Agreement with Alberta First Nations groups was signed in 2004 following Alberta/First Nations consensus concerning how the FNDF should operate. A single agreement template was then negotiated and signed by each First Nation.

On 1 March 2002, the casino building moratorium was lifted, opening the door to First Nations applications. A systematic 8-step application process was established for casino approval (Appendix G). By 2006 AGLC had received casino applications from 7 First Nations. The first to be approved and the first to open was the River Cree Casino located on the Enoch Cree Nation (just west of Edmonton) on October 26, 2006. This was followed by Casino Dene on the Cold Lake First Nation (near Cold Lake) on September 26, 2007, the Grey Eagle Casino on the Tsuu T'ina First Nation (west side of Calgary) on December 19, 2007, the Eagle River Casino and Travel Plaza on the Alexis Nakota First Nation (near Whitecourt) on January 31, 2008, and the Stoney Nakoda Entertainment Resort on the Stoney Nakoda First Nation (near Morley) on June 10, 2008. Paragon Gaming was a partner in the development of the River Cree Casino and the Eagle River Casino. Sonco Gaming was a partner in the development of the Grey Eagle Casino.

CURRENT REGULATION, AVAILABILITY, AND PROVISION OF LEGAL GAMBLING IN ALBERTA

This section provides a detailed explanation of the current regulation, provision, and availability of legal gambling in Alberta. The first section describes regulation and the second section describes availability.

In general, up to 1969 the provisions contained in the Criminal Code of Canada were the primary determinant of what forms of gambling were available in Alberta and how they operated. While the Criminal Code of Canada still plays a significant role, the legislation and policy decisions of the Alberta government have played a larger role since 1969 when the Criminal Code of Canada authorized them to provide 'lottery schemes' and in 1985 when they were further authorized to provide electronic forms of gambling.

Currently, the regulation and management of gambling in Alberta is primarily a responsibility of the Alberta Gaming and Liquor Commission (AGLC), a crown corporation acting as an agent of the Government of Alberta. The AGLC consists of 7 divisions that report to the AGLC Board through the Chief Executive Officer. The AGLC Board chair reports to the Solicitor General and Minister of Public Security. All Alberta gambling regulations are governed by the [Criminal Code of Canada](#), the Alberta [Gaming and Liquor Act](#), the Alberta [Gaming and Liquor Regulation](#), and policies that are established by AGLC.

The actual ownership, management, and direct provision of gambling in Alberta is explained below.

CHARITABLE GAMBLING

Alberta employs a 'charitable gaming model' whereby the management and direct provision of certain forms of non-electronic gambling (**raffles, pull-tickets, bingo (traditional and satellite), and casino table games**) is directly or indirectly provided by 'charity groups' and much of the revenue is also kept by these groups. It is done under the provisions of the Criminal Code which authorizes provincial governments to issue licences to charitable organizations, religious groups, agricultural fairs or exhibitions, and individuals so as to operate 'lottery schemes'.

Technically, 'charity groups' refers to groups whose purpose is to give money, goods, or service to the less fortunate and/or those in need. This was the original meaning of the term in the Criminal Code of Canada and the reason for their exemption from offering certain forms of gambling. However, since the 1980s the AGLC has expanded the meaning of 'charitable group' and 'charitable gaming' to include a wide range of community organizations whose purpose is to promote local sport, educational initiatives, arts, community associations, ethno-cultural groups, nature conservation, hobby/social groups, historical preservation, as well as groups more aligned with the original meaning of the term: medical/health/relief initiatives, First Nations endeavors, support of children/youth, veteran support, and senior citizens. AGLC's 2009 Annual Report indicates that over 11,000 'charities' received charitable gambling revenue in 2008/2009.

Thus, a wide variety of community organizations can apply to the AGLC for a licence to issue pull-tickets or conduct a raffle, casino event, or bingo event. Revenue from these events must be used within a 2 year period in accordance with the terms of the gaming licence, which generally requires the money be used for the 'charitable' purposes originally outlined (in addition to paying expenses incurred in operating the event). Detailed financial reporting to AGLC is also required.

Raffles

The traditional distinction between a lottery and a raffle is that the prizes in raffles consisted of merchandise rather than cash. However, in Alberta the term 'raffle' is primarily used to denote the fact that it is a lottery *managed and directly provided by charity groups*. In contrast, the term 'lottery' denotes a lottery that is managed and provided by the provincial and/or federal governments.

Raffle licences are generally issued for a single event. There are 2 types of licences: one for raffles with a total ticket value greater than \$10,000 and one for raffles with a total ticket value under \$10,000. AGLC itself issues licences for raffles over \$10,000 whereas Alberta Registry agents issue licences for raffles under \$10,000. Licences are free for raffles where the total value of the raffles tickets is under \$10,000, but licences can be up to a \$10,000 for events with very large prizes. AGLC policy requires that raffle prizes must constitute at least 20% of the

aggregate value of all tickets sold, and expenses no more than 30% of the aggregate value of all tickets sold. All revenue generated from a raffle goes to the charity licensee.

Pull-Tickets

A pull-ticket licence is generally in effect for 2 years. The cost of a pull-ticket licence is \$10 per set of sealed, boxed or bagged tickets. Groups licensed to sell pull-tickets must sell them from the premises where they provide services to the community. The tickets themselves must also be purchased from a supplier that is registered with the AGLC. All revenue generated from pull-tickets goes to the charity licensee.

Bingo

Both bingo halls and bingo events are licensed by the AGLC.

An Association Bingo Hall requires a 'Class A' licence. There is no charge for this licence. An Association Bingo Hall operates at least 4 days a week and is owned and operated by the Bingo Association (a collection of different charitable groups). The Bingo Association may also be approved to sell pull-tickets, or offer electronic digital (DIGI) bingo or electronic keno (a provincially managed form of lottery with draws held every 5 minutes) within the facility. The licensed charities provide volunteers for key financial positions during the bingo whereas the other positions are usually paid employees of the bingo hall. A person must be 18 or older to enter an Association Bingo facility that provides electronic bingo or electronic keno. Sixteen is the legal age for participating in non-Association bingo. (Note: for all other forms of gambling in Alberta the legal age is 18).

A 'Class B' licence is issued for a Private Operator Bingo Hall. This licence costs \$500. In this situation, a bingo society contracts with the owner of a private facility to supply the space and services to conduct bingo. The general conditions relating to Class A licences also apply to Private Operator Bingo Halls.

A Community Bingo Hall refers to a non-dedicated facility (e.g., community hall, seniors' centre, church basement) where bingos are held 3 times per week or less. These facilities are generally used by a single charity group.

Either an individual charity or a bingo association can apply for a licence to conduct a bingo event. These licences cost \$30 per event at licensed bingo halls and/or events with yearly sales of \$150,000 or more. There is no charge for bingos held at a nonlicensed facility with yearly sales of \$150,000 or less. All revenue generated from bingo events goes to the charity licensee. (The large majority of bingo revenue is generated from Association Bingo.)

Bingo events at Caesar's Bingo in Edmonton are broadcast via satellite to other participating bingo halls in the province so as to create a single large scale bingo event with a much larger prize. This is known as 'Satellite Bingo'. It is deemed to be non-electronic, thus, it is broadcast by a private supplier and managed by charity groups. (Note: other provinces consider it electronic by virtue of the fact it is provided via a 'video device').

However, operating hand-held electronic devices for recording bingo numbers (DIGI bingo), and keno are deemed to be electronic. Hence, the revenue from these two activities, less operator commissions and certain AGLC costs, initially goes to the AGLC administered Alberta Lottery Fund, and is then returned to the host charities (less AGLC operating expenses).

ALBERTA GOVERNMENT GAMBLING

The Criminal Code requires a provincial authority to ‘conduct and manage’ all ‘lottery schemes’ operated through a computer, video device or slot machine (‘electronic gambling’). Hence, AGLC owns and manages the operation of all **slot machines, video lottery terminals, electronic (DIGI) bingo, electronic keno, and electronic table games**. In addition, the provincial government also conducts and manages its own **lotteries, instant win (scratch) tickets, and sports betting tickets** (lotteries, instant win, and sports betting tickets collectively referred to as ‘**ticket lotteries**’). The direct provision of all of these activities is contracted out to private operators and/or charitable groups, as explained below. Revenue from these activities is deposited into the [Alberta Lottery Fund](#), which is administered and managed by the Alberta Gaming and Liquor Commission.

Ticket Lotteries

The Alberta government is a member of the [Western Canada Lottery Corporation](#) (WCLC) (other members being Saskatchewan, Manitoba, with the Yukon Territory, Northwest Territories, and Nunavut being associate members).²⁶ The WCLC operates and provides provincial lotteries, instant win tickets (‘Scratch ‘N Win’), and sports betting (‘Sports Select’). (For Sports Select the person bets between \$2 and \$100 per ticket, with the ticket requiring the person to predict the outcome of 2 or more games.) Marketing these products is done by the WCLC in conjunction with the Alberta Gaming and Liquor Commission.

WCLC is a member of the Interprovincial Lottery Corporation (ILC) (other members being the British Columbia Lottery Corporation, Atlantic Lottery Corporation, Ontario Lottery and Gaming Corporation, and Lotto-Quebec), which was created by the provinces to provide national lotteries (Lotto 6/49, Lotto Max²⁷). WCLC is responsible for marketing these national lotteries within its own jurisdiction, with revenue received by each province/territory being proportional to each jurisdiction’s sales.

A distribution network of private lottery retailers sell these tickets throughout Alberta and receive a commission for this service. In general, approximately 52% of lottery, instant win, and Sports Select revenue is returned in prizes, 33% goes to the provinces and territories (with the Alberta portion going to the Alberta Lottery Fund), 6.9% to WCLC operating expenses, 6.5% to private retailers, and 1.3% to ticket printing.

²⁶ The Western Canada Lottery Corporation is governed by a Board consisting of 2 representatives from each of the member provincial governments.

²⁷ Lotto Max replaced Lotto Super 7 in 2009.

Video Lottery Terminals

A VLT in Alberta is primarily defined as an EGM that is not located in a casino or at a racetrack.²⁸ The Alberta government owns, operates, and maintains all VLTs. All VLTs in Alberta are programmed to provide a payback rate of 92.0%.²⁹ VLTs are distributed throughout the province in roughly 1,000 age-restricted establishments licensed to sell alcohol. A 15% commission of gross profit from each machine is paid to the owners of these establishments. The remaining 85% is put into the Alberta Lottery Fund after AGLC operating costs are deducted.

Slot Machines

A slot machine in Alberta is defined as an EGM located in a casino or at a racetrack. The Alberta government owns, operates, and maintains all slot machines. All slot machines in Alberta are also programmed to provide a payback rate of 92.0%. Slot machines are distributed throughout 24 casinos and 3 racetracks in Alberta. A 15% commission of gross profit from each machine is paid to the casino owners. Another 15% is given to the charitable organization holding the licensed 'casino event' in the casino. The remaining 70% is put into the Alberta Lottery Fund after AGLC operating costs are deducted. In the case of the 3 Racing Entertainment Centres, a 15% commission of gross profit from each machine is paid to the racetrack, 51.7% of gross profit is given to the horse racing industry (Horse Race Alberta) as part of the Racing Industry Renewal Initiative, and 33.3% goes to the Alberta Lottery Fund.

²⁸ This is a bit of an oversimplification, as Alberta VLTs are a different brand of machine, have a few different hardware protocols, and offer somewhat different games. In 2010 there were 129 of these machines in casinos.

²⁹ Meaning that over an extended period of time, that 92% of the money put into the machine is returned as prizes. The modal payback rate (cashout) on a machine to any individual player is much less than 92% because most players do not play for a long enough period to experience the larger wins.

CASINOS

Traditional Casinos

Casinos in Alberta are defined as establishments that provide both EGMs (slot machines) plus table games. The particular types of casino table games offered depends on the casino but may include roulette, blackjack, poker, baccarat, red dog, craps, sic-bo, and pai gow tiles. Some casinos also provide electronic keno. Alberta casinos are subdivided into Traditional Casinos and First Nations Casinos, with some differences in their respective regulatory operation (described below).

The AGLC licenses both casinos and casino events. A casino facility licence costs \$500. Obtaining a licence for a new casino facility requires successfully going through an 8-step process that demonstrates community support, financial viability, and an understanding of potential community impacts.

Casinos are owned, operated and staffed by casino companies, First Nations communities, and/or private individuals. All the equipment (other than slot machines) is also owned by these companies/bands/individuals. Casino owner revenue derives from hosting government-owned slot machines in their venues, from conducting charity initiated 'casino events', and from food, drink and other amenities sold at their facility (e.g., commissions from ATMs).

Charity groups apply to AGLC to hold a 'casino event' at a casino designated for their region (Appendix C). This licence is for a single event that typically runs for 2 days. The cost of the licence is \$15 per table per day (excluding poker) or \$35 per table per day (excluding poker) at fairs or exhibitions. As there are more charity applications to hold casino events than there are days available for casinos to host casino events, random draws are held on a regular basis to determine which 182 charities will be able to hold casino events at that casino that year, and which particular days each event will be held. (In 2009 the waiting period to hold a casino event varied from 16 months in Fort McMurray and Medicine Hat to 34.5 months in Lethbridge) (MLA Advisory Committee, 2010). The casino owner provides the equipment (other than slots) and staff to directly run the games (e.g., dealers) and the charity provides volunteers for the other positions (general manager, banker, cashier, count room supervisor, chip runner, count room staff).

Net revenue after expenses from **table games** is pooled and distributed to participating charities on a quarterly basis. The casino owner receives a fixed fee for service (50% in Calgary and Edmonton, 65% in St. Albert, 65% outside of Edmonton and Calgary with 300-400 slot machines, and 75% for those outside Edmonton and Calgary with up to 299 slot machines). Casino owners are also paid 75% of the net revenue from craps and poker dealer services. The Alberta government receives no revenue from casino table games.

The charity casino-event licensee also receives 15% of the net revenue from **slot machines**. The casino owner receives 15% of net slot revenue and 5% sales commission on keno tickets sold as well as 2% redemption commission on prizes paid up to \$1,000. The remaining 70% of slot revenue and approximately 34% of keno revenue is returned to the provinces after prizes and WCLC operating expenses.

First Nations Casinos

First Nations casinos are licensed and regulated by the AGLC in the same way as Traditional Casinos, and must conform to all of these same regulations. However, there are some important differences. One difference is that these casinos must operate on reserve land that existed as of 2001.

A second major difference is that First Nations casinos are not obliged to provide ‘casino events’ to outside charity groups. Rather, the host First Nation is allowed to have a single ‘in house’ charity that provides a continuous year-round ‘charity event’. The name of each charity for each First Nation with a casino is listed in Table 14.

Table 14: Host First Nation Charities.

First Nation	Casino Name	Charity Name
Tsuu T’ina Nation	Grey Eagle Casino	Dit'onik'odza Charities Limited
Enoch Cree	River Cree Resort & Casino	Me'Chet Charities Limited
Stoney Nation	Stoney Nakoda Resort	Mini Thni Community Foundation
Cold Lake	Casino Dene	Cold Lake First Nations Casino Society
Alexis	Eagle River Casino	Northern Isga Foundation

These charities must employ independent Casino Advisors for their cash cage and count rooms for a minimum of 6 months after the opening of the casino. A local board of directors also oversees the operation of the charity, and assesses grant applications for spending of charity gambling revenue. A province-wide First Nations Charitable Eligibility and Use of Proceeds Committee provide a final review of applications that have been approved by the local First Nations charity. This committee is composed of roughly an equal number of representatives from the host First Nations and from the provincial government. It has since been disbanded, and the Charities and the AGLC now refer to the Host First Nation Charitable Casino Policies Handbook for guidance concerning charitable revenue use. Those that need vetting go to the AGLC for further review.

This continuous local charity provision of gambling better ensures that gambling revenue derived from charity-sponsored casino gambling stays with the local First Nations community. In the case of table game revenue, the money is divided between the host First Nation charity and the casino owner (facility licensee). The casino owner is typically the host First Nation in partnership with a private casino company, but could just be the First Nation itself. The

percentage of table game revenue retained by the casino owner is dependent on how many slot machines are in the venue. Fifty percent of net table game revenue is retained when there are over 400 slot machines, 65% when the casino has 300 to 400 slot machines, and 75% when there are less than 300 slot machines. In the case of slot machine revenue, the standard 15% of gross slot revenue goes to the host First Nation charity, and another 15% goes to the casino owner. In the case of electronic keno, the casino owner receives a 5% sales commission on Keno tickets sold as well as 2% redemption commission on prizes paid up to \$1,000. Remaining keno revenue is returned to the Western Canada Lottery Corporation (WCLC) for disbursement to the provinces.

Of the 70% of slot revenue that goes to the Alberta Lottery Fund, 30% is retained in the ALF and 40% goes to the [First Nations Development Fund](#) (FNDF). The FNDF operates in a similar way to the ALF, but is managed by the Alberta Ministry of Aboriginal Relations, only recognized Alberta First Nations Band Councils are eligible to apply for funds, and grant allocation and project eligibility is somewhat different. Of the money deposited into the FNDF, 75% is reserved for grant applications originating from the First Nations hosting the casino, and 25% is reserved for grant applications from the 39 other Alberta First Nations.³⁰ The 75% allocation to the host First Nation was agreed upon as a means to pay back the initial non-gaming related investment as well as to provide the needed infrastructure upgrades that would be necessary. Of the 25% allocated to the other First Nations that do not host casinos, half (i.e., 12.5%) is divided equally among these 39 First Nations non-host groups. The other 12.5% is also divided among the 39 other First Nations groups, but in this case, proportionally according to population.

The FNDF provides grants to Alberta First Nations groups for economic, social and community development projects. Every FNDF grant application must include a Band Council Resolution, which is required to initiate, authorize or approve transactions under the Indian Act. FNDF monies cannot be used to finance the development or acquisition of a casino, dedicated gambling facility, or gambling equipment. It also cannot be used for operating or financing a casino; gaming facility or gaming equipment; per capita distributions (i.e., a general distribution of money or other property on a per capita basis); or creating or providing for a security interest in the grant monies. The Government of Alberta is permitted to conduct audits to ensure compliance with the FNDF Grant Agreement and First Nations Gaming Policy and to suspend the agreement and discontinue FNDF grants for non-compliance. The provincial Aboriginal Affairs minister also retains the power for final decision-making, although there is a dispute resolution process in place.

The overall distribution of revenue from First Nations casinos is displayed in Figure 14.

A list of Alberta casinos is contained in Table 15 and their geographic location is displayed in Figure 15.

³⁰ For the allocation of FNDF funds to the non-hosts, FNDF uses the Indian Register population, which includes off-reserve populations (although off-reserve populations benefit significantly less from the FNDF as the projects funded are almost exclusively on-reserve).

Figure 14: Casino Revenue Distribution in Alberta First Nations Casinos.

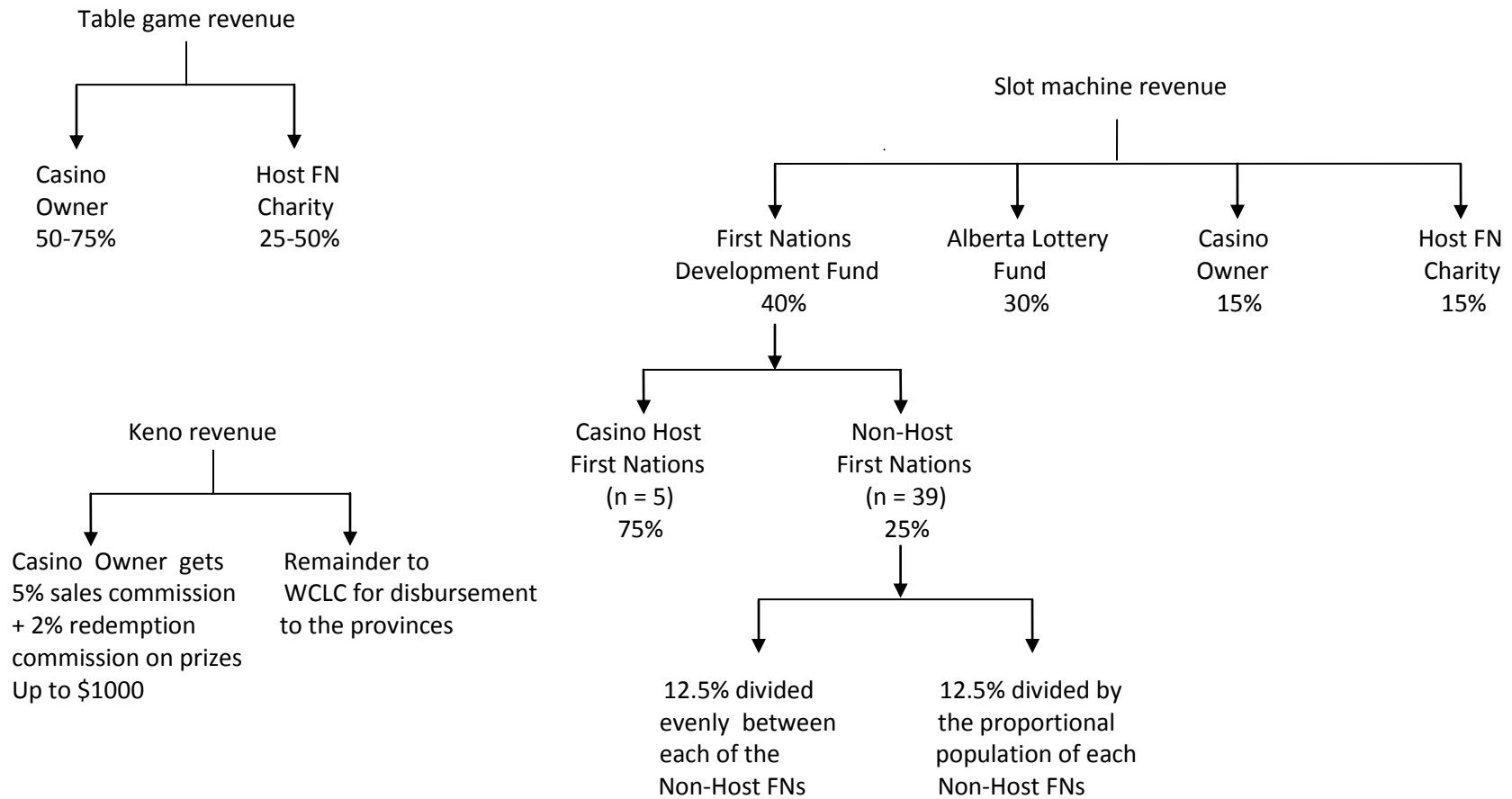


Figure 15. Location of Current and Planned Casinos/RECs in Alberta as of March 2011.

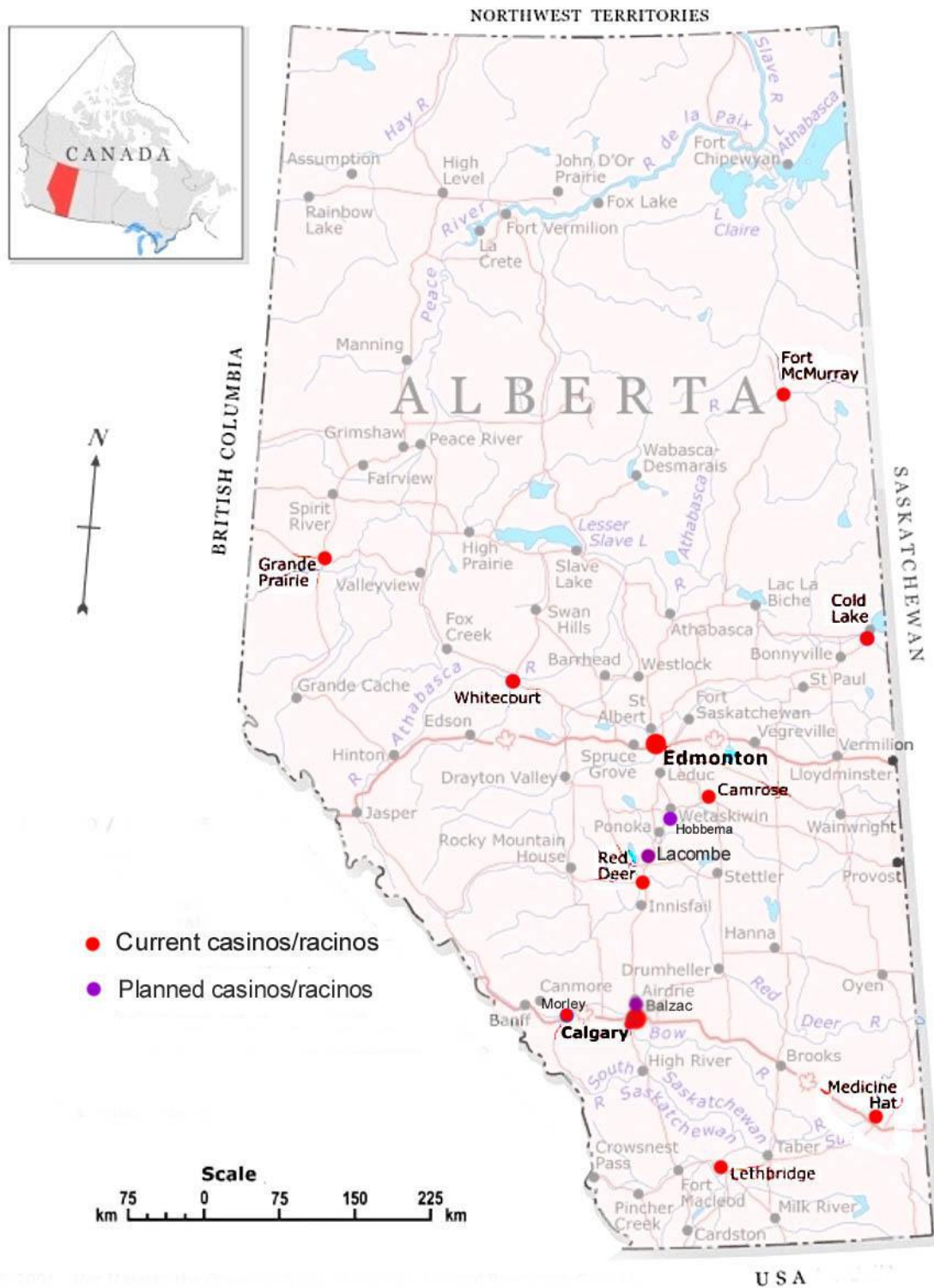


Table 15: Casino/REC Gambling in Alberta (March 2011).

Region	Host Community	Casino/REC	Ownership	Opened/Major Expansions	Gambling Available	Square Footage	Hotel
Northern Alberta	City of Fort McMurray	Boomtown Casino	Gamehost Income Fund	1994/2000/2006	399 slots; 13 tables	23,000	--
	City of Grande Prairie	Great Northern Casino	Gamehost Income Fund	1999/2003	392 slots; 18 tables	30,864	Yes
		Evergreen Park	Grande Prairie Regional Agricultural Exhibition Society	2003 (slots)	99 slots; horse racing	3,000 (slots)	--
		Cold Lake First Nation	Casino Dene	Cold Lake First Nation	Sep 26, 2007	156 slots; 14 tables	25,000
	Alexis Nakota First Nation	Eagle River Casino & Travel Plaza (near Whitecourt)	Alexis Nakota Sioux Nation (Paragon Gaming)	Jan 31, 2008	250 slots; 18 tables	25,000	--
Edmonton area	City of Edmonton	Baccarat Casino	Gateway Casinos	1996	366 slots; 37 tables	35,000	--
		Casino Edmonton	Casino ABS (Heinz Oldach)	1986	863 slots; 34 tables	60,000	--
		Casino Yellowhead	Casino ABS (Heinz Oldach)	2000	773 slots; 40 tables	75,000	--
		Century Casino & Hotel	Century Casinos	Nov 2006	650 slots; 44 tables	35,000	Yes
		Northlands Park	Community owned	1996/2002 (slots)	625 slots; keno; horse racing	28,000 (slots)	--
		Palace Casino	Gateway Casinos	1990/2001	706 slots; 31 tables	64,000	--
	St. Albert	Gold Dust Casino	Game Plan Developments	1994	240 slots; 12 tables	20,000	--
	Enoch Cree Nation	River Cree Resort Casino	Enoch Cree Nation (Paragon Gaming)	Oct 26, 2006	850 slots; 47 tables	65,000	Yes
Central Alberta	City of Camrose	Camrose Resort Casino	Mayfield Hospitality	June 2007	200 slots; 18 tables	27,000	In Fall 2011
	City of Red Deer	Cash Casino	Ron Desrochers & David Ng (Privately owned)	1995	330 slots; 19 tables	23,000	--
		Jackpot Casino	Franklin Daines & Ken Oxtoby (Privately owned)	1997/2006	319 slots; 16 tables	26,000	Yes
Calgary area	City of Calgary	Cash Casino	Ron Desrochers & David Ng (Privately owned)	1980/?/?	665 slots; 31 tables	50,000	--
		Casino Calgary	Casino ABS (Heinz Oldach)	1997/2000/2004	832 slots; 34 tables	57,000	--
		Deerfoot Inn & Casino	Gamehost Income Fund, Will Inns Ltd, Winners Gaming, JM Wood Investments	2005	767 slots; 42 tables	60,000	Yes
		Elbow River Casino	Sam Switzer (Privately owned)	1989/2005	603 slots; 45 tables	80,000	--
		Silver Dollar Casino	Century Casinos Europe GmbH	1996	519 slots; 16 tables	50,000	--
		Stampede Casino	Calgary Exhibition & Stampede	1969/1988/2008	600 slots; 40 tables	40,000	--
	Tsuu T'ina First Nation	Grey Eagle Casino & Bingo	Tsuu T'ina First Nation (Sonca Gaming LP)	Dec 19, 2007	600 slots; 64 tables; Bingo	84,000	--
Southern Alberta	Stoney Nakoda First Nation	Stoney Nakoda Entertainment Resort (near Morley)	Stoney Nakoda First Nation, Mini Thni Hotel Corporation and Mini Thni Land Management Corporation ³¹	June 10, 2008	300 slots; 18 tables	70,000	Yes
	City of Medicine Hat	Casino By Vanshaw	Vanshaw Enterprises	1996	399 slots; 11 tables	14,000	Yes
	City of Lethbridge	Casino Lethbridge	Casino ABS	1993/2004	427 slots; 20 tables	44,000	--
		Whoop-Up Downs	Rocky Mountain Turf Club	1997/2002 (slots)	105 slots; horse racing	N/A	--

Shaded cells represent First Nations Casinos. The information in this table was obtained from each casino's website and/or the Alberta Gaming Research Institute.

³¹ Mini Thni Hotel Corporation and Mini Thni Land Management Corporation are entities owned by the Stoney Nakoda First Nation.

HORSE RACING

Horse racing is the one form of legal gambling not directly regulated by AGLC. Rather, it is self-regulated by Horse Racing Alberta (HRA). HRA is a private non-profit organization governed by a Board membership from the different horse breed organizations (Thoroughbred, Standardbred, Quarter Horse), the racetracks, the general public, and the Alberta government (2 non-voting members). The mandate of HRA is established through the 1996 *Alberta Racing Corporation Act*. HRA is expected to: govern, direct, control, regulate, manage, and promote horse racing in any or all of its forms; to protect the health, safety, and welfare of racehorses, racing participants and racing officials; and to safeguard the interests of the general public.

Although it is largely a self-regulated private industry, the provincial government is a 'partner', by virtue of its Board membership; the fact that HRA provides the Alberta government with regular updates of its operations via annual reports, operating and capital budgets, and 3 year business plans; and because it receives most of its funding from the provincial government (provincial government directs 51.7% of net slot revenue at racetracks to HRA and another 15% to the host racetrack).

The Criminal Code of Canada requires that *parimutuel betting* be regulated by the federal department of agriculture. The Canadian Pari-Mutuel Agency (CPMA) is the arm of Agriculture and Agri-Food Canada that currently serves this function. This agency is directly funded through a levy of 0.8% on each bet placed.

There are 3 types of horseracing in Alberta: [Thoroughbred Racing](#) (jockey-ridden horses on oval tracks), [Standardbred/Harness Racing](#) (jockey operates from a sulky behind the horse on an oval track), and [Quarter Horse Racing](#) (jockey-ridden horses on short straight tracks).

Horse racing is conducted at 'A' tracks that provide at least 100 days of live racing per year (Northlands Park) and 'community' tracks which provide a minimum of 50 days of racing.

A summary of the availability and provision of all forms of gambling in Alberta in 2011 is presented in the next section.

SUMMARY OF CURRENT AVAILABILITY AND PROVISION OF GAMBLING IN ALBERTA

TYPE	Sub-Type	Provision	Details
Horse Race Betting ³²	On-site betting at a Horse Race Track	Private Operator	<ul style="list-style-type: none"> • 5 tracks operational in 2010: Northlands Park (Edmonton); Whoop-Up Downs (Lethbridge); Evergreen (Grande Prairie); Alberta Downs (Lacombe); Millarville (1 day/yr) • 260 live race days in 2009 • 3 tracks also have slot machines ('Racing Entertainment Centres'): Northlands; Whoop-Up Downs; Evergreen. 15% of net slot revenue goes to the racetrack; 51.7% to HRA; and 31.7% to the Alberta government (Alberta Lottery Fund).
	On-site betting at a Teletheatre of a televised broadcast of a North American, Asian, or Australian horse race.	Private Operator	<ul style="list-style-type: none"> • 38 teletheatres operational in 2010 • Some teletheatres also contain VLTs
	Online or telephone betting on North American horse races	Private Operator	<ul style="list-style-type: none"> • Online bets taken at HorsePlayer Interactive in Ontario³³ • Phone-in bets to Alberta race tracks also possible.
Raffles	'Charity' Raffles	Community Organizations	<ul style="list-style-type: none"> • 7756 raffle licences issued by the provincial government in 2010
Pull Tickets	'Charity' Instant Win Pull Tickets	Community Organizations	<ul style="list-style-type: none"> • 437 pull-ticket licences issued by the provincial government in 2010

³² Subtypes of thoroughbred racing (oval track), quarter horse racing (straight track), and harness racing (also known as standardbred racing).

³³ The legality of placing online bets on horse racing outside of one's province is unclear. Thus far no one has been prosecuted.

Bingo	Traditional bingo	Bingo Associations (groups of Community Organizations) or individual Community Organizations or a Private Bingo Hall (contracted with a Community Organization(s))	<ul style="list-style-type: none"> • 30 licensed bingo halls (1 private) and dozens of community halls as of March 2011 • 1514 bingo licences issued by the provincial government in 2010 • 20 halls provide electronic devices for recording numbers called (DIGI bingo) • Electronic keno available in some bingo halls
	Linked Bingo where several bingo halls are linked-in to one large bingo event (held live in Caesar's Bingo in Edmonton) via satellite broadcast.	Private satellite broadcaster contracts with Bingo Associations &/or individual Community Organizations	<ul style="list-style-type: none"> • 59 participating bingo halls as of March 2011
	Electronic Keno (a variant of bingo)	A WCLC managed, conducted, and operated activity provided in private casinos and community-owned bingo halls	<ul style="list-style-type: none"> • Random draw electronically posted every 5 minutes in participating casinos and bingo halls
Lotteries and Instant Win (Scratch) Tickets	Traditional Lotteries	Private retailers (e.g., gas stations, stores) receive small commission for selling Provincial Government tickets	<ul style="list-style-type: none"> • 2466 retailers in 2010 • 6 games with tickets costing \$1 to \$5: Lotto Max; Lotto 6/49; Western 649; Payday; Extra; Pick 3 • Possible to purchase subscription whereby you automatically purchase ticket with your numbers each draw and credit card automatically debited.
	Instant Win Scratch Tickets	Private retailers (e.g., gas stations, stores) receive small commission for selling Provincial Government tickets	<ul style="list-style-type: none"> • 2466 retailers in 2010 • 21 games with tickets costing \$1 to \$20
Sports Betting	Sports Select	Private retailers (e.g., gas stations, stores) receive commission for selling Provincial Government tickets	<ul style="list-style-type: none"> • 2466 retailers in 2010 • 5 types of bets ranging from \$2 to \$100: <i>Pro-Line</i> requires picking winner of 3 to 6 games; <i>Over-Under</i> requires picking whether score will be over or under predicted score for 2 to 10 games; <i>Point-Spread</i> requires predicting whether favourite will exceed predicted win margin or underdog will 'beat' predicted loss margin for 2 to 12 games; <i>Double Play</i> and <i>Combo Play</i> are combinations of these above bets. • Betting permitted on hockey, football, baseball, basketball, soccer, and golf.

Video Lottery Terminals	Video Lottery Terminals in Lounges	Privately owned lounges receive a commission for providing these provincially owned and operated machines	<ul style="list-style-type: none"> • 6000 VLTs (number capped in 1995) • 1032 VLT locations (includes 71 Video Gaming Entertainment Rooms where 15 or more VLTs are contained) in 2010
Slot Machines, Table Games, and Casinos	Slot Machines in Casinos and Race Tracks	Privately owned casinos and race tracks receive a commission for providing these provincially owned and operated machines	<ul style="list-style-type: none"> • 12,873 slot machines in 2010 • 24 casinos (19 Traditional; 5 First Nation) in 2011 • Electronic Keno offered in some casinos
	Casino Table Games: Roulette, Blackjack, Poker, Baccarat, Red Dog, Craps, Sic-Bo, Pai Gow Tiles	Privately owned casinos receive a commission for providing these Community Organization provided gambling activities.	<ul style="list-style-type: none"> • 3426 charitable casino licenced issued by provincial government in 2009 • 24 casinos (19 Traditional; 5 First Nation) in 2011 • Electronic Keno offered in some casinos
Internet Gambling	Not legally available in Alberta as of 2011. If it was provided it would have to be provided by the provincial government as it is an electronic form of gambling.		

AMOUNTS, ORIGINS, AND RECIPIENTS OF ALBERTA GAMBLING REVENUE

HOW MUCH MONEY IS INVOLVED?

Net Gambling Revenue and Gross Domestic Product

As stated earlier, the first step in a socioeconomic impact analysis of gambling is to document how much money is actually being expended and received, as this serves as a rough guide of the potential magnitude of these impacts (especially the economic ones).

Aggregated net gambling revenue in Alberta after prizes/winnings (but before commissions and operating expenses) is presented in Table 16. This combines net revenue from horse racing; raffles; pull-tickets; bingo (traditional, satellite, and electronic); electronic keno; provincially run lotteries, instant win tickets, and sports betting; video lottery terminals; casino table games; and slot machines and electronic racing games. This data was compiled from the following sources: Alberta Gaming Commission Annual Reviews (1980 – 1994); Western Canada Lottery Alberta Division Annual Reports (1983 – 1994); Alberta Lotteries Annual Reports (1992 – 1997); Alberta Gaming and Liquor Commission Annual Reports (1995 – 2009); Alberta Gaming Annual Reports (2000 – 2006); and Horse Race Alberta Annual Reports (2001 – 2009). Unlike the sometimes ‘spotty’ availability of data concerning the *availability* of certain forms of gambling, data concerning actual revenue was largely complete except for the years 1970 to 1974.

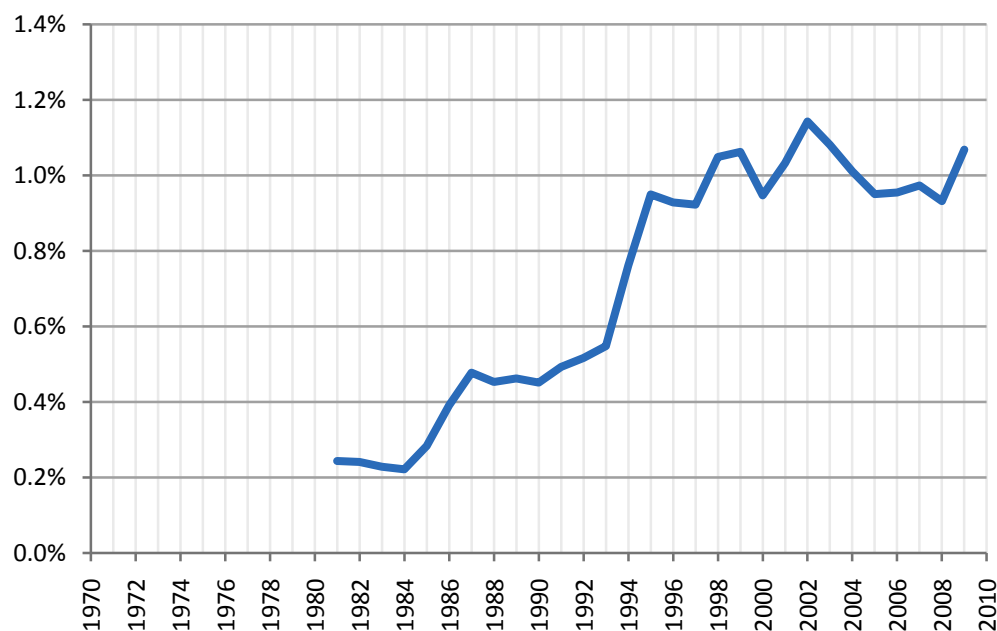
Table 16 illustrates a couple of points. First, that gambling revenue in Alberta has increased dramatically in the past 35 years, especially since the early 1990s. Second, that the percentage increase in revenue from year to year has flattened somewhat since about 2002, with 2009 being particularly notable, as this is the first year where revenue was actually lower than the previous year. The figure for fiscal 2009/2010 (not reported in the table) continues this slight downward trend: \$2,468,696,000.

Year	Revenue	Year	Revenue	Year	Revenue	Year	Revenue
1970	NA	1980	\$107,245,000	1990	\$330,662,000	2000	\$1,371,669,000
1971	NA	1981	\$129,966,000	1991	\$359,248,000	2001	\$1,561,952,000
1972	NA	1982	\$136,676,000	1992	\$386,779,000	2002	\$1,721,601,000
1973	NA	1983	\$133,531,000	1993	\$444,597,000	2003	\$1,839,134,000
1974	NA	1984	\$138,023,000	1994	\$670,241,000	2004	\$1,917,984,000
1975	\$43,055,000	1985	\$189,335,000	1995	\$874,454,000	2005	\$2,089,749,000
1976	\$53,574,000	1986	\$226,517,000	1996	\$916,032,000	2006	\$2,275,515,000
1977	\$71,803,000	1987	\$287,109,000	1997	\$987,852,000	2007	\$2,500,150,000
1978	\$81,434,000	1988	\$289,476,000	1998	\$1,145,052,000	2008	\$2,715,428,000
1979	\$89,981,000	1989	\$311,502,000	1999	\$1,244,151,000	2009	\$2,641,086,000

It is also important to understand how much money this represents in the larger Alberta economy. Thus, Figure 16 shows these amounts as a percentage of provincial Gross Domestic Product (market price) in each of these years as reported by Statistics Canada. GDP values were not available prior to 1981.

As can be seen, Figure 16 shows that gambling as a percentage of GDP has quadrupled since the early 1980s. However, Figure 16 also shows that even with this significant increase, gambling still represents a very small part of overall economic activity in the province of Alberta (~1%).

Figure 16: Net Gambling Revenue as a Percentage of Alberta GDP



Another way of looking at the overall magnitude of gambling within the Alberta economy concerns Statistics Canada estimates of the contribution of various industries (as defined by North American Industrial Classification System (NAICS)) to provincial GDP. The NAICS defines the gambling industry as “establishments primarily engaged in operating gambling facilities, such as casinos, bingo halls, and video gaming terminals, or in the provision of gambling services, such as lotteries and off-track betting.” It excludes hotels that have associated casinos, which in Alberta represents 7 out of the 24 casinos (Table 15, p. 86). Table 17 shows the annual estimates of production in the gambling industry (excluding casino hotels) and total provincial GDP in Alberta, expressed in current prices over the period 1997-2006. (Statistics Canada stopped producing these estimates after 2006). As can be seen, the value of goods and services produced by the gambling industry is seen to grow significantly over this time period. However, as a percentage of total GDP in each year, the amount is quite small (0.09% to 0.15%). By comparison, the gas and oil extraction industry accounted for about 15% of the goods and services produced in the province in 2006. Furthermore, the amounts are relatively stable (similar to Figure 16 in this same time period).

Table 17: Gambling as a Percentage of Alberta GDP (Current Prices).

Year	Gambling Industry	All Industries	Gambling as % of Total
1997	\$194,400,000	\$192,876,300,000	0.10%
1998	\$217,400,000	\$195,946,500,000	0.11%
1999	\$251,200,000	\$211,973,600,000	0.12%
2000	\$289,000,000	\$261,375,100,000	0.11%
2001	\$292,500,000	\$276,632,500,000	0.11%
2002	\$396,700,000	\$275,444,000,000	0.14%
2003	\$412,100,000	\$303,731,900,000	0.14%
2004	\$512,400,000	\$338,256,600,000	0.15%
2005	\$370,000,000	\$390,542,700,000	0.09%
2006	\$440,900,000	\$432,708,000,000	0.10%

Source: Statistics Canada Table 381-0016 Provincial Gross Output at Basic Prices in Current Dollars.

Gambling Expenditure per Adult Albertan

Although it is clear that gambling represents a relatively small economic activity within the Alberta economy, *personal* expenditures only account for part of GDP. Thus, it is also important to also look at *per capita expenditure* on gambling to appreciate the potential magnitude/importance of gambling expenditures at the individual level.

Net gambling revenue divided by the adult population does not take into account gambling revenue derived from out-of-province residents (or out-of-province gambling expenditure by Alberta residents). The adjustment that needs to be made to Alberta gambling revenue to

account for revenue derived from out-of-province residents is somewhat difficult to determine. Theoretically, it should not be large. Although Alberta is an attractive tourist destination, it is doubtful that many people come here for the purposes of gambling as our main neighbors (British Columbia, Saskatchewan, Montana) all provide very similar gambling opportunities to Alberta. Rather, the main source of gambling-related tourism is likely people who have travelled to Alberta to visit relatives or other attractions, but also opted to visit a casino while they were here.

Alberta Tourism reports that there were 2.4 million people who visited Alberta from other parts of Canada in 2008 (primarily from British Columbia and Saskatchewan) and another 1.6 million people who visited Alberta from the United States and overseas. The average length of stay was 11.7 days for overseas visitors, 4.7 days for U.S. visitors, and approximately 5 days for other-province visitors. The Travel Survey of Residents of Canada (TSRC)³⁴ documents that 5.4% of other-province visitors reported going to a casino while in Alberta in 2007 and 4.8% in 2008. Thus, if we assume that roughly 5% of all visitors visit a casino in any given year, then the best estimate of the number of non-Alberta residents who have visited an Alberta casino in recent years is about 200,000 people per year. Even if all of these 200,000 people went to a casino *twice* while they were here and spent *twice* as much as Alberta residents, it is clear this would still represent a tiny fraction of Alberta casino patronage and revenue. Although attendance figures are not available for Alberta casinos, there are a few comparison points worth noting: e.g., there were 1,664,000 attendees just to Alberta horse race tracks in 2008 (HRA, 2009); and popular individual casinos in neighbouring provinces have between 5,000 to 10,000 visitors *a day* (e.g., River Rock Casino in British Columbia; Casino Regina).

Thus, it is clear *that almost all Albertan gambling revenue dollars represents money spent by Albertans*. This is a very important fact not just in the determination of average gambling expenditure per adult Albertan, but in assessing the overall economic benefits of gambling to Alberta (something discussed later in this report).

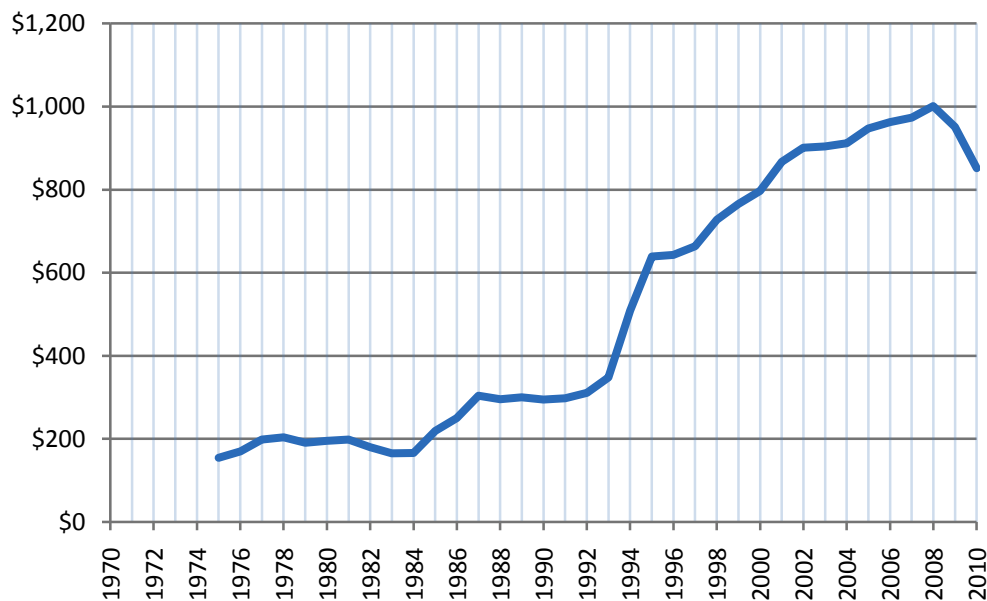
Thus, total net revenue divided by the number of adult Albertans *does* give a reasonable estimate of average adult expenditure on gambling in Alberta. It will be a slight underestimate, as it does not include out-of-province gambling expenditure by Albertan residents. However, as later analyses will show, this is also very small relative to in-province expenditure. Also, the inclusion of these amounts would not reflect the impact of the provision of legal gambling in *Alberta* to Albertans, which is the purpose of this section.

Figure 17 shows the per adult gambling expenditure as a function of year. All these figures have adjusted for inflation to show what their values would be in 2010 dollars. Similar to the findings for Total Net Revenue, there has been a very marked rise in per adult expenditure. Current expenditures are almost five times higher than expenditures in the 1970s. Most of this

³⁴ The TSRC is sponsored by Statistics Canada, the Canadian Tourism Commission, the provincial governments and two federal organizations. It is a supplement to the monthly Labour Force Survey that is administered to 54,000 households.

increase has occurred since the early to mid 1990s. Also similar to Total Net Revenue, there has been a decrease in per adult expenditure since its peak in 2008.

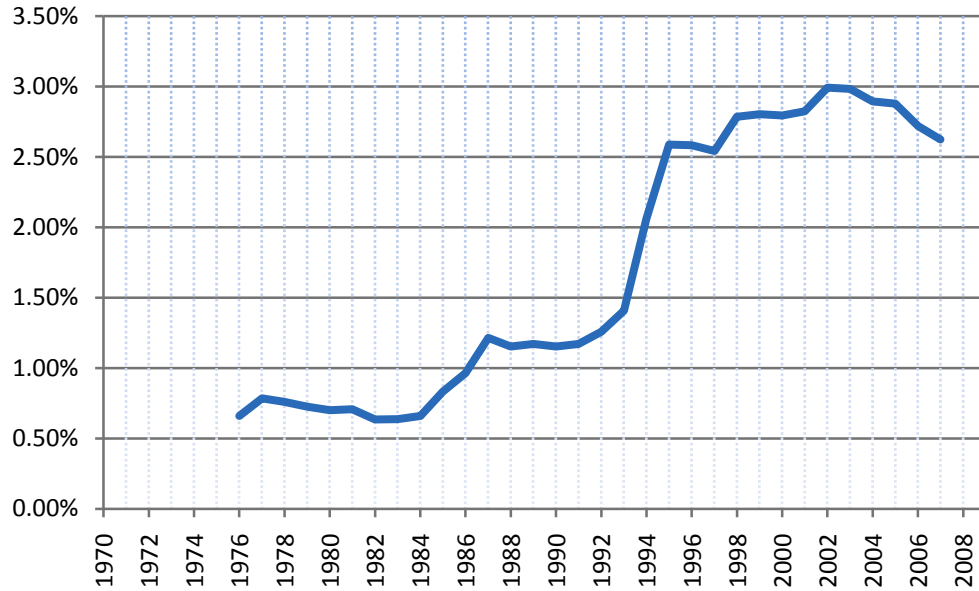
Figure 17: Per Adult Net Gambling Expenditure (in 2010 dollars)



To put these figures in their proper context, however, it is important to know how much money this represents relative to available income, and to also make adjustments for the increases in after tax income that have occurred in the past 40 years. Thus, Figure 18 illustrates per adult Albertan gambling expenditure as a percentage of average after tax income of individual Albertan tax filers as reported by Statistics Canada. After tax income for individuals was not available for 2008 to 2010.

The same basic pattern emerges in terms of there being a significant increase in percentage of income spent on gambling over time, with most of the major increases occurring during the early to mid 1990s. However, two additional findings of importance are that a) average adult percentage of after tax income spent on gambling has not really changed since the mid 1990s, and b) the percentage of after tax income spent on gambling in recent years (2.5% to 3.0%) is not that large.

Figure 18: Per Adult Yearly Gambling Expenditure as a % of After Tax Income of Albertan Tax Filers (in 2010 dollars).



Hence, the first important conclusion to be drawn about the impacts of gambling in Alberta is that gambling is a relatively small activity both in global economic terms and at the level of most individual Albertans.

This is not to say that there are not sectors of the economy and sectors of society where the impacts are larger. This is the focus of the next section.

WHERE IS THE MONEY COMING FROM?

As indicated earlier, most of the impacts of gambling will be found in the groups and sectors where the money comes from and in the groups and sectors where the money goes. The present section explores the origin of net gambling revenue by game type, by demographic characteristics and by geographic origin.

Origin of Net Gambling Revenue by Game Type

The first thing to examine is the source of gambling revenue/expenditure as a function of game. This is presented in Figures 19, 20, and 21. As can be seen, the game origin composition of gambling revenue has changed quite dramatically over time.³⁵ The largest component of aggregate gambling revenue was horse race betting from 1970 to 1984, changing to ticket lotteries from 1985 to 1993, changing to VLTs from 1994 to 2004, changing to slot machines from 2005 to the present time. Horse racing revenue per adult Albertan peaked in 1979,³⁶ pull-tickets in 1987, bingo in 1992, ticket lotteries in 1995, VLTs in 1998, table games and slot machines in 2009, and raffles in 2010.

The most salient point about this data is that since 1995 the large majority of personal gambling expenditure/revenue has come from electronic gambling machines. The composition of Alberta net gambling revenue in 2010 is displayed in Figure 19. A total of 71.2% of all Alberta gambling revenue now comes from EGMs. The fact that slot revenue is approximately double VLT revenue appears to be primarily due to the fact that the number of slot machines is about double the number of VLTs (i.e., the revenue per machine ratio has been fairly stable for both VLTs and slot machines for the past 10 years averaging \$138,000 per VLT and \$110,000 per slot machine (adjusted for inflation)).

The game origin of gambling revenue is important because not all forms of gambling are equal. In addition to major differences in revenue generation, different game types differ in terms of patronage, beneficial economic spin-offs, addiction potential, and the primary beneficiaries.

³⁵ Note: electronic keno revenue is not included as the amounts are extremely low (less than \$0.20 per adult Albertan). Also, the Ticket Lottery amount includes Instant Win and Sports Select. Instant Win has historically comprised 23% of gross Ticket Lottery revenue and Sports Select has historically comprised 8%.

³⁶ The current financial viability of horse racing is very much dependent on slot machine revenue.

Figure 19: Total Net Alberta Gambling Revenue Contributed by Each Type of Gambling (after prizes but before expenses; in thousands of 2010 dollars).

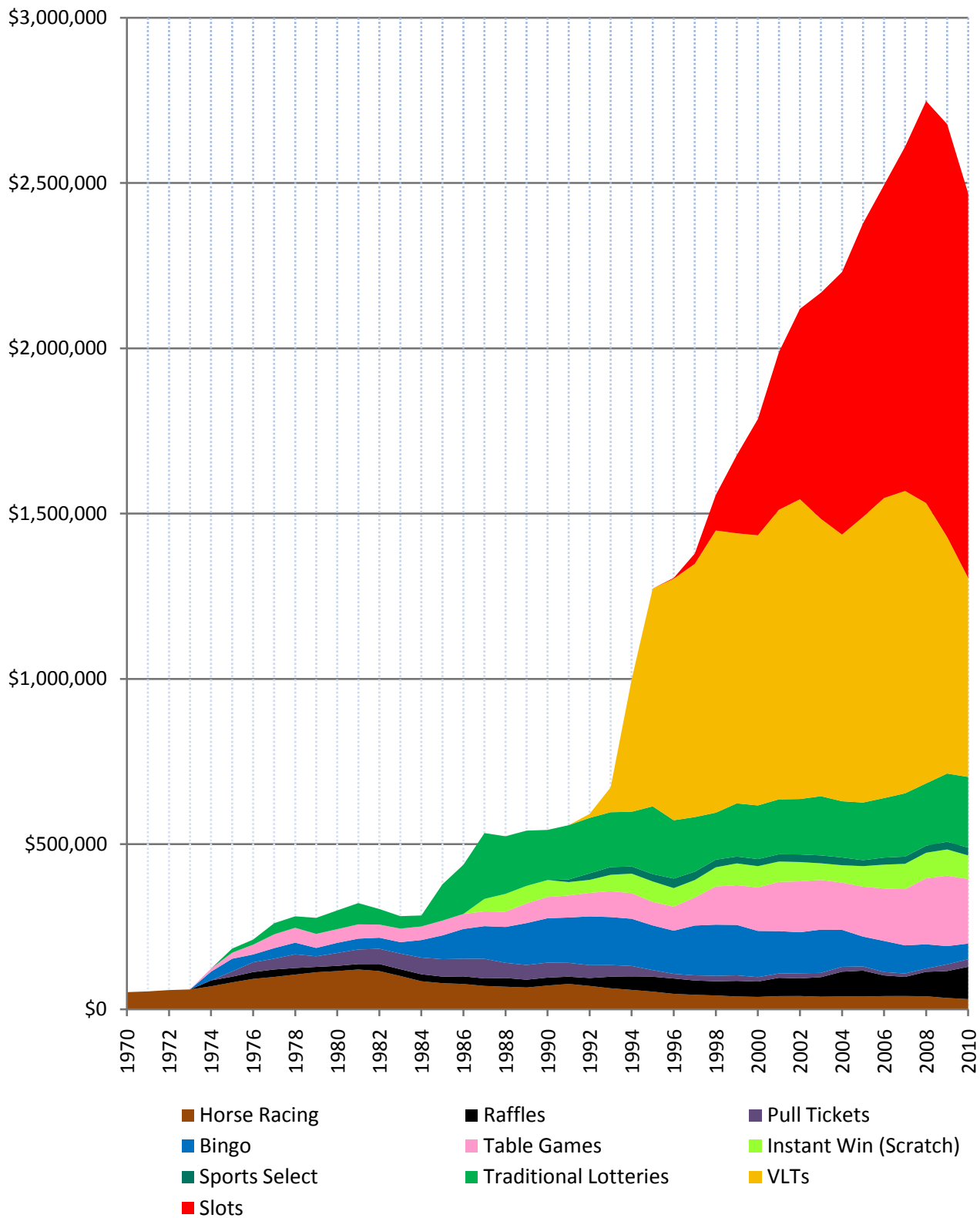


Figure 20: Proportion of Alberta Net Gambling Revenue in 2010 accounted for by Different Forms of Gambling .

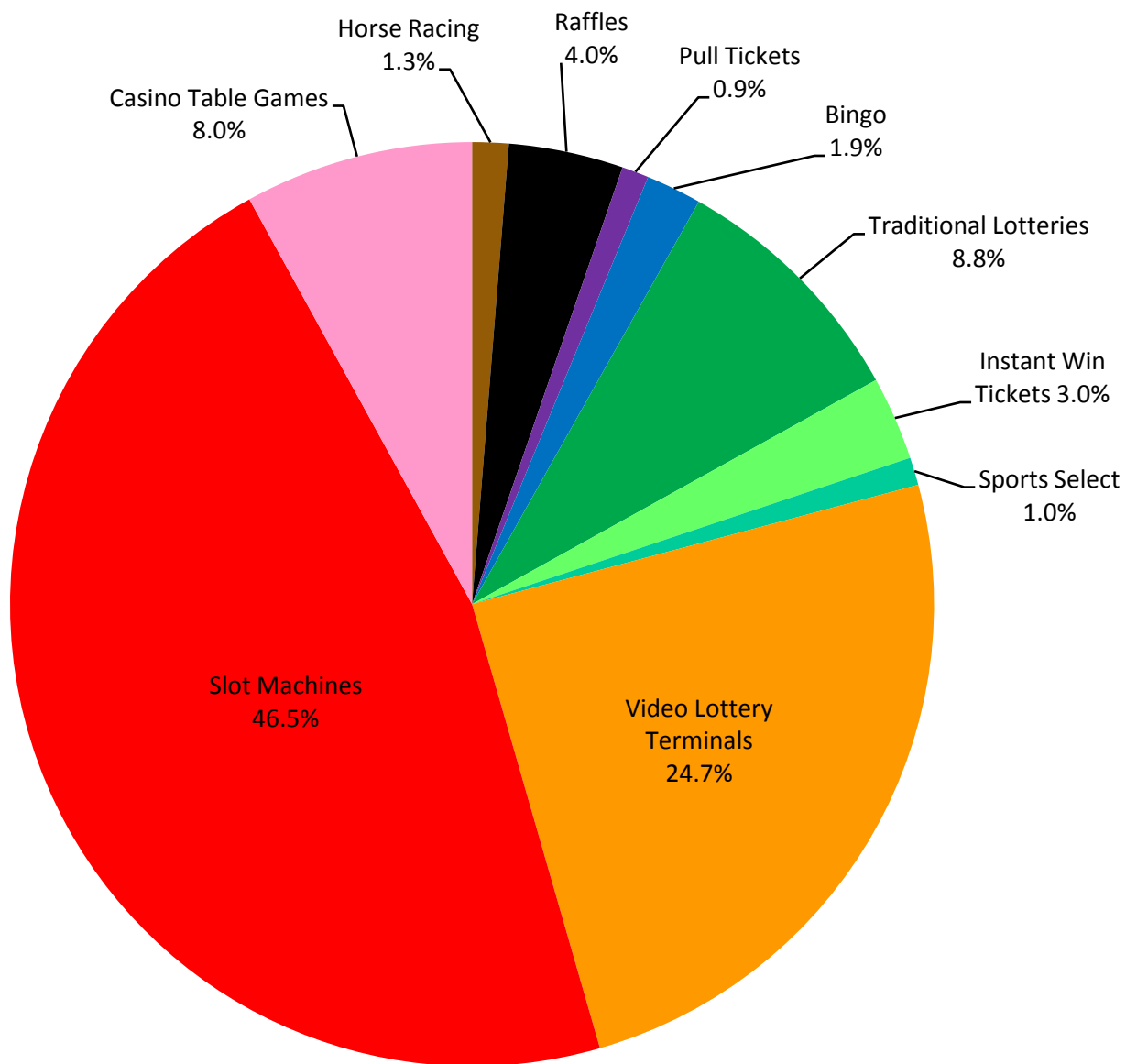
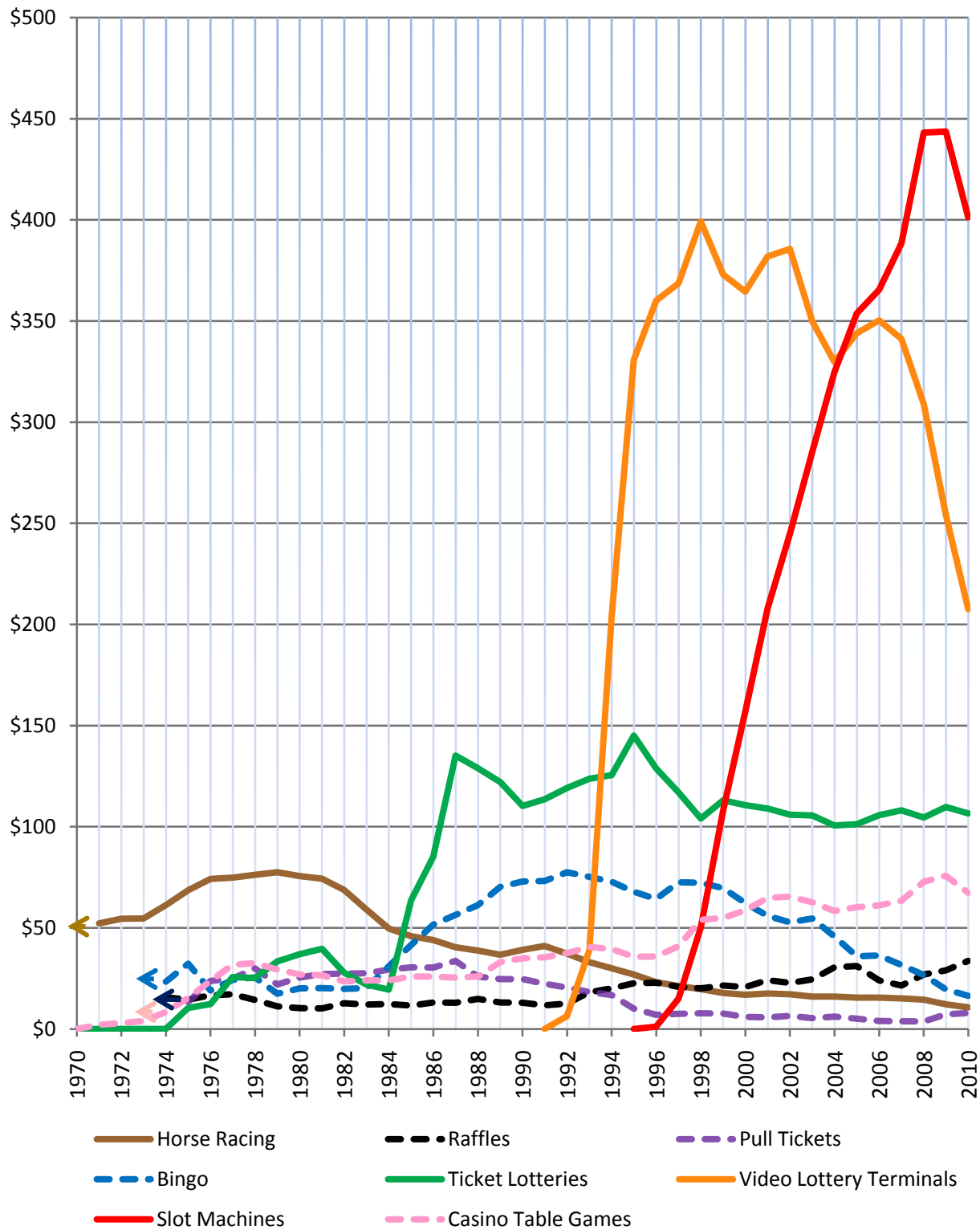


Figure 21: Average Adult Albertan Yearly Gambling Expenditure on Different Forms of Gambling (in 2010 Dollars).



Origin of Net Gambling Revenue by Demographic Characteristics

The next issue to examine regarding where the money comes from concerns gambling revenue as a function of demographic characteristics. For this we have to look at the population surveys of gambling in Alberta that were conducted in 1992, 1993, 1998, 2001, 2002, 2003, 2004, 2005, 2007, 2008, and 2009. The details of these studies are contained in Appendix B. It is important to remember that findings in one year are not perfectly comparable to findings in other years due to the fact that a) response rates to survey participation are different between years (with progressively lower rates in later years); b) weighting the obtained sample against household size and known demographic characteristics of the population to correct for sampling biases was not done in some survey years (1992, 1993, 1998, 2001, 2003, 2004, 2005) and c) questions were often asked in slightly different ways each time.

Table 18 provides rates of past year participation in gambling and each form of gambling in each survey year.³⁷ The first thing of note is that a large majority of the population has participated in one or more forms of gambling over the past 20 years. The second thing of note is that participation rates vary considerably as a function of game type. While about 3/5 people purchase lottery tickets and 2/5 participate in raffles; only about 1/3 of people purchase instant win tickets; 1/5 engage in social gambling; 1/7 gamble at out-of-province casinos or play slot machines; 1/8 play VLTs; 1/11 bet on sports, purchase high risk stocks, or play casino table games; 1/20 play bingo; 1/25 bet on horse racing; and about 1/35 engage in Internet gambling. The third thing of note is that participation rates in some games have been stable over time, while others have varied (with this stability or variation mirroring changes previously reported regarding the availability of different forms of gambling and the revenue they have generated). Lotteries, raffles, and possibly instant win tickets have lost some of their popularity since the early 1990s, which may account for a slight decline in overall gambling participation rates. The lower rates of gambling participation obtained after 2000 (i.e., 70 – 77%) compared to before 2000 (87 – 90%) is at least partly due to not asking about purchase of raffle tickets as a form of gambling in these later surveys. However, there also appears to be a genuine decrease in overall participation, as seen by the decline in household participation rates in Statistics Canada *Survey of Household Spending (SHS)* from 1997 to 2008. (Although there are problems with the accuracy of the *SHS* data, the biases are consistent across time periods). Somewhat counter intuitively, there has been an *increase* in travel to out-of-province casinos subsequent to the wide scale introduction of domestic Alberta casinos. Participation in slot machines appears to be relatively stable in the past 10 years, whereas VLT participation appears to have declined since the early 1990s. Bingo and horse racing have experienced declining participation throughout this time period. By contrast, Internet gambling was virtually nonexistent prior to

³⁷ The online panel surveys listed in Appendix B are not included in this table, as research conducted by the present authors has found them not to provide reliable measures of population prevalence (i.e., they produce significantly higher rates of pathology, including problem gambling, because members of online panels are not generally representative of the population, except on basic demographic variables. Similarly, data from the yearly *Survey of Household Spending* by Statistics Canada (1997 to present) is not used because the questions asked about combined forms of gambling together and about ‘household’ rather than individual participation/expenditure.

1998 but has continued to increase up to the present time (albeit not to any great extent, as it continues to be the least common form of gambling).

Knowing something about participation rates for each form of gambling allows us to recalculate the per Albertan adult expenditure amounts from Figure 21 to a much more relevant figure, which is *per participant expenditure* on each form of gambling. These latter figures are reported in Table 19. The most obvious change from Figure 21 concerns the very large per participant expenditures of slot and VLT players, which now represents about 7-8% of average after tax income (which will be higher for the people who play both, and does not include their expenditures on other forms of gambling).

Furthermore, Table 18 and Figure 20 tell us that *at least* 71.1% of all gambling revenue in Alberta (i.e., VLT + slot revenue) is now generated from just 21% of all adults. Thus, in order to understand who is primarily contributing to Alberta gambling revenue it is necessary to look at the demographic profile of slot and VLT players. This is presented in Table 20.

Table 18: Past Year Gambling Participation as a Function of Game Type.

	1992	1993	1998	2001	2002	(2003) ^a	(2004) ^a	2005 ^a	2006 ^a	2007	2008	2009
<i>Sample Size</i>	1277	1804	1821	1804	3236	1001	1000	1000	1002	680	3001	1054
Any Gambling	89.0%	90.3%	87.4%	(77.0%)^b	(72.0%)^b	--	--	--	--	(70.3%)^b	(72.2%)^b	(73.5%)^a
Lotteries	75.0%	(78.7%) ^c	(75.2%) ^c	60.8%	59.9%	(68%) ^d	(69%) ^d	65.7% ^d	65.7% ^d	54.9%	58.3%	62.3%
Raffles	63.0%	68.9%	63.3%	48.5%	--	(53%)	(47%)	42.2%	43.4%	--	--	--
Instant Win Tickets	--	65.6%	36.9%	29.0%	31.1%	--	--	--	--	37.5%	29.1%	33.0%
Pull-tickets	--	18.6%	10.3%	--	--	(19%)	(19%)	13.4%	14.3%	--	--	--
Social	29.0%	22.9%	14.4%	13.4%	12.6%	--	--	--	--	--	18.9%	21.8%
Games of Skill	--	13.0%	11.0%	6.5%	7.0%	--	--	--	--	15.8%	--	--
Out-of-Province Casinos	10.0%	7.9%	10.3%	e	--	--	--	--	--	12.1%	14.2%	14.7%
Slot Machines	--	--	--	15.7%	15.8%	(20%)	(19%)	15.8% ^f	18.7% ^f	--	16.5%	15.4%
VLTs	4.0%	17.0%	20.6%	13.5%	11.7%	(17%)	(16%)	14.1%	13.6%	--	11.8%	11.7%
Slots or VLTs	--	--	--	22.5%	22.4%	--	--	--	--	23.2%	21.5%	20.7%
Sports Betting	(30.0%) ^g	(27.8%) ^h	(9.3%) ⁱ	10.5%	6.6%	--	--	--	--	7.2%	7.8%	7.9%
High Risk Stocks	--	(18.7%) ^j	(25.1%) ^j	11.4%	7.2%	--	--	--	--	3.8%	9.2%	8.6%
Casino Table Games	7.0%	9.5%	(7.0%) ^k	5.8%	7.2%	(12%)	(11%)	8.5%	10.2%	8.1%	8.2%	7.0%
Bingo	16.0%	16.6%	12.2%	8.7%	7.8%	(18%)	(16%)	7.5%	7.5%	7.5%	5.3%	4.8%
Horse Racing	11.0%	9.3%	5.8%	4.7%	4.3%	--	--	--	--	4.5%	5.3%	3.5%
Internet Gambling	--	--	0.1%	0.3%	(0.9%) ^l	--	--	--	--	1.6%	3.5%	3.1%

a = Gambling prevalence rates are somewhat higher than they should be in 2003 and 2004 because these figures are the percentage of people 'participating' in the activity, as opposed to 'playing' (i.e., includes paid workers and volunteers). Figures for 2005 and 2006 represent the percentage of people 'participating in' the activity times the percentage of people who reported participating in as a player (data provided by AGLC). It should also be noted that the 2003 – 2006 surveys used a random selection of listed numbers rather than random digit dialling and did not re-weight the data to correct for potential sampling biases.

b = Surveys in these years did not inquire about raffles.

c = Does not include 'daily lottery games' (6.6% in 1993 & 2.5% in 1998).

d = lottery tickets include instant win (scratch) tickets and Sports Select

e = Question only asked about whether person played *table games* at casinos outside of Alberta (i.e., slots not asked).

f = Does not include slot machines at horse race tracks (5%).

g = 30% Sports Pools; 10% Sports Select; <1% Bookie

h = 7.5% Sports Select; 17.2% sports pools; 27.8% sports bets with friends/family; 0.5% sports with bookie

i = 4.7% Sports Select; 8.1% sports pools; 9.3% sports bets with friends/family; 0.3% sports with bookie

j = Question asked about any 'stocks, options, commodity markets', i.e., not just high risk stocks.

k = Question asks about 'games at local casinos', which could include slot machines as they were introduced in 1995.

l = Question asks about gambling on the Internet or arcade gambling.

Table 19: Gambling Expenditure per Year per Participant as a Function of Game Type (in 2010 dollars).

	1992	1993	1998	2001	2002	(2003)	(2004)	2005	2006	2007	2008	2009
Any Gambling	\$349	\$385	\$845	\$1126	\$1251	--	--	--	--	\$1384	\$1390	\$1245
Lotteries	\$118	\$109	\$154	\$119	\$119	(\$110)	(\$101)	\$106	\$106	\$130	\$118	\$118
Instant Win (Scratch)	--	\$39	--	\$93	\$80	--	--	--	--	\$76	\$97	\$85
Raffles	\$20	\$26	\$32	\$50	--	(\$46)	(\$65)	\$74	\$55	--	--	--
Pull-Tickets	--	\$98	\$75	--	--	(\$28)	(\$32)	\$38	\$28	--	--	--
Slot Machines	--	--	--	\$1325	\$1550	(\$1427)	(\$1709)	\$2239	\$1954	--	\$2686	\$2881
VLTs	\$159	\$229	\$1938	\$2829	\$3296	(\$2057)	(\$2061)	\$2440	\$2576	--	\$2618	\$2173
Casino Table Games	\$535	\$426	\$772	\$1117	\$910	(\$522)	(\$531)	\$708	\$600	\$783	\$888	\$1082
Bingo	\$485	\$453	\$593	\$642	\$676	(\$303)	(\$286)	\$479	\$484	\$422	\$504	\$408
Horse Racing	\$339	\$356	\$340	\$373	\$400	--	--	--	--	\$335	\$273	\$350

Note: Forms of gambling where there are no reliable revenue figures are not included in this table.

Note: The per participant expenditures in 2003 and 2004 are lower than actual due to gambling participation rates that are somewhat elevated (see Footnote 'a' in previous table).

EGM Players

Table 20 shows reasonable consistency in the profile of VLT and/or slot players over the past 10 years. In general, VLT and slot players appear to mirror 2006 Alberta census data with respect to gender, age, employment status, educational attainment, and income levels. The only areas of obvious difference concern the fact that VLT and slot players are less likely to be immigrants, and they have 3 to 4 times higher rates of problem gambling (as measured by a score of 5 or higher³⁸ on the Canadian Problem Gambling Index (CPGI)) (Ferris & Wynne, 2001). Personal income may also be slightly higher than average.

Table 20: Demographic Profile of Alberta Slot Machine and/or VLT Players Compared to the 2006 Alberta Census.

	2001	2002	2007 ³⁹	2008	2009	2006 census
Male	48.2%	54.6%	(52.7%)	48.1%	45.2%	50.0%
Female	51.8%	45.4%	(47.3%)	51.9%	54.8%	50.0%
Age 18 – 34	42.5%	38.5%	(41.7%)	31.7%	35.9%	32.5%
Age 35 – 54	36.3%	39.0%	(34.7%)	39.2%	35.0%	40.5%
Age 55+	21.2%	22.5%	(23.6%)	29.1%	29.1%	26.9%
Married or Common Law	57.5%	61.7%	(71.7%)	63.4%	72.1%	55.4%
Employed Full Time	61.1%	60.1%	(59.1%)	58.5%	54.1%	61.0%
Completed High School or Less	41.0%	37.9%	(39.7%)	-- ⁴⁰	--	39.5%
Household income < \$30K	21.2%	17.7%	(7.5%)	-- ⁴¹	--	19.4%
Household income \$30K - \$49.9K	25.6%	20.5%	(19.4%)	--	--	18.9%
Household income \$50K+	53.2%	62.0%	(73.1%)	--	--	61.7%
Caucasian	88.9%	--	(87.6%)	78.7%	80.9%	80.3%
Aboriginal	5.7%	--	(2.5%)	6.5%	6.7%	5.8%
Other Ethnicity	5.4%	--	(9.9%)	14.8%	12.4%	13.9%
Immigrant	--	7.0%	--	9.8%	7.7%	16.2%
# different gambling formats played				3.8	3.8	
Problem Gambling Prevalence vs. General Population (CPGI 5+)	9.0% vs. 2.7%	6.5% vs. 1.7%	4.3% vs. 1.6%	6.5% vs. 1.9%	7.8% vs. 3.5%	--

Note: detailed demographic information was not collected in the 2003 – 2006 surveys.

³⁸ A score of 5 or higher provides a better demarcation of problem gambling than the traditional cut-off of 3+ or 8+ (Williams & Volberg, 2010). This will be discussed further in the Problem Gambling section of this report.

³⁹ Results must be taken with caution due to a very small sample size of slot/VLT players ($n = 193$).

⁴⁰ Question was not asked in exactly the same way as Statistics Canada. The category that is most similar is 'completed high school and/or some post-secondary' (or less) = 49.0% in 2008 and 50.3% in 2009.

⁴¹ This survey assessed personal income rather than household income and asked the question in a different way (i.e., "To the nearest \$10,000 what was your approximate income" (with options listed in \$10K increments)): In 2008 34.4% reported a personal income of \$30K or below; 19.3% reported a personal income of \$40K or \$50K; and 46.3% had a personal income of *greater than* \$50K. In 2009 35.8% had a personal income of \$30K or lower; 19.3% had an income of \$40K or \$50K; and 44.9% had an income of greater than \$50K. In 2008 Statistics Canada reports that 34.9% of adult Albertans had a personal income of *\$50K and higher*.

However, to some extent it is misleading to try to identify the 'profile' of EGM players, as the large majority of Alberta gamblers also gamble on other formats (true of 66.4% of Alberta gamblers in 2008 and 67.4% of Alberta gamblers in 2009). This is *especially true* of slot and VLT players, in that only 1.4% in 2009 and 4.9% in 2008 just played either slots or VLTs.

The extent of cross-format involvement in 2008 and 2009 combined is displayed in Table 21. Each row represents the past year gambling formats engaged in by people who indicate they play the form of gambling in the first column. What this table illustrates is that lottery players are the type of gambler least likely to engage in other forms, although a minority also purchase instant win tickets. People who purchase high risk stocks are also comparatively less likely to be involved in other forms of gambling. At the other end of the continuum, Internet gamblers, casino table game players, and horse race bettors tend to have extensive involvement in several other forms.

Thus, while there are some differences in people who tend to engage in one form of gambling compared another form, a more important pattern concerns the fact that there tends to be large numbers of 'light gamblers' who engage in just one or two formats versus a small number of 'heavily involved' gamblers who engage in many different formats that often include EGMs. The importance of this 'heavily involved' versus 'lightly involved' distinction will become clearer in the next few pages.

Table 21: Percentage of Each Type of Gambler who also Engaged in Other Forms of Gambling in 2008 and 2009 Combined (N = 4,055)

	2008/2009 Population Prevalence	Lotteries	Instant Win	Social	Slots	Out of Province Casinos	VLTs	High Risk Stocks	Sports Betting	Table Games	Horse Racing	Bingo	Internet
Lottery Players	59.3%	--	45.1%	23.2%	24.0%	18.4%	16.8%	10.0%	10.1%	10.7%	6.6%	7.1%	4.6%
Instant Win Players	30.0%	88.8%	--	27.6%	32.6%	20.8%	24.5%	9.6%	12.0%	13.3%	7.5%	11.8%	5.5%
Social Gamblers	19.1%	72.2%	43.5%	--	26.2%	21.2%	23.3%	14.7%	26.1%	24.5%	8.8%	4.6%	9.8%
Slot Players	16.2%	87.5%	60.4%	30.8%	--	34.4%	41.6%	9.1%	13.4%	23.0%	11.7%	15.2%	7.1%
Out-of-Province Casino Players	14.3%	79.7%	45.5%	29.3%	40.0%	--	26.0%	14.4%	14.9%	19.7%	11.6%	9.6%	5.3%
VLT Players	11.8%	84.5%	62.3%	37.7%	57.4%	30.8%	--	12.1%	16.0%	21.8%	11.4%	14.0%	8.7%
High Risk Stock Players	9.1%	65.1%	31.7%	30.8%	16.2%	21.8%	15.7%	--	15.4%	15.9%	9.1%	2.7%	7.4%
Casino Table Game Players	7.9%	80.6%	50.8%	59.4%	47.6%	35.5%	32.7%	18.4%	34.9%	--	19.1%	8.6%	16.4%
Sports Bettors	7.8%	76.1%	46.0%	63.4%	27.7%	26.2%	23.9%	17.9%	--	35.1%	21.3%	7.7%	12.1%
Bingo Players	5.2%	81.2%	68.6%	16.9%	47.6%	26.0%	31.9%	4.8%	11.6%	13.0%	6.3%	--	2.6%
Horse Race Bettors	4.9%	80.5%	46.2%	34.5%	39.0%	32.8%	27.7%	17.0%	34.4%	30.8%	--	6.7%	8.4%
Internet Gamblers	3.4%	79.5%	50.2%	58.6%	33.3%	23.6%	30.4%	22.5%	28.8%	41.4%	12.5%	3.6%	--

Degree of shading indicates degree of participation: no shading = <30%; lightest shading = 30-49.9%; middle shading = 50-69.9%; darkest shading = 70-100%.

'Big Spenders'

A second way of shedding light on the demographic characteristics of the people who primarily contribute to Alberta gambling revenue is by examining the individuals who report spending the most. Unfortunately, self-reported gambling expenditure tends to be unreliable and is known to be strongly shaped by how the question is asked (Wood & Williams, 2007). For example, the question wording used by Statistics Canada to establish gambling expenditure in their annual *Survey of Household Spending (SHS)* typically elicits amounts that represent only 15% - 20% of actual provincial revenue (e.g., average Alberta household gambling expenditure in the 2008 SHS was reported to be \$363 compared to approximately \$2,000 in actual per household revenue). However, the use of certain question wordings (as was used in the 2008 and 2009 population surveys) can produce estimates that provide a reasonable match with amounts obtained via prospective diaries as well as actual jurisdictional revenue (Wood & Williams, 2007). In the present situation, the average self-reported annual expenditure on all forms of gambling that contributed to Alberta gambling revenue in the 2008 and 2009 population surveys was \$1,037, as compared to an average of \$963 in actual per adult revenue in this same time period.^{42,43}

Thus, assuming some validity for these self-reports, participants in the 2008 and 2009 population surveys were ordered from highest to lowest expenditure, and the demarcation point that identified the people who contributed 75% of the total reported expenditure was determined.

The first important result from this analysis is that a very small percentage of 'big spenders' (5.8%) account for 75% of the reported expenditures.⁴⁴ There are a small number of very large expenditures that have a significant influence on this 5.8% figure. If these outliers are

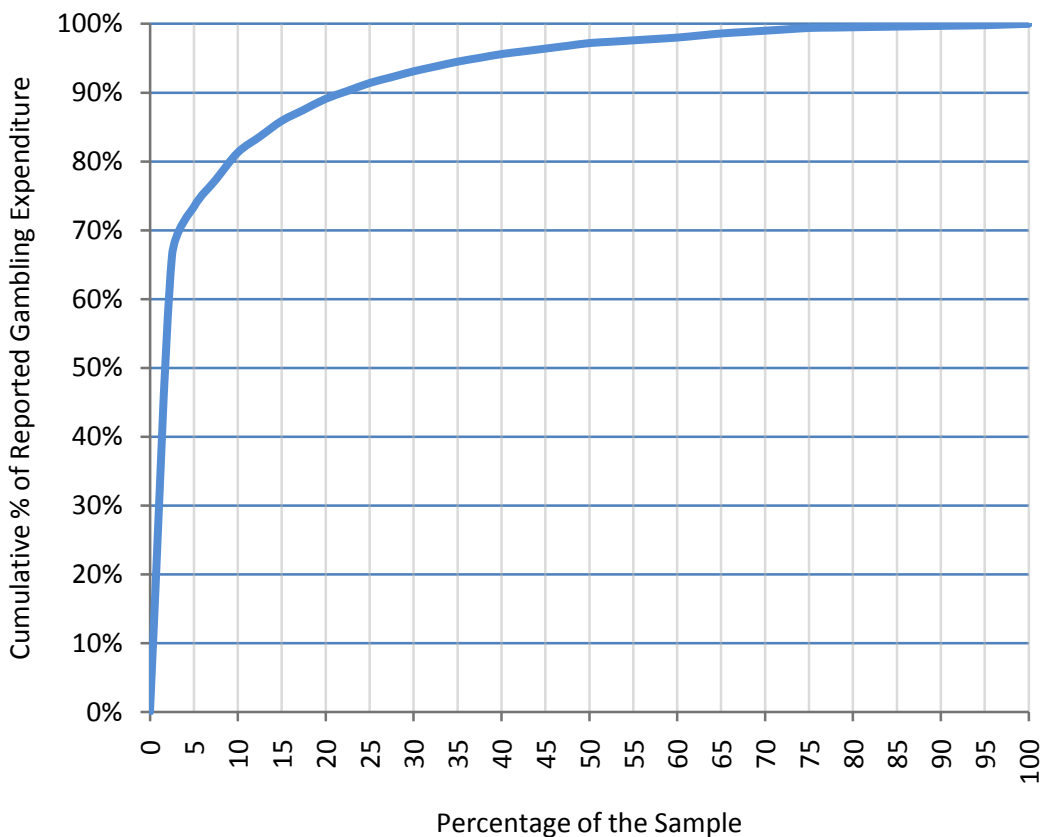
⁴² All subsamples (General Population, Targeted, Online) from the 2008 and 2009 population surveys were first combined ($n = 15,166$) (as a large sample size is needed to reduce the impact of outliers on the average). Each person's 'typical monthly spending' on each form of gambling that contributed to government, charity, or private-industry provided gambling in Alberta was then totalled and multiplied by 12 to arrive at annual amount (i.e., this excluded spending on social gambling, stock market gambling, Internet gambling, and out-of-province gambling). All individual totals that showed a net win were converted to zero, as winning is statistically implausible. Combining the individual totals produced an aggregated amount of \$1,310,571 for the 15,166 people in the sample, which represents an average per person self-reported expenditure of \$1,037. By comparison, the average net revenue (after prizes but before expenses) from government sponsored gambling in Alberta in fiscal 2008/2009 averaged with fiscal 2009/2010 was \$2,678,257. The estimated adult (18+) population in Alberta in 2008/2009 was 2,780,084. Hence, the average per adult revenue is \$963.

⁴³ The match with revenue per game type is not as good. The proportion of reported expenditure accounted for by different game types against the actual proportion of revenue accounted by these games in 2010 is as follows: 20.6% vs. 24.7% for VLTs, 26.1% vs. 46.5% for slots, 27.8% vs. 8.8% for lotteries, 9.0% vs. 8.0% for table games, 5.2% vs. 3.0% for instant win tickets, 5.1% vs. 1.3% for horse racing, 3.2% vs. 1.9% for bingo, and 3.1% vs. 1.0% for sports betting.

⁴⁴ This 5.8%/75% ratio is not necessarily inconsistent with the 21.0%/71.1% ratio mentioned for EGMs as there is not perfect overlap between the groups (i.e., about 20% of the 'big spenders' do not play EGMs).

winsorized then 75% of reported expenditure is accounted for by 7.7% rather than 5.8% of the sample. In either case, the fact that a small percentage of people account for a large percentage of the expenditure is not that surprising, as a well validated economic principle across many industries is that 20% of your client base typically accounts for at least 80% of sales (known as the [Pareto Principle](#)) (Mizuno et al., 2008; Sanders, 1992). This almost certainly applies to gambling, and probably to an even greater extent. For the purchase of most products there are saturation points that deter further spending. For example, there is a physical limit on how many flights a frequent flyer can take in a month; a heavy drinker can only consume a certain amount of alcohol a day; etc. Unlike normal goods and services, however, there are no such saturation points or purchase limitations for gamblers aside from their total accumulated savings and credit limits, both of which can be quite high. Figure 22 depicts the cumulative reported gambling expenditure in the combined 2008 and 2009 population surveys as a function of expenditure percentile of the sample, demonstrating that the top 5% of gamblers account for 73.4% of the expenditure, the top 10% account for 81.3%, and the top 20% account for 89.1%.⁴⁵

Figure 22: Cumulative % of Reported Gambling Expenditure in 2008/2009 as a Function of Expenditure Percentile of the Sample.



⁴⁵ Player Card data would provide an even more reliable test of the Pareto Principle with respect to gambling expenditure, but Player Cards are not used in Alberta.

The demographic profile of this subgroup of people is presented in Table 22a. What is perhaps more of a surprise is that Table 22a shows that most of these ‘big spenders’ do not appear to be ‘high rollers’. People who wager large amounts of money on table games (‘whales’, ‘high rollers’) represent a significant source of revenue in major gambling destinations such as Macau and Las Vegas. However, the income profile of the ‘big spenders’ in Table 22a shows that while the average income of these ‘big spenders’ is definitely higher than most Albertans, only a minority of these people are in the highest income bracket (i.e., >\$100K per year). Also, it should be pointed out that similar to most surveys, income was the question that had the highest refusal rate (12.1% in the case of the ‘big spenders’ and 17.0% of the total sample). Thus, this income profile must be taken with caution. (A more detailed analysis of proportion of reported expenditure as a function of income group is contained in the Socioeconomic Inequality section of this report).

The other demographic characteristics that best predict ‘big spenders’ are being of Aboriginal ancestry, being a non-immigrant, and living in Northern Alberta compared to Calgary or Edmonton⁴⁶. To a lesser extent, male gender, being older than 35, and being married or living common law are also related.

Problem Gamblers

However, as seen in Table 22b, the feature that most clearly distinguishes ‘big spenders’ concerns their prevalence of problem gambling, where their rate of 40.6% is many times higher than the 2.5% found in the entire sample. This figure is consistent with other research that has documented that problem gamblers in Canada have historically tended to account for approximately one-third of all gambling revenue (Williams & Wood, 2004; 2007). *The present study has found the 2008/2009 ratio to be even higher, with CPGI 5+ problem gamblers accounting for roughly 50% of all reported expenditure on government, charity, or private-industry provided gambling in Alberta (i.e., this excludes spending on social gambling, stock market gambling, Internet gambling, and out-of-province gambling).* The proportion of game-specific expenditure accounted for by problem gamblers is as follows: 86% for Internet gambling, 77% for VLTs, 72% for slot machines, 61% for casino table games, 49% for lotteries, 33% for instant win tickets, 31% for bingo, 25% for sports betting, 19% for out-of-province gambling expenditure, and 9% for horse racing.

⁴⁶ Northern Alberta residency was defined as living in Census Division 10, 12, 13, 14, 16, 17, 18, or 19. Southern Alberta residency was defined as living in Census Division 1, 2, 3, 4, 5, 7, 8, or 9. Calgary residency was defined as living in Census Division 6. Edmonton residency was defined as living in Census Division 11.

Table 22a: Demographic Profile of the 5.8% of Gamblers who Account for 75% of Total Reported Gambling Expenditure in 2008 and 2009.

	'Big Spenders'	2006 census
Male	56.0%	50.0%
Female	44.0%	50.0%
Age 18 – 34	19.8%	32.5%
Age 35 – 54	47.6%	40.5%
Age 55+	32.6%	26.9%
Married or Common Law	66.0%	55.4%
Employed Full Time	60.1%	61.0%
Completed High School or Less	-- ⁴⁷	39.5%
Personal Income < \$30K	16.9%	49.3%
Personal Income \$30K - \$49.9K	19.6%	15.9%
Personal Income \$50K - \$69.9K	21.1%	16.2%
Personal Income \$70K - \$99.9K	19.0%	8.7%
Personal Income \$100K+	23.5%	9.9%
Caucasian	79.6%	80.3%
Aboriginal	10.7%	5.8%
Other Ethnicity	9.7%	13.9%
Immigrant	8.9%	16.2%
Northern Alberta Residency	46.3%	14.1%
Edmonton Residency	15.7%	32.6%
Calgary Residency	20.8%	35.9%
Southern Alberta Residency	17.3%	17.4%

Table 22b: Gambling Profile of the 5.8% of Gamblers who Account for 75% of Reported Gambling Expenditure in 2008 and 2009 vs. the Entire Sample.

	'Big Spenders'	Entire Sample
# of Gambling Formats Played	4.4	1.9
Problem Gambling Prevalence (CPGI 5+)	40.6%	2.5%

⁴⁷ The only category that is similar is 'completed high school and/or some post-secondary' (or less) = 60.1%

Origin of Net Gambling Revenue by Geography

The last thing to investigate is where the gambling revenue is coming from in terms of geographic location. This is also one of the more important considerations in determining the economic value of gambling, as one way in which gambling can potentially produce a clear economic gain is when the bulk of the revenue/patronage comes from outside the jurisdiction (i.e., Alberta).

Out-of-Province Revenue

As a previous analysis has documented (page 94), although Alberta receives many tourists, very few people come here for the purposes of gambling. Alberta is not marketed as a gambling destination and there are no casinos in the primary Alberta destinations that attract tourists (i.e., Banff, the Rocky Mountain National Parks, Rocky Mountain ski resorts, Dinosaur Provincial Park).⁴⁸ Rather, 23 out of Alberta's 27 casinos and RECs are located in Alberta's major urban centres and draw their patronage from these cities (i.e., Edmonton, Calgary, Red Deer, Lethbridge, St. Albert, Medicine Hat, Fort McMurray, and Grande Prairie). It is also the case that our main neighbors and primary source of visitors (British Columbia, Saskatchewan) both have many casinos themselves, the largest of which is as large or larger than any Alberta casino.^{49,50}

That being said, some of the tourists who visit Alberta decide to also visit an Alberta casino during their trip and spend some money. To recap the analysis reported earlier in this paper, Alberta Tourism indicates there were 2.4 million people who visited Alberta from other parts of Canada in 2008 and another 1.6 million people who visited from the United States and overseas, with the average length of stay being 11.7 days for overseas visitors, 4.7 days for U.S. visitors, and approximately 5 days for other-province visitors. The Travel Survey of Residents of Canada (TSRC) documents that 5.4% of other-province visitors reported going to a casino while in Alberta in 2007, and 4.8% reported the same in 2008. Thus, if we assume that roughly 5% of all visitors visit a casino in any given year, then the best estimate of the number of non-Alberta residents who have visited an Alberta casino in recent years is about 200,000 people per year.

Even if all of these 200,000 people went to a casino *twice* while they were here and spent *twice* as much as Alberta residents, it is clear this would still represent a tiny fraction of Alberta casino

⁴⁸ The exceptions to this are the casinos in Calgary that out-of-province visitors could patronize during the annual Calgary Stampede.

⁴⁹ The largest casinos in Alberta are in the range of 80,000 square feet with 700 to 850 slot machines (Table 15). This is smaller than found in most other provinces (i.e., Saskatchewan, Manitoba, Ontario, Quebec), but larger than the casinos in Nova Scotia and New Brunswick.

⁵⁰ There are a few chartered bus services to Alberta casinos from places such as Regina and Swift Current in Saskatchewan. However, these services are offset by a few chartered bus services from Alberta to British Columbia and Saskatchewan casinos.

patronage and revenue. Attendance figures are not readily available for the 24 Alberta casinos, but it is typical for casinos of the size that exist in Alberta to *each have* 1 to 2 million visitors a year (e.g., Grey Eagle Casino appears to have about 1,400,000 people a year;⁵¹ Casino Regina in Saskatchewan reports having 2,000,000 people a year; River Rock Casino in British Columbia reports having 3,500,000 people a year).⁵² *Thus, it is clear that almost all Albertan gambling revenue represents money spent by Albertans.*

This answers the question of where the money comes from at a provincial level. However, there is still the issue of whether there are important regional or community variations in gambling revenue.

Out-of-Province Expenditure

The amount of money that is spent gambling outside of Alberta also deserves scrutiny. This is an important issue from both a policy and economic perspective, as the possibility of lost revenue has been one of the primary justifications, first, for the creation of domestic lotteries in western countries in the 1970s, then for casinos in the 1980s and 1990s, and now for Internet gambling. When one jurisdiction begins providing a new form of gambling it has typically had a domino effect on neighbouring jurisdictions, leading to what is now fairly pervasive availability of almost all forms of gambling in almost all western countries.

The pertinent questions here are: 1) How much money was leaving the jurisdiction before domestic opportunities were created?, and 2) Does the creation of domestic gambling opportunities capture revenue that was previously leaving the province, or that would have left the province in the future if domestic opportunities had not been created?

These questions can be addressed to some extent from the Alberta population surveys. There are two primary forms of gambling in Alberta with potential for out-of-province expenditure: casinos and Internet gambling.⁵³ Population surveys in 1992, 1998, 2008, and 2009 asked about past year participation in one or both of these forms. Expenditure was not asked in 1992. Findings are displayed in Table 23. For comparison purposes, the number of Alberta casinos operational in each of these years is also reported.

As can be seen, the percentage of Albertans going to out-of-province casinos appears to have increased from about 10% in the 1990s, to 14% in recent years. This is despite the fact that many more casinos and gambling opportunities exist in Alberta in recent years. In the 2008 population survey, the most frequent out-of-province destinations were: Nevada (50.9%); British Columbia (14.0%), Saskatchewan (9.0%); Ontario (3.7%); and Arizona (3.2%). In the 2009

⁵¹ Personal communication from an official at Grey Eagle Casino (November 4, 2010) who reported an average of 4,000 visitors per day.

⁵² In recent years Las Vegas has received approximately 100,000 visitors a day.

⁵³ Although Alberta is legally able to offer Internet gambling, thus far, it has chosen not to do so.

population survey, the most common destinations were: Nevada (49.7%); British Columbia (13.4%); Saskatchewan (6.9%); Arizona (4.4%); Ontario (4.2%).

There appears to be an even more dramatic increase in out-of-province casino *expenditure* from the 1990s to the present time (these are the average expenditures for the people engaging in this). However, the small sample sizes make the averages susceptible to outliers. Also, differences in question wording may account for part of this increase, as the question wording in 1998 tended to imply that expenditure did not include travel and accommodation costs, whereas this was specifically included in the costs estimates in the 2008 and 2009 surveys.

To further contextualize these findings, 2008 figures from the Travel Survey of Residents of Canada (TSRC) are also presented in Table 23. The TSRC reports the estimated expenditures on all travel-related and entertainment costs for Albertans who visited casinos in the United States or other provinces. As can be seen, this survey produces estimates of total out-of-province expenditures that are somewhat less than what is projected from the population surveys. These TSRC estimates are likely the more reliable figures because of the much larger sample size used in this survey.

Table 23: Out-of-Province Gambling Participation and Expenditure by Albertans.

	1992	1998	2008	2009
# Alberta Casinos	7	18	27	27
Patronization of Out-of-Province Casinos in Past Year	10.0%	10.3%	14.2%	14.7%
Average Yearly per Person Reported Out-of-Province Casino Expenditure (from Population Surveys)	a	\$125 ^b	\$1,853	\$3,850
Projected Total Out-of-Province Casino Expenditure (Population Surveys) (millions)	--	\$28M	\$722M	\$1,593M
Projected Total Out-of-Province Casino Expenditure (Travel Survey of Residents of Canada) (millions)	--	--	\$440M	--
Total Out-of-Province Casino Expenditure as a % of Alberta GDP	--	.03%	.15% - .25%	.60%
Internet Gambling Participation in Past Year	--	0.1%	3.5%	3.1%
Average Yearly per Person Reported Internet Gambling Expenditure (from Population Surveys)	--	c	\$3,054	\$3,980
Projected Total Internet Gambling Expenditure (Population Surveys) (millions)	--	--	\$293M	\$347M
Total Internet Gambling Expenditure as a % of Alberta GDP	--	--	.10%	.14%

a = expenditure not asked; b = question wording implied that travel and accommodation costs should not be included; c = sample too small to calculate reliable figures

However, less important than the actual numbers is the fact that Table 23 contains no evidence to support the contention that out-of-province casino visitation or expenditure has decreased subsequent to domestic casino availability. Rather, there is some evidence that visitation and expenditure might have actually increased. Some corroboration of this trend is seen in Table 24, which shows a general increase in Canadian visits and expenditure (gambling and non-gambling) to Nevada from 2000 to 2009.⁵⁴

Table 24: Travel to Nevada by Canadians.

	Individual Visits	Reported Spending in State
2000	811,000	\$592,000,000
2001	658,000	\$542,000,000
2002	626,000	\$528,000,000
2003	711,000	\$611,000,000
2004	761,000	\$651,000,000
2005	931,000	\$777,000,000
2006	902,000	\$799,000,000
2007	927,000	\$825,000,000
2008	1,059,000	\$930,000,000
2009	1,233,000	\$1,143,000,000

Statistics Canada, Tourism and the Centre for Education Statistics. Travel by Canadians to the United States.

Now, it is also possible that out-of-province casino patronage might have been the same (or even higher) if domestic casinos were not built. The \$U.S./\$CAD exchange rate is an important determinant of travel to the United States from Canada, and these rates have been very favourable to Canadians in recent years. Further support for this contention is seen in the fact that the prevalence of Internet gambling in Alberta has continued to rise despite a lack of legal availability in Alberta (Tables 18, p. 103 and Table 23). However, it is also important to recognize that the increase in Internet gambling prevalence has been much larger in countries that legalized it compared to countries that have not (Wood & Williams, 2009). Worldwide, the current jurisdictional prevalence of Internet gambling tends to parallel its legal availability, with the highest rates occurring in jurisdictions where it is legal (e.g., U.K. where it is currently 14%, Sweden where it is about 12%), and much lower rates in countries where it is primarily illegal

⁵⁴ The more general point to be made here is that casino destinations such as Las Vegas did not suffer as a result of domestic casino introduction that occurred in the 1990s and early 2000s in many states and provinces across North America. Rather, this time period was coincident with a significant *increase* in Nevada gambling revenue. There are a couple of explanations for this effect. One is the fact that in a competitive industry, whenever a competitor introduces something that could potentially divert your customer base, the natural tendency (which occurred in Nevada) is to enhance your product to continue to make it attractive. The other explanation appears to be that domestic casinos contribute to a 'culture' of gambling, increasing the likelihood that casino players will want to go to the major casino destinations in addition to their locally available ones.

(e.g., U.S., Canada, where it is about 2 – 4%) (Wood & Williams, 2009). In general, legal sanctioning of a product tends to increase availability and consumption of that product.⁵⁵

In summary, it is very unlikely that domestic casinos have stemmed the flow of gambling revenue leaving Alberta, and may have inadvertently increased it. However, it is important to contextualize the magnitude of this loss. Table 23 also illustrates that, in terms of proportion of Alberta GDP, these losses represent relatively small amounts (likely less than 0.2% of GDP (using TSRC data), either before or after casino introduction).

Geographic Revenue Patterns within Alberta

There are several ways of addressing this question. Two ways are reported expenditures in the population surveys, and actual revenue from annual reports.

Reported Expenditures

Unfortunately, participant residency in the population surveys was either not asked or analyzed in most of these surveys. However, it was asked in 2001, 2008, and 2009, and is reported below in Table 25. Mean and median expenditure are reported for each year. The medians are a more reliable indicator of typical expenditure, as outliers have an inordinate effect on the means. In general, these surveys tended to find higher per adult expenditure levels in northern Alberta compared to southern Alberta, with perhaps the two major cities having intermediate values.

Table 25: Reported Per Adult Net Monthly Expenditure on Government Sanctioned or Sponsored Gambling as a Function of Region.

	2001 mean	2001 median	2008 mean	2008 median	2009 mean	2009 median
Northern Alberta	\$211	\$22	\$79	\$15	+\$12	\$20
Edmonton	\$95	\$15	\$126	\$15	+\$16	\$10
Calgary	\$90	\$15	\$21	\$10	\$39	\$15
Southern Alberta	\$111	\$14	\$36	\$12	\$79	\$10

For the 2008 and 2009 surveys, Edmonton comprised the Edmonton Census Division (#11); 'Calgary' comprised the Calgary Census Division (#6), Southern Alberta comprised Census Divisions 1,2,3,4,5,7,9,15, Northern Alberta comprised Census Divisions 10,12,13,14,16,17,18,19. See Appendix D for details.

The expenditure questions were worded slightly differently between surveys. In 2001 the question asked "In the past 12 month, how much money, *not including winnings*, did you spend on _____ in a typical month". Furthermore, 'wins' were not accepted as an answer. In 2008 and 2009 the question was "Roughly how much money do you spend on _____ in a typical month? Spend means how much you are ahead (+\$) or behind (-\$), or your net win or loss in an average month in the past 12 months."

⁵⁵ The most problematic drugs in Western society always have always been the legally sanctioned ones (i.e., tobacco, alcohol, prescription drugs), rather than the illegal ones.

Because of the paramount importance of casino revenue to overall Alberta gambling revenue, it is instructive to see whether reported casino expenditure is disproportionately concentrated in neighbourhoods in close proximity to the venue. Table 26 displays reported slot machine plus casino table game expenditure per month in 2008 and 2009 combined as a function of residential driving distance to the nearest casino (total sample size of 12,758 individuals). Driving distance was calculated using Google Maps based on the person's reported 6 digit postal code (corroborated against the community they reported residing in).

Table 26 confirms that most casino revenue appears to come from people who live in close proximity to the venue, with this contribution being higher the closer the proximity. More specifically, 46.4% of typical Alberta casino revenue is derived from people who live within 5 km of the venue and 72.6% of all revenue is derived from people who live within 20 km. Because most Alberta casinos are located in major urban centres, it is also the case that most Albertans actually live within 20 km of a casino. However, Table 26 also illustrates that people who live within 5 km contribute 1.54 times more revenue than what would be expected given their population prevalence (i.e., 46.4% divided by 30.1%), people who live within 10 km contribute 1.26 times more, people who live within 20 km contribute 1.10 times more, and people who live within 30 km contribute 1.03 times more. The Pearson correlation between Distance Category and Casino Patronage is .44 ($p = .07$, 1 tail, 13 pairs) and the correlation between Distance Category and Average Expenditure per Casino Gambler is .33 ($p = .14$, 1 tail, 13 pairs).

Table 26: Driving Distance to the Nearest Casino as it Relates to Casino Patronage and Reported Monthly Casino Expenditure.

Distance	Total Sample	Casino Gamblers	Casino Patronage	Total Casino Expenditure	Average Casino Expenditure per Person	Average Expenditure per Casino Gambler	Cumulative % of Casino Gamblers	Cumulative % of Total Expenditure
0 - 5 km	3353	835	24.9%	-\$70302	-\$20.97	-\$84.19	30.1%	46.4%
5.1 - 10 km	2816	657	23.3%	-\$32089	-\$11.40	-\$48.84	53.7%	67.6%
10.1 - 20 km	1598	350	21.9%	-\$7606	-\$4.76	-\$21.73	66.3%	72.6%
20.1 - 30 km	827	150	18.1%	-\$1967	-\$2.38	-\$13.11	71.7%	73.9%
30.1 - 40 km	738	154	20.9%	\$3652	\$4.95	\$23.71	77.2%	71.5%
40.1 - 50 km	888	152	17.1%	-\$8791	-\$9.90	-\$57.84	82.7%	77.3%
50.1 - 60 km	306	57	18.6%	\$1190	\$3.89	\$20.88	84.8%	76.5%
60.1 - 70 km	466	94	20.2%	-\$5688	-\$12.21	-\$60.51	88.2%	80.3%
70.1 - 80 km	362	69	19.1%	-\$9819	-\$27.12	-\$142.30	90.6%	86.8%
80.1 - 90 km	432	81	18.8%	-\$5975	-\$13.83	-\$73.77	93.6%	90.7%
90.1 - 100 km	254	48	18.9%	-\$5988	-\$23.58	-\$124.76	95.3%	94.7%
100.1 - 200 km	572	97	17.0%	-\$6793	-\$11.88	-\$70.03	98.8%	99.2%
200.1 km +	146	34	23.3%	-\$1267	-\$8.68	-\$37.26	100.0%	100.0%
Average			21.8%		-\$10.60	-\$53.06		

Note: Negative numbers indicate losses and positive numbers indicate reported net wins.

Note: Participants from all 3 groups (General Population, Targeted, and Online) were used in this analysis, and no weighting was employed. Hence, the absolute value of the figures should be taken with caution. However, the relative size of the numbers in one distance category compared to another are the important figures, and these are valid. Note: Casino expenditure values with z scores of 4 or greater were winsorized.

Note: Casino Patron Surveys are another methodology that could be used to establish these figures. Unfortunately, none of the casinos in Alberta agreed to let the Research Team conduct a brief survey of their patrons so as to establish geographic origin.

Actual Revenue

Another source of data concerns actual revenue as it relates to geographic region (as opposed to reported expenditure). This information tends to be available as a function of game type.

One category concerns charitable gaming revenue from casino events, bingo events, raffle tickets, and pull tickets. This data was obtained from Alberta Gaming Commission Annual Reviews (1980 – 1994) and Alberta Gaming and Liquor Commission Annual Reports (1995 – 2009). Figure 23 shows the relative contribution of Calgary, Edmonton, and all Other Communities to total net (after prizes but before expenses) charitable revenue over time. The proportion is roughly equal between these 3 regions, although Calgary’s proportion has been increasing in recent years.

Figure 23: Proportion of Total Net Alberta Charitable Gambling Revenue Contributed by Each Region (in 2010 dollars).

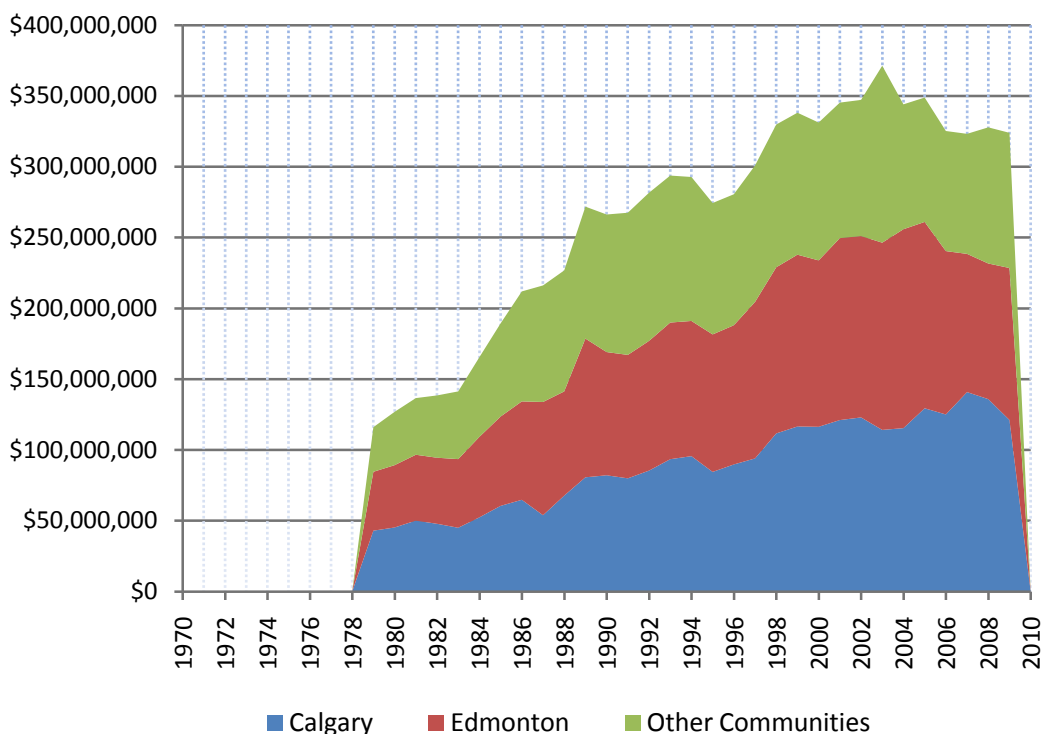
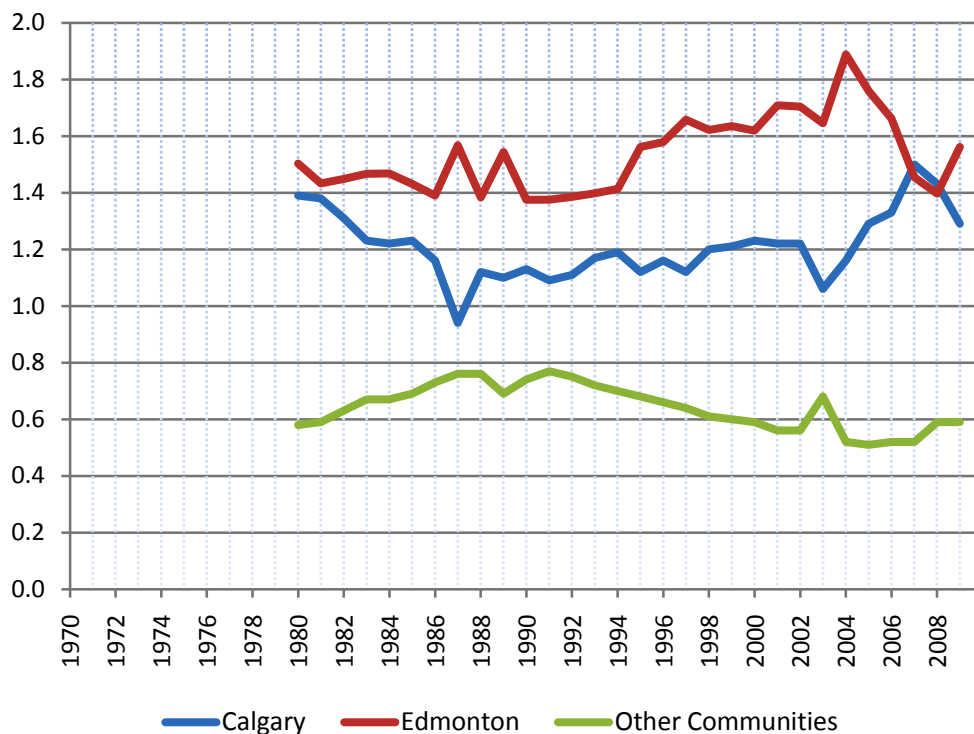


Figure 24 shows the ratio of provincial charitable gambling revenue derived from Calgary, Edmonton, and all ‘Other Communities’ divided by the relative population size of these three areas in each year (population data from Statistics Canada). As can be seen, charitable gambling revenue per capita from the two major cities is considerably higher than charitable gambling revenue per capita in other areas of Alberta. Furthermore, the per capita revenue of Edmonton is consistently higher than Calgary. This higher per capita revenue of Edmonton and Calgary may be partly due to the fact that the majority of charitable gaming revenue comes from casinos, and these are more conveniently located in these two cities.

Although not shown, within the 'Other Community' region there is an important north/south difference, with the ratio for the northern communities of Fort McMurray and Grande Prairie being in the range of 1.4 and the ratio for the southern communities of Lethbridge and Medicine Hat being in the range of .70.

Figure 24: Proportion of Total Alberta Charitable Gambling Revenue of Each Region Divided by that Region's Proportion of Total Alberta Population.



Revenue per community over time is also available for [ticket lotteries](#) and [video lottery terminals](#). This information was provided to the Research Team by AGLC and then tabulated by Dr. Brad Humphreys (University of Alberta) in the following two figures.

Figure 25 shows average lottery ticket revenue per Alberta census division for the period 1994 to 2008. The provincial average of \$154 for every 1000 Albertans is illustrated by a vertical red line. Similar to previous findings, there is a tendency for the highest expenditures to occur in northern census divisions such as Fort McMurray, Edson, Lloydminster, and Athabasca; for the lowest expenditures to occur in southern census divisions such as Fort MacLeod, Drumheller, Hanna, and Rocky Mountain House; and for the major centres of Edmonton and Calgary to have intermediate expenditures (with the more northerly Edmonton having higher expenditures than Calgary).

Figure 25: Average Ticket Lottery Revenue per 1000 Albertans as a function of Census Division (1994 – 2008).

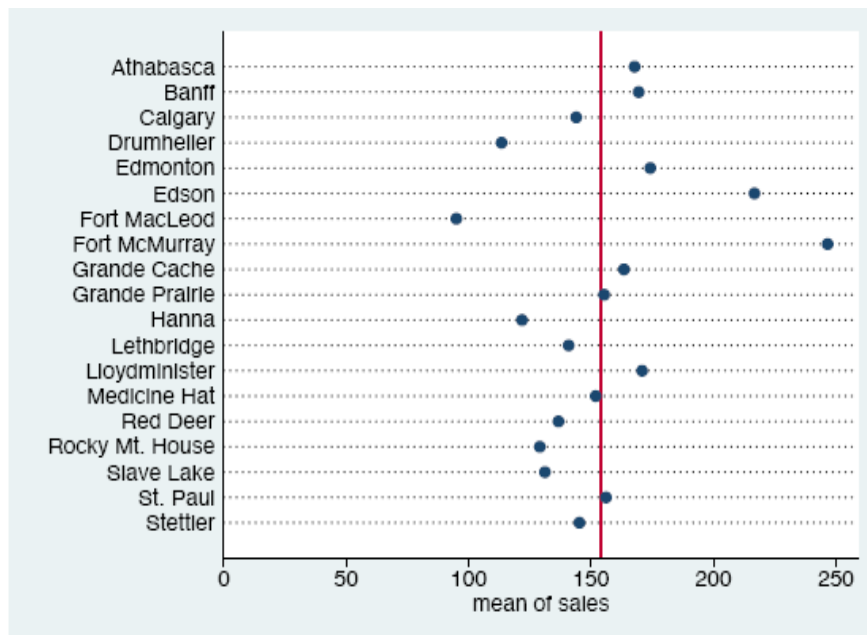
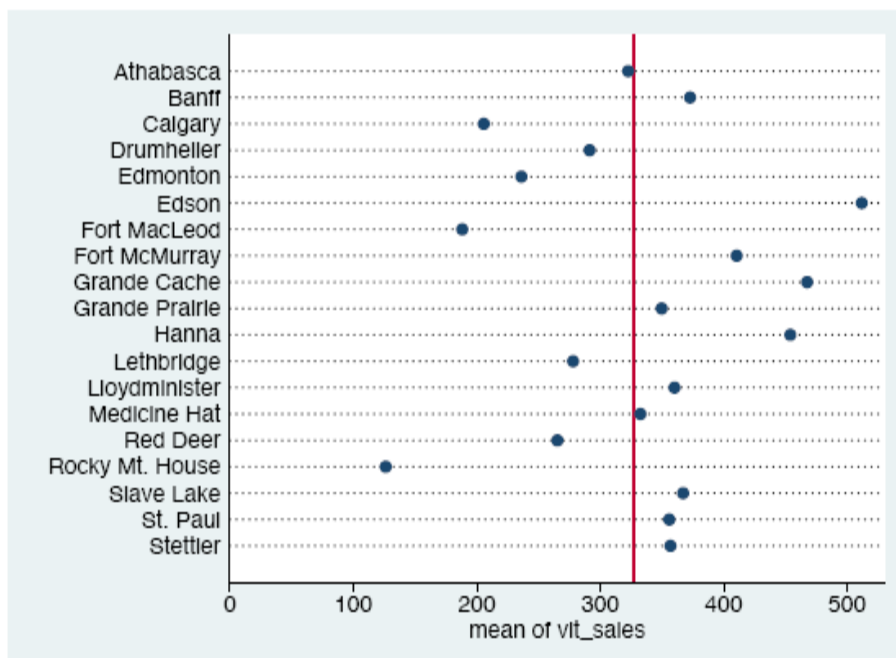


Figure 26 shows average video lottery terminal revenue per Alberta census division for the period 1994 to 2008 with the provincial average of \$327 being illustrated by a vertical red line. The same north – south pattern tends to appear, with three out of the top four census divisions with the highest per capita revenues being from northern Alberta (Hanna being an exception), and the lowest two census divisions in terms of per capita revenue being from southern Alberta (i.e., Fort MacLeod, Rocky Mountain House,).

However, an additional urban – rural difference is apparent in this figure, with lower per capita VLT revenue occurring for Alberta’s four largest urban centres (Edmonton, Calgary, Lethbridge, Red Deer) relative to all other areas. However, this is also related to the fact that the physical availability/density of VLTs tends to be lower in these four cities, presumably due to the much greater availability of slot machine gambling in casinos. Similarly, the very low per capita revenue in Rocky Mountain House census division is related to the total removal of VLTs from the town of Rocky Mountain House in 1997 following a local plebiscite.

Figure 26: Average VLT Revenue per 1000 Albertans as a Function of Census Division (1994 – 2008).



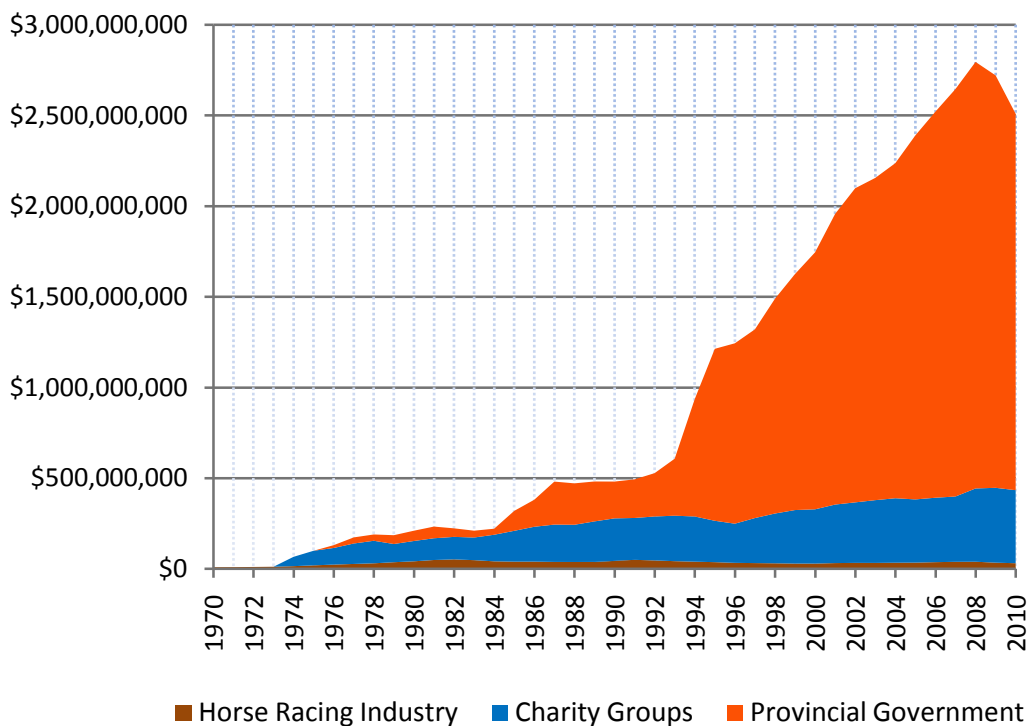
WHERE IS THE MONEY GOING?

The final step in determining the groups/sectors most likely impacted by gambling is to determine the immediate recipients of gambling revenue and how this revenue is subsequently disbursed.

Immediate Recipients

Figure 27 illustrates the magnitude of net gambling revenue received (after prizes but before expenses) for the 3 groups that directly receive this revenue: the horse racing industry, community groups or 'charities', and the provincial government. As demonstrated, charity groups were the primary recipients of net gambling revenue until 1987, at which point provincial government revenue started to match charity revenue due to the introduction of provincial instant win tickets and the increased popularity of provincial lottery tickets. This parity continued until 1993. Beginning in 1994 provincial government revenue rapidly outpaced charity revenue due to the introduction of VLTs, and then slot machines. The provincial government is now the direct recipient of approximately 83% of all gambling revenue.

Figure 27: Proportion of Total Net Alberta Gambling Revenue Directly Received as a function of Year by Major Sector (in 2010 dollars).⁵⁶



⁵⁶ Note: this does not include the approximately \$3 - \$5 million the provincial government also receives annually in charitable licence fees.

Ultimate Recipients

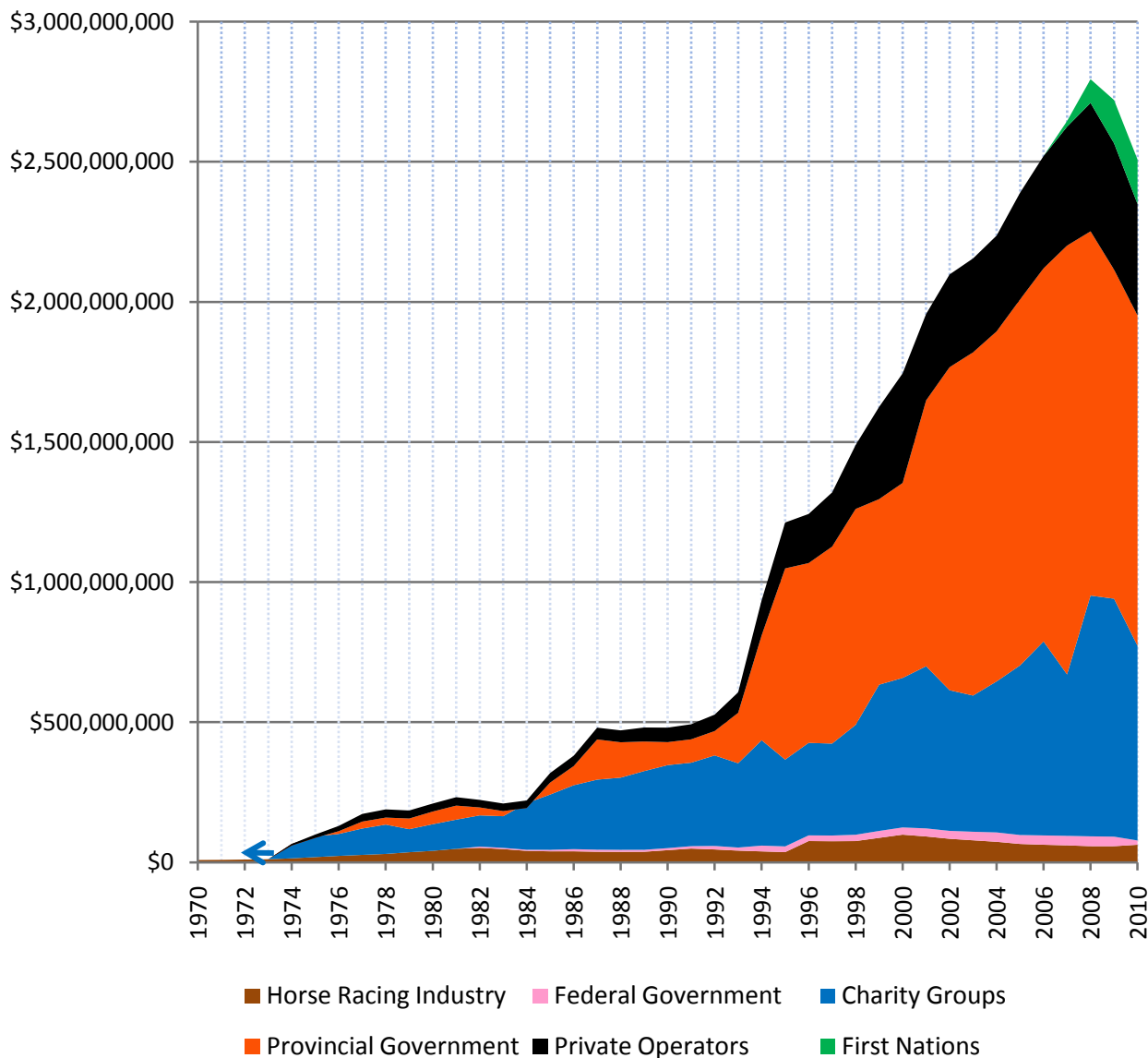
Gambling profits in Alberta are typically redirected because of pre-existing agreements regarding commissions, levies, revenue disbursement, etc. More specifically:

- The federal government receives two types of payment from Alberta government gambling revenue. The first payment are taxes that are paid on revenue from slot machines, VLTs, ticket lotteries and electronic bingo in lieu of the usual Goods and Services Tax (GST). This tax is in addition to the GST paid on the purchase of gambling-related goods and services. The second source of payment is the province of Alberta's share of the \$24 million (indexed to inflation) the provinces agreed to pay the Government of Canada for its withdrawal in 1979 from offering 'lottery schemes'. This payment is made by the Western Canada Lottery Corporation on behalf of Alberta, and is based on current population and Alberta's share of ticket lottery sales.
- An 0.8% levy is collected by the Canadian Pari-Mutuel Agency on every horse racing bet that is placed.
- 15% of provincial government slot revenue at racetracks is immediately redirected to the racetrack and another 51.7% goes to the horse racing industry (Horse Racing Alberta).
- 15% of provincial government slot revenue at 'casino events' goes to the host charity and another 15% goes to the casino owner.
- 40% of slot revenue from First Nations casinos immediately goes to the First Nations Development fund to benefit First Nations communities.
- 15% of VLT revenue goes to the lounge/bar owner as commission.
- 50% to 75% of total casino table game revenue earned by charity groups goes to the host casino.
- Most electronic bingo and keno revenue that AGLC collects is returned to the host charity.
- Private lottery retailers receive a 6.5% commission from lottery ticket sales.
- A portion of the Alberta Lottery Fund (ALF) (averaging 21% of ALF funds) is allocated to community/charity grants.

Thus, Figure 28 displays the more important figure of who the 'ultimate recipients' of net gambling revenue are after these distributions. This figure still shows the provincial government receiving the largest segment of gambling revenue since 1995. Since 1995 its percentage of the total has ranged from 41% to 58% (47% in 2010). Charity groups have been the second largest recipient since 1995, with their portion of the total since 1995 ranging from 22% to 32% (28% in 2010). The fluctuation in the charity sector proportion relative to the provincial government proportion is largely due to the differences in the yearly proportion of the Alberta Lottery Fund distributed in the form of charity grants. Private operators (casino owners, lounges hosting VLTs, lottery ticket retailers) have been the third largest recipient, with their portion of total gambling revenue since 1995 ranging from 13% to 22% (16% in 2010). In the past couple of years First Nations revenue has grown significantly and they now receive approximately 6% of Alberta gambling revenue. The fifth largest recipient is the horse racing

industry. The proportion of gambling revenue derived from horse racing has declined significantly since the 1980s (when it was as high as 21%) and now only constitutes about 2% of revenue. Finally, the federal government has always received the smallest proportion of net Alberta gambling revenue (ranging from 1 – 2%), and currently represent about 1% of the total. In general, the stability observed in the relative proportion of revenue garnered by different sectors is related to the fact that they all tend to share in the revenues from the biggest ‘money maker’ (i.e., EGMs), and they have tended to received a fixed percentage of gambling revenue as opposed to a set amount.

Figure 28: Proportion of Total Net Alberta Gambling Revenue Ultimately Received by Different Sectors (in 2010 dollars).



Alberta Lottery Fund Charity Grants

The Alberta Lottery Fund commitments to community/charity grants merits more detailed explanation. Since the early 1980s a portion of the ALF has been used to support thousands of local community initiatives each year through a granting process requiring an application from interested 'charitable' groups. Since 1998 the proportion of the Alberta Lottery Fund allocated to community grants has averaged 21% of the total ALF (range of 16% to 30%). Since 1998, the annual number of grants awarded has averaged 6,071 (range of 4,433 to 8,661) and the average grant size has been \$46,580 (in current dollars). These granting agencies are listed in Table 27 in addition to the number of grants awarded and the aggregate value of these grants up to the present time. This data is derived from the [Alberta Lottery Fund](#) website, which provides a database from 1998 to the present time on all groups that have received funding, the number of grants awarded, grant amounts, grants per community, and which particular granting agency provided the money.

Table 27: Grants Awarded by Alberta Lottery Fund Granting Agencies.

Granting Agency	Years of Operation	Number of Grants Awarded (1998 to Oct 2010)	Aggregate Dollar Value of Grants (1998 to Oct 2010)
Community Facility Enhancement Program	1988 – present	7,086	\$400,371,211
Other Lottery Funding	1998 - 2009	254	\$355,382,104
Alberta Foundation for the Arts	1991 ⁵⁷ - present	16,852	\$317,275,220
First Nations Development Fund	2006 - present	992	\$300,922,426
Major Community Facilities Program IX	2007 - 2009	232	\$281,885,651
Major Fairs and Exhibitions Initiatives	1998 - 2010	218	\$241,735,685
Community Initiative Program	2002 - present	8,736	\$228,577,362
Community Lottery Board	1998 – 2002	15,156	\$202,336,004
Agricultural Support Initiatives	1988 - present	8,645	\$199,069,503
Centennial Legacies Program	2000 - present	518	\$194,551,475
Other Initiative Programs	1998 - present	454	\$158,615,256
Alberta Sport, Recreation, Parks and Wildlife Foundation	1993 ⁵⁸ - present	4,468	\$128,125,822
Wild Rose Foundation	1984 - 2010	1,917	\$57,045,902
Alberta Historical Resources Foundation	1976 - present	1,620	\$53,869,669
Community Spirit Donation Grant Program	2008 - present	3,235	\$37,990,259
Health and Wellness Initiatives	1999 – 2001	21	\$17,300,000
Human Rights, Citizenship, and Multiculturalism Education Fund	1996 ⁵⁹ - 2010	407	\$10,384,485
Alberta Museums Association	1998 - present	2,900	\$8,648,028
CIP – Operational Assistance	2009 – present	92	\$5,300,000
CIP – International Development Assistance	2009 - present	63	\$1,300,000
Human Rights, Education, and Multiculturalism Fund	2009 - present	18	\$848,445

Source: Alberta Lottery Fund database.

⁵⁷ Established 1991 after 4 agencies amalgamated.

⁵⁸ Established 1993 after 2 funds amalgamated.

⁵⁹ Established 1996 to replace 1 fund.

Table 28 shows the total amount of ALF received for each Census Division from 1998 to 2010 as well as funds received per person for each Division (using the 2009 population estimate). As expected, the total amount of funds received roughly parallels the population size of each Division, with the Census Divisions containing the two largest cities (Calgary and Edmonton) receiving the largest share. More interesting is the per person amounts received ($M = \$838$, $SD = \$218$). As can be seen, there is a significant variation in these amounts, with Camrose-Lloydminster being three times higher than Fort McMurray. However, while it is clear that there are some individual Census Divisions that benefit more or less from Alberta Lottery Funds, there is no obvious north-south or urban-rural pattern to these differences.

**Table 28: Alberta Lottery Funds Received (1998 – 2010)
as a Function of Census Division.**

Census Division	Alberta Lottery Funds per Person	Total Alberta Lottery Funds Received
10 Camrose-Lloydminster	\$1,179	\$110,277,206
12 St. Paul	\$1,161	\$79,956,895
4 Hanna	\$1,097	\$11,949,272
13 Athabasca	\$1,063	\$76,246,030
17 Slave Lake	\$1,023	\$66,582,889
7 Stettler	\$997	\$42,332,818
15 Banff	\$945	\$37,217,168
3 Fort MacLeod	\$877	\$34,840,312
11 Edmonton	\$853	\$1,024,084,462
19 Grande Prairie	\$839	\$91,526,670
5 Drumheller	\$819	\$45,567,467
6 Calgary	\$806	\$1,066,363,873
1 Medicine Hat	\$721	\$59,773,273
2 Lethbridge	\$693	\$109,593,718
18 Grande Cache	\$640	\$9,640,772
9 Rocky Mountain House	\$625	\$13,776,202
8 Red Deer	\$601	\$117,054,341
14 Edson	\$591	\$17,514,233
16 Fort McMurray	\$385	\$25,351,264

Source: Alberta Lottery Fund database.

Note: These disbursements do not include amounts that could not be uniquely attributed to a particular census division: i.e., \$171,983,640 was distributed to provincial organizations, \$17,663,805 to international organizations, \$8,729,915 to regional organizations, and \$7,987,319 to national organizations.

The *overall* equitability of where Alberta gambling revenue geographically derives from, compared to where the money is geographically distributed back to, is an important question. However, it is difficult to answer with the existing data: although information about the geographic origin of charitable gaming revenue, lottery ticket revenue, and VLT revenue has been presented, information on the geographic origin of slot revenue was not available for this report (slot revenue has constituted a significant and increasing portion of all gambling revenue

since 1999; 47% of all revenue in 2009). Also, although information has been presented about the geographic distribution of ALF grants, it must be remembered that approximately 77% of provincial gambling revenue is distributed back to Albertans through Alberta Ministry program delivery, the geographic distribution of which is not addressed in this report (i.e., Health, Education, Social Services, Agriculture, Transportation, Economic Development, etc.).

Nonetheless, it is an important question that merits some speculation. It is a reasonable assumption that the large majority of slot revenue from 1998 to the present time has come from the Census Divisions containing casinos or Racing Entertainment Centres (i.e., Fort McMurray, Grande Prairie, Lethbridge, Medicine Hat, Red Deer, Calgary, Edmonton). It is also a reasonable assumption that government Ministry monies are either distributed evenly throughout the province, or spent proportionally (per capita) more on urban areas. This latter possibility is based on the fact that the majority of the Alberta budget historically has been allocated to the departments of Health and Education, with the bulk of these budgets being spent on staffing associated with major facilities (hospitals and schools), both of which tend to be over-represented (per capita) in urban areas.

If these two assumptions are correct, then the only geographic region that might have a case that they receive an unequal 'return on their money' is the Fort McMurray Census Division. This region contributes more gambling revenue by virtue of its higher than average per capita expenditures on charity gaming and lotteries, and the fact that it has had a casino since 1994. In return, its ALF grant size is the lowest of all Census Divisions, and because it is a rural area it is unlikely to be receiving higher than average government services. Otherwise, for the most part, the geographic origin of provincial gambling revenue relative to its geographic distribution appears to be relatively equitable.

Revenue Disbursement from Ultimate Recipients

The final question concerns how the revenue is disbursed after all the pre-existing commitments have been honoured.

Provincial Government Disbursement

The most important disbursements are from the provincial government, as they are the ones with the largest amount of money to disburse. The way in which this money is distributed back to the citizens of Alberta has changed somewhat over the years. Since 1989 the provincial government's gambling revenue has been first deposited in the Alberta Lottery Fund (ALF). The majority of money from this fund has then been distributed to government ministries via the General Revenue Fund (prior to 1998) or directly (after 1998). In either case, virtually all of this revenue is ultimately disbursed to Albertan in the form of government services. It is worth noting that such would not be the case if it was the federal government who was collecting the revenue, as the federal government redistributes its revenue proportionally more to the 'have

not' provinces and spends a portion of its revenue outside of Canada (various foreign ventures and debt financing/repayment). (Note: Alberta has been debt free since 2005).

Community 'Charity' Group Disbursement

Figure 28 (p. 125) shows that the thousands of different community 'charity' groups spread throughout the province have the second largest amount of gambling revenue to disburse. All of this money is spent to support the primary functions of the community group as well as internal administrative costs of providing the gambling. Thus, similar to provincial government gambling revenue disbursement, it is fair to say that that the citizens of Alberta are again the primary recipients and beneficiaries of 'community group' revenue disbursement.

First Nations Disbursement

The disbursement of monies from First Nations gambling revenues (after commitments and commissions have been paid) is covered in the First Nations section of this report. Here, too, these disbursements represent money spent on (First Nations) citizens of Alberta.

Private Operator Disbursement

Private operators in Alberta receive a relatively small portion of overall gambling revenue compared to many other (non-Canadian) jurisdictions (roughly 16 – 17% since 2001). A sizeable portion of these profits are spent on wages, primarily for locally employed people to staff the casinos, VLT bars, and lottery retail outlets (all of which benefits Albertans). In other jurisdictions it would be instructive to further establish how much of the remaining profits leave the jurisdiction to shareholders (i.e., for casinos) and/or to purchase out-of-jurisdiction supplies. However, in Alberta, the amounts involved are too small (relative to overall Alberta gambling revenue) to be consequential.

Horse Racing Disbursement

Figure 28 (p. 125) illustrates that a comparatively small amount of money is available for disbursement by the horse racing industry. All of this money is spent in Alberta to support Alberta horse breeding, raising and racing. Two recent studies of the economic impacts of horse racing in Alberta shed light on how these revenues are disbursed (Econometric Research, 2001; Serecon Management, 2009).

Federal Government Disbursement

The roughly \$30 to \$35 million in Alberta gambling revenue provided to the federal government each year is money leaving Alberta, representing a potential economic loss. However, a portion of this is returned in the form of federal services. In any case, the amounts involved are fairly insignificant (roughly 1.3% of total gambling revenue).

IMPACTS OF LEGAL GAMBLING

IMPACTS ON THE PROVINCIAL GOVERNMENT

The previous section has made it clear that the large majority of gambling revenue in Alberta since 1994 has been received and disbursed by the provincial government. Thus, the provincial government is one of the sectors that potentially experiences the largest ‘impacts’ of legal gambling. (Note: Williams, Rehm, & Stevens (2011) have documented that increased government revenue is the most consistent impact of gambling introduction across all studies investigating the socioeconomic impacts of gambling).

Financial Impacts

To evaluate the potential financial magnitude of this impact, Figure 29 illustrates the percentage that annual gambling revenue has represented to overall Alberta government revenue over time. This data is derived from Statistics Canada, which tabulates provincial government revenue in a standardized way across provinces and across time periods. Data is available from 1989 to the present time. Statistics Canada defines Alberta government gambling revenue as money deposited into the Alberta Lottery Fund, and thus does not include corporate tax revenue from casinos and racetracks which is listed under Amusement Tax. However, in Alberta, amusement tax revenue amounts are very small, averaging between \$7 and \$12 million a year from 1981 to 1996, and ‘0’ from 1997 to present.⁶⁰

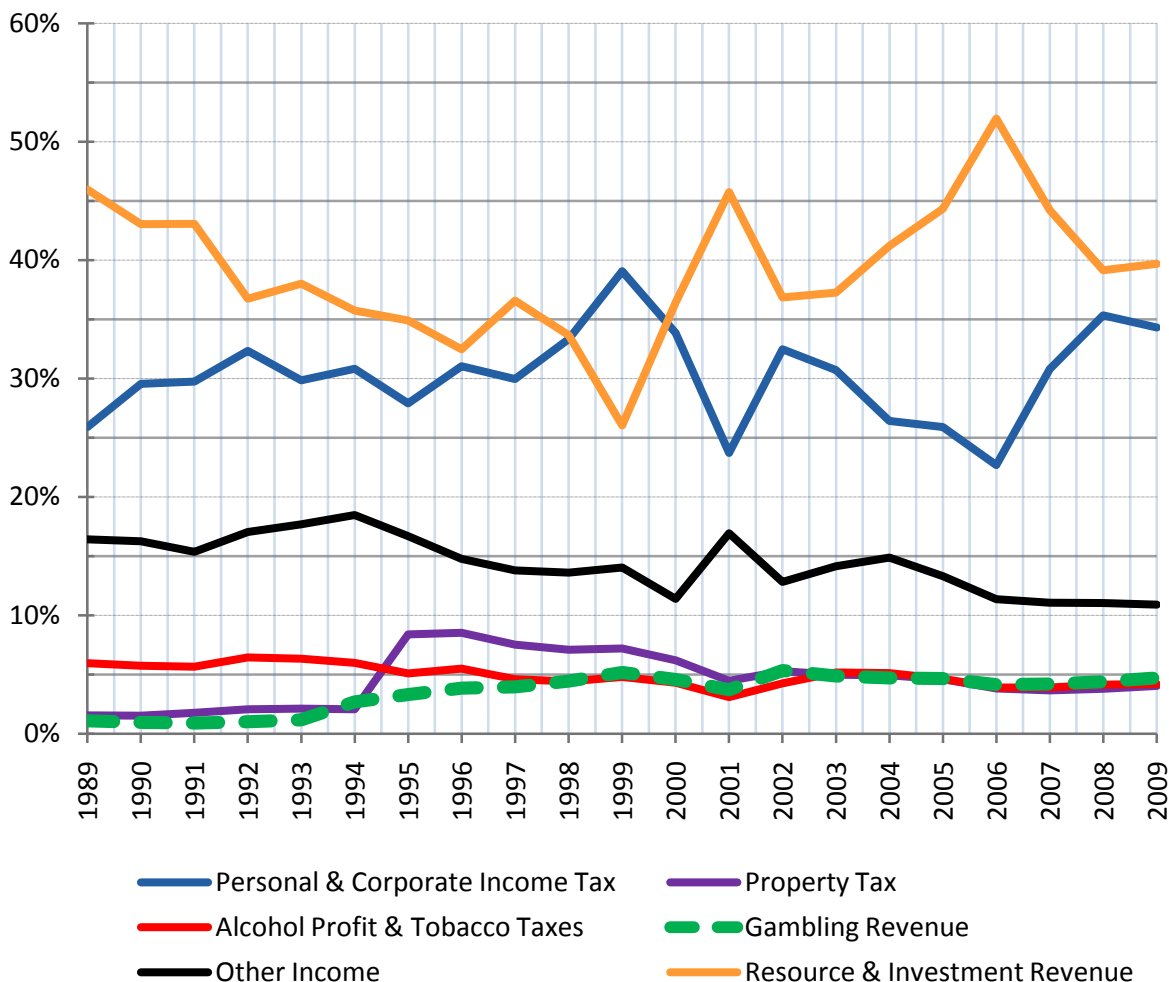
Figure 29 illustrates that gambling revenue represented only about 1% of government revenue from 1989 to 1993. This did increase significantly from 1993 to 1999 coincident with the influx of revenue from VLTs and slot machines, and has been in the range of 4 – 5% from 1998 to the present time. For the past 10 years the percentage of revenue derived from gambling has been roughly equivalent to percentage of revenue the government receives from its taxes and profits on alcohol and tobacco, as well as the percentage of revenue it receives from property taxes.

Thus, even though there has been a steep and steady increase in government gambling revenue from 1993 to 2008 (even in inflation-adjusted dollars), it is important to recognize that there have been coincident increases in more important sources of provincial government revenue in this same time period that have continued to minimize gambling’s overall contribution to provincial coffers. To be sure, the magnitude increase in government gambling revenue from 1989 to 2009 is much higher than other sources (i.e., this same Statistics Canada

⁶⁰ *Statistics Canada Table 384-0007. Taxes on production and imports, provincial economic accounts, annual. CANSIM (database).*

data shows that government gambling revenue in 2009 is 15.9 times higher than it was in 1989, compared to 9.5 times higher for property taxes, 4.8 for income taxes, 3.1 for investment income⁶¹, 2.6 for alcohol and tobacco, and 2.4 for other revenue). However, the annual increases in gambling revenue only outpaced other sources of revenue up to about 1999. After 1999 the magnitude increase in gambling revenue (2.1) is actually slightly less than the magnitude increase in all sources of government revenue (2.3).

Figure 29: Source of Annual Alberta Provincial Government Revenue from 1989 to 2009.



Source: Statistics Canada. Table 385-0002 - Federal, provincial and territorial general government revenue and expenditures, for fiscal year ending March 31. CANSIM (database).

As seen in Table 29, the Alberta government's proportion of revenue derived from gambling has tended to be higher than other provinces. Nonetheless, with gambling revenue only constituting approximately 5% of overall provincial revenue, it is too strong a claim (as is sometimes made by critics of government-run gambling) that provinces such as Alberta are

⁶¹ In Alberta 'investment income' primarily represents royalties from non-renewable resources (natural gas, oil, coal).

'addicted to gambling revenue'. There is no doubt that Alberta, like other provinces, has come to expect this additional small revenue stream each year and would miss it if it were gone. However, the reality is that if gambling revenue ended it would only require the provincial governments to effect a relatively small decrease in annual expenditures and/or a relatively small increase in other sources of revenue to compensate. (Although there is no doubt that they would be reticent to do this because of the potential political repercussions).

Table 29: Inter-Provincial Comparison of Provincial Government Gambling Revenue as a Percentage of Total Revenue.

	1992	1994	1997	2000	2001	2002	2003	2005	2006	2007
Alberta	1.1	3.8	4.2	6.3	5.4	5.9	6.9	5.2	5.5	6.2
Saskatchewan	1.0	2.9	2.7	4.4	4.8	6.1	6.5	5.1	5.4	5.8
British Columbia	1.6	2.1	1.2	3.6	3.6	4.5	4.3	4.5	5.2	5.6
Manitoba	2.4	4.2	4.1	5.5	5.5	5.6	5.0	5.2	5.3	5.3
Ontario	1.3	3.1	2.6	4.8	6.0	6.7	6.4	5.3	5.2	4.8
Nova Scotia	2.6	5.6	3.4	4.6	6.0	6.1	5.8	4.3	4.5	3.9
Quebec	1.6	3.1	3.0	5.0	5.0	4.9	4.9	4.5	3.9	3.6
New Brunswick	1.9	4.8	2.1	3.1	3.5	3.6	3.7	3.2	3.3	3.1
Prince Edward Island	1.8	5.4	2.4	3.0	3.1	3.0	3.4	3.0	3.3	3.2
Newfoundland & Labrador	2.3	4.1	3.6	4.0	4.9	2.0	5.2	3.2	4.1	2.9
Yukon, NWT, Nunavut	--	1.7	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3
CANADA				5.2	5.1	5.6	5.6	4.8	4.8	4.7

Sources: *Statistics Canada Perspectives on Labour – Gambling.*

Note: It is unclear why these Statistics Canada figures for Alberta are slightly discrepant with the some of the figures in Figure 29 (also provided by Statistics Canada).

Several factors influence the percentage of provincial government revenue that each province derives from gambling. The primary factor is the amount of money their citizens spend on gambling. Table 30 displays the strong relationship between percentage of total revenue derived from gambling, and provincial gambling revenue per adult ($r = .85, p = .002, N = 10$).

It is beyond the scope of this report to elucidate all the factors responsible for per capita gambling expenditure. However, one of the more obvious and important ones is the availability of gambling, especially the forms of gambling that garner the largest revenue (i.e., EGMs). As seen in Table 29, following the rapid introduction of casinos in most provinces in the late 1990s (later for British Columbia) the provinces and territories with casinos (in the top half of the table: Alberta, Saskatchewan, British Columbia, Manitoba, Ontario, Nova Scotia, Quebec) have tended to derive their budgets from gambling to a greater extent than provinces and territories without casinos (listed in the lower half of the table: New Brunswick, Prince Edward Island, Newfoundland and Labrador, Yukon Territory, Northwest Territories, and Nunavut). It is important to recognize that most of these latter jurisdictions nonetheless still have EGMs in bars and lounges. The lowest percentage of government revenue derived from gambling occurs in the jurisdictions without any EGMs at all: Yukon Territory, Northwest Territories, and Nunavut.

A second important factor related to per capita gambling expenditure concerns available income to spend on gambling (see Table 30). The correlation in Table 30 between average per adult gambling revenue and median after-tax income in each province is quite strong: $r = .65, p = .04$ (2 tail), $N = 10$.

Table 30: Comparison of Provincial Government Gambling Revenue.

	Gambling Revenue as % of Total Provincial Revenue in 2007	Gambling Revenue per Adult 18+ in 2008	Median After-Tax Income in 2007 for Economic Families (2+)
Alberta	6.2%	\$790	\$75,300
British Columbia	5.6%	\$540	\$63,300
Saskatchewan	5.8%	\$830	\$59,900
Manitoba	5.3%	\$690	\$58,300
Ontario	4.8%	\$465	\$65,900
Nova Scotia	3.9%	\$420	\$54,200
Quebec	3.6%	\$440	\$54,500
Prince Edward Island	3.2%	\$385	\$52,600
New Brunswick	3.1%	\$365	\$50,600
Newfoundland & Labrador	2.9%	\$480	\$50,900
CANADA	4.7%	\$520	\$61,800

Sources: Statistics Canada, *Perspectives on Labour and Income; Gambling, August 2010* and Statistics Canada CANSIM table 111-0001.

Compromise or Facilitation of Regulatory Function?

Some people have speculated that another potential impact of the fact that the Alberta government is now the largest provider and recipient of gambling revenue, is that it compromises the provincial government's traditional role as regulator of gambling and other 'problematic products' to ensure there are sufficient safeguards in place for the general public (a role it still serves for the provision of alcohol, tobacco, and drugs; firearms; etc.).

Regulatory approaches to the legal provision of gambling around the world exist on a continuum from a free market approach with the government only being involved through its traditional role as regulator (e.g., United States, Australia), to the government being very much involved in the actual provision of gambling or being the primary financial beneficiary of private gambling operations (either through a state monopoly, or high tax rates on private operators). In most jurisdictions, government control varies as a function of the type of gambling. The most common situation is where the government establishes a monopoly for lotteries (present in two-thirds of European jurisdictions, and common in North America). In several European countries only a public operator or one closely supervised by the State can manage a casino (Germany, Greece, Finland, Hungary, the Netherlands, Sweden, Slovenia).

A conflict of interest obviously exists when the regulator (i.e., government) and the operator are part of the same organization or the regulator is the primary financial beneficiary of gambling. This conflict of interest potentially compromises the regulator's ability to implement truly effective prevention policies, and to effectively regulate the operator. Effective prevention and treatment will typically negatively impact revenues, introducing a policy conflict between the protection of public health and the maximization of gambling revenues (Adams, Raeburn, & de Silva, 2009; Orford, 2009).

The actual effects of this conflict of interest are difficult to determine, as this situation tends to be confounded with other things. Many of the jurisdictions where government is the provider of gambling and/or receives most of the revenue (e.g., Canada, many European countries) are involved in gambling ostensibly to provide it in a safer and more controlled fashion to the public. With this greater concern for public welfare, these governments also tend to offer more in the way of problem gambling prevention and treatment initiatives. That being said, a) the creation of these initiatives is partly spurred on by their sensitivity to this conflict of interest criticism, and b) the initiatives that most of these governments have chosen to implement have tended to be the least effective ones (Williams, West & Simpson, 2007, 2008).⁶² In contrast, places where the government is primarily involved in the regulation rather than provision of gambling (e.g. United States, Australia), tend to have less in the way of protective measures, as these governments put more responsibility on the individual to govern their own behaviour. The power of the gambling lobby/industry is also much stronger in these types of countries and effectively deters the introduction of protective measures (Grinols, 2004).

⁶² Most of these initiatives have focused on the fairly weak strategy of better education of consumers as opposed to more effective policy initiatives that constrain the availability of gambling and how it is provided.

There are also some important lessons from the alcohol field, where the evidence indicates that monopolistic and/or government involvement in alcohol provision is associated with less harm to the general public (e.g., Miller et al., 2006; Popova et al., 2011). However, this correlational data is subject to the same confounds mentioned above. A stronger methodology involves examining the effects of privatisation of alcohol provision in jurisdictions where government monopolies previously existed. Privatization has occurred in several U.S. states (Idaho, Iowa, Maine, Virginia, Washington, West Virginia), a couple of Canadian provinces (Quebec, Alberta), and certain countries (New Zealand).⁶³ This research has generally found privatization to be associated with an increase in the number of retail outlets, longer opening hours, and *increases in overall alcohol consumption* (with overall consumption level having a statistical relationship to overall level of harm) (Holder et al., 2008; Wagenaar & Holder, 1995, 1996; cf. Trollid, 2005).

Hence, although somewhat counterintuitive, the limited evidence tends to indicate that government involvement in the provision of gambling may actually be preferable to non-involvement in terms of providing a 'safer' product.⁶⁴ To be clear, however, the issue of government versus private delivery of gambling is a complex one and the present discussion does not speak to the potential *overall* benefits of private versus government provision (i.e., in some circumstances private delivery may produce greater economic benefits and/or a better consumer product).

⁶³ Although in some of these cases it just involved elimination of certain types of alcohol provision (e.g., retail wine monopoly), and in some cases there were still restrictions on private retail (e.g., no provision in grocery stores).

⁶⁴ This does not negate the fact that a conflict of interest still exists and most governments (to date) have implemented fairly ineffectual methods of preventing problem gambling. Recognizing this, some jurisdictions have enacted legislation that targets this conflict of interest and/or requires gambling providers (government or otherwise) to effectively mitigate the harm from the provision of gambling. This has been done to some extent in Germany, the Netherlands, and Switzerland. Germany has legislation that among other things a) prohibits the pay of gambling provider executives to be tied to gambling revenue; b) requires that the monitoring of compliance with gambling regulations be done by authorities not connected to the fiscal interests of the state; c) requires all new gambling products to be reviewed by an advisory board of gambling addiction experts prior to their introduction; d) requires gambling providers to detect and exclude problem gamblers from gambling venues (Meyer, Hayer & Griffiths, 2009). The Netherlands prohibits gambling providers from making a personal profit. All games are either for 'good causes' or taxes; the one exception is slot machines outside of casinos.

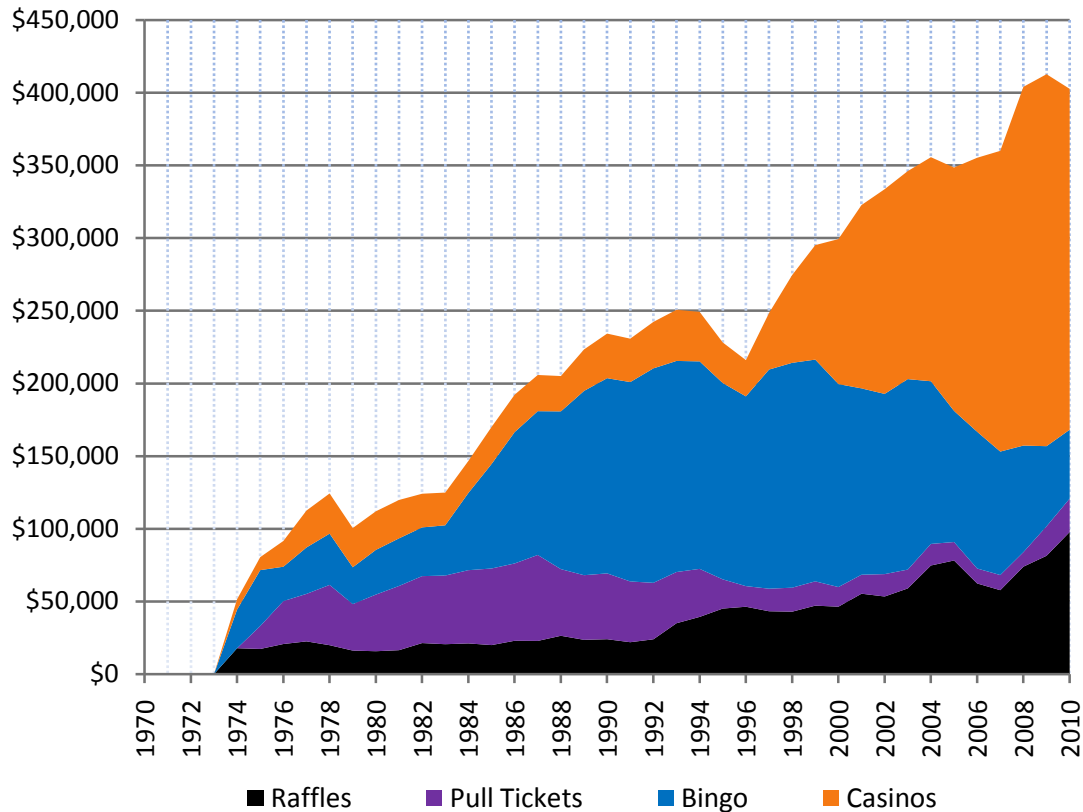
IMPACTS ON CHARITABLE ORGANIZATIONS

Charitable organizations were the major recipient of Alberta gambling revenue for over 100 years up to 1994, and the second largest recipient since 1994 (although strictly speaking, community organizations superseded charity organizations as the major benefactor of 'charity' gambling revenue since the 1980s). Hence, charity/community groups are also expected to experience important impacts.

Financial Impacts

The most self-evident impact is the ongoing ability to use gambling revenue to facilitate the activities that these community groups are engaged in, which directly or indirectly benefits the citizens of Alberta. Indeed, a recent survey of Alberta charity groups has confirmed that they are very satisfied with the current system (MLA Advisory Committee, 2010). In many jurisdictions, the emergence of EGM and casino gambling run by governments or the private sector has negatively impacted charitable gambling revenue (Azmier & Roach, 2000; Berdahl, 1999). This has not occurred in Alberta for two reasons. The first reason concerns the fact that the government of Alberta dedicates a significant portion of its own gambling revenue to community/charity grants. The amount that is allocated each year is somewhat dependent on the number of grant applications received but has kept pace with inflation and generally averaged 21% of total funds deposited in the Alberta Lottery Fund. The second reason concerns the fact that Alberta charities are allowed to directly operate and/or benefit from casino gambling. Raffles, pull-tickets, and bingo are commonly permitted forms of charitable gambling in most jurisdictions. However, most gambling revenue comes from EGMs and casino table games, and only certain jurisdictions (such as Alberta) permit charities to operate and/or receive revenue from these much more lucrative sources. As seen in Figure 30, charitable gambling revenue would have declined (in constant dollars) if casino revenue had not been added to its revenue stream (casino revenue constituted 58% of charity casino revenue in 2009/2010). For the past few years casino revenue from slots and table games has been the major source of charitable gambling revenue in Alberta.

Figure 30: Proportion of Total Net Charitable Alberta Gambling Revenue Derived from Different Gambling Formats (in thousands of 2010 dollars).



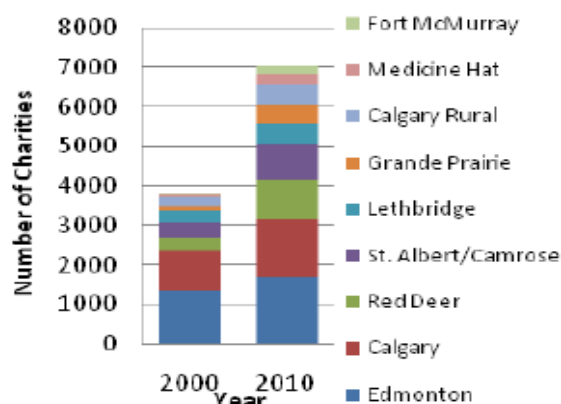
The fact that Alberta charity/community groups have had access to a reliable and expanding source of gambling revenue has some potentially negative effects, however. One issue concerns whether community groups have developed a reliance on gambling revenue over other sources of fund-raising. The Canada West Foundation conducted a study of this issue in 1999 whereby they surveyed 406/1005 Canadian organizations that received gambling grants between 1995 and 1998 (44% of these organizations being from Alberta). Sixty-nine percent of these groups considered gambling grants to be very important to their organization's revenues (Berdahl, 1999). For most organizations gambling grants did not represent a major part of their overall budget, with 46% indicating that it only accounted for between 1 – 10%. On the other hand, 20% (13% in Alberta) reported that gambling grants represented *over half of their total revenue*, with this being particularly true for sports and recreation groups compared to social, health and educational groups (Berdahl, 1999). For those groups who also directly conducted charitable gambling, 68% considered this source of revenue to be very important to their organization and 14% (20% in Alberta) reported receiving over half of their annual revenues from charitable gambling (Berdahl, 1999). Overall, gambling grants were rated as the top funding source for 28% of the sample, and rated in the top 3 funding sources for 50% of the sample. Charitable gambling was rated less highly, with 13% of respondents rating it as the top funding source, and 33% rating it in their top 3 funding sources.

A similar study was conducted by the Canada West Foundation in 2000 whereby a stratified random sample of 4,000 registered charities operating in Canada were mailed a survey, with 647 questionnaires being returned (16% from Alberta) (Azmier & Roach, 2000). Thirty four percent reported that their organization participated in providing some form of charitable gambling between 1995 and 1999. This percentage varied considerably by sector, with 62% of charitable health organizations using this form of fundraising compared to only 8% of religious organizations (Azmier & Roach, 2000). Similarly, health organizations were the most likely to identify gambling as their largest revenue source (22%) followed by culture, art and recreation (19%), social services (16%), education and research (12%), other (5%), and religion (2%). Azmier & Roach (2000) identify several reasons why gambling revenue is very attractive to charity groups. First, traditional fund-raising techniques such as door-to-door or phone solicitation, direct mail appeals, auctions, benefit performances, running/walking/biking events, galas/dinners, festivals, bake sales, etc. tend to require much more effort and tend to generate much less revenue. Second, charitable gambling revenue tends to have fewer strings attached to its use compared to other revenue sources. Third, there is strong public support for the use of gambling for charitable purposes.

Thus, it seems clear that even 10 years ago when this research was conducted many charities had come to rely on gambling revenue, with some sectors more reliant than others (Azmier & Roach, 2000; Berdahl, 1999; Campbell, 2000b). There have been no comparable studies done in recent years. However, what is clear is that there are more community groups in Alberta seeking gambling revenue than ever before. In the early 1990s it was typical for 2,000 to 3,000 community groups to receive ALF grants, whereas it has averaged 6,000 ALF grant recipients per year in the past 10 years. Similarly, in 2000 there were under 4,000 charities registered to hold a casino event. This has increased to over 7,000 in 2010, with the number of charities in some regions having grown at a much faster rate than other regions (Figure 31) (MLA Advisory Committee, 2010).⁶⁵ It is still certainly a widely held belief that many Alberta charity groups rely on charity gambling revenue (Kleiss, 2010).

⁶⁵ This situation has caused some problems, as the waiting time now to hold a casino event has increased to approximately 30 months (MLA Advisory Committee, 2010). An additional issue concerns the fact that because charities can only hold casino events in a casino located in their region (Appendix C), the ratio of charities per casino varies considerably between regions, resulting in widely different waiting times (ranging from 16 months in Fort McMurray and Medicine Hat to 34.5 months in Lethbridge). Also, because some casinos are more profitable than others, the revenue per event also varies from \$18,000 in the Camrose region to \$77,000 in the Edmonton region (MLA Advisory Committee, 2010).

Figure 31: Number of Charities per Region.



Source: March 2010 MLA Advisory Committee Report to the Alberta Solicitor General.

Another question concerns whether the charitable donations of Albertan citizens have been adversely affected by the ability of community groups to raise revenue through gambling. This issue is addressed to some extent in Table 31, which lists the average and median charitable donation listed on Alberta tax returns from 1997 to 2009 (in 2010 inflation-adjusted dollars). As can be seen, charitable donations by year have actually increased over time, although they have been fairly stable as a percentage of after tax income. In general, provincial comparisons tend to show that the size of charitable donations in each province is more strongly associated with average provincial income.

Table 31: Annual Average and Median Charitable Donations by Albertan Tax Filers.

	Average donation (2010 inflation adjusted dollars)	Average donation as % of inflation- adjusted after tax income	Median donation (2010 inflation adjusted dollars)	Median donation as % of inflation-adjusted after tax income
1997	\$1442	5.5%	\$265	1.0%
1998	\$1465	5.6%	\$276	1.1%
1999	\$1514	5.5%	\$297	1.1%
2000	\$1545	5.4%	\$299	1.1%
2001	\$1583	5.2%	\$318	1.0%
2002	\$1645	5.5%	\$308	1.0%
2003	\$1731	5.7%	\$307	1.0%
2004	\$1863	5.9%	\$326	1.0%
2005	\$2113	6.4%	\$330	1.0%
2006	\$2354	6.7%	\$351	1.0%
2007	\$2402	6.5%	\$365	1.0%
2008	\$2239	6.0%	\$364	1.0%
2009	\$2086	NA	\$370	NA

Source: Statistics Canada. Table 111-0001 – Summary of charitable donors, annual. Revenue Canada database. [Statistics Canada Charitable Donations \(1997 - present\)](#)

Ethical Issues

Another potential impact is a philosophical one. As mentioned earlier, the ability of community/charitable groups in Alberta to directly provide and directly or indirectly receive revenue from slot machines and casino table games is different than in most jurisdictions, where charity groups are more typically limited to providing bingos, raffle tickets, pull-tickets and/or having access to jurisdictional gambling revenues just through a granting program. This has created conflict within some organizations uncomfortable with receiving direct funding from something that potentially is creating harm.

There have only been a few studies that have looked at this issue within a Canadian context. In a survey of Canadian charity groups, Azmier & Roach (2000) found that among the 66% of Canadian charity groups that opted not to use gambling revenue, ethical concerns were cited as a factor behind this decision by 63% of these organizations (90% for religious organizations). Even among the organizations that did use gambling money, 49% reported that someone in their organization had voiced ethical concerns about this source of revenue, 58% indicated that they would prefer to raise revenue through other means (but were unable to), and 27% indicated that they did not personally believe that charitable gambling was an ethical method of fundraising. Very similar findings were reported in a very similar study conducted by Berdahl (1999).

The main stated reasons for these ethical concerns were: a belief that gambling is related to addiction, family breakdown, and crime; charitable gambling increases the number of problem gamblers; and perceived hypocrisy in using a fundraising method that would increase the number of people who turn to the charity sector for assistance (Azmier & Roach, 2000). There were also differences as a function of type of gambling, with the majority of respondents indicating that raffles and bingo were acceptable forms of gambling for charities, but only 20-21% indicating that VLTs and slot machines were acceptable.

Suffice to say that this ethical issue has not been resolved and is as prominent and polarizing in 2011 as it was in 2000, with certain groups (particularly the Catholic church) being particularly vocal in their public opposition to charity fundraising in Alberta through casinos (Bounds, 2011; CBC News, 2010; Ramp & Badgley, 2009).

Saliency

A final issue concerns the fact that charitable groups that rely on gambling revenue for fundraising often will have less need for ongoing fundraising efforts, as revenue from the 2-day casino event supplies much of their needs. Consequently, the visibility of these groups in the community can be lessened. This is an issue explored further in the Key Informant section of this report.

IMPACTS ON SOCIETY

The citizens of Alberta are the ones who partake in legalized gambling and are also the primary recipients of the benefits disbursed by the provincial government and charitable organizations. Thus, they constitute a particularly important sector in which impacts are anticipated.

Government and Charitable Services

As has already been clearly stated, Albertans are the direct recipients and primary beneficiaries of the roughly \$2 billion dollars annually that the provincial government and charity/community organizations have collected in net gambling revenue in the past few years (Figure 28, p. 125). In addition, beginning in 2007 Albertan citizens of First Nations communities have also started to receive similar direct benefits deriving from the new First Nations casinos. These collective benefits are primarily manifest in terms of maintained and/or perhaps enhanced public services, and/or a decreased need to raise *involuntary* taxes (in the case of non-First Nations communities). These represent some of the most important and unambiguously positive benefits of legalized gambling in Alberta. (Maintained and/or enhanced public services have tended to be a reliable impact of gambling across all jurisdictions that have studied this issue (Williams, Rehm, & Stevens, 2011)).

Employment

Most studies of the socioeconomic impacts of gambling have found increased employment associated with gambling introduction (Williams, Rehm, & Stevens, 2011). However, this is primarily due to the limited scope of most of these studies, in that they only examined employment changes in the local region where the new gambling venue was located without determining whether there were potential losses in other regions. When a larger geographic scope is used, then net jurisdiction-wide employment gains are not usually found (Williams, Rehm, & Stevens, 2011). These same investigators have also found that there are significantly different gambling impacts as a function of *type* of gambling. There is greater potential for employment gains in labour intensive forms of gambling such as horse racing and casinos, and greater potential for employment losses with automated forms of gambling such as EGMs.

There are a couple of sources of data that can potentially speak to employment impacts of gambling for Alberta. One source is the provincial database for registered gaming workers. Anyone who is paid to assist a licensed gambling facility (e.g., casino, racing entertainment centre, bingo hall) is required to register with the Alberta Gaming and Liquor Commission as a gaming worker, as a condition of employment. This includes security guards, cashiers, book keepers, etc., in addition to personnel who directly deliver or manage the gaming operations (e.g., slot operators, slot managers, pit bosses, bingo hall manager, etc.). Unfortunately,

although this database was provided to the Research Team by AGLC, it proved to be of limited utility as gaming employees are not routinely removed from the registry when they leave the industry, which does not permit a determination of number of gaming employees at any given time. This registry information also does not contain information on employment prior to becoming a registered gaming employee. Knowing whether the new employee was previously unemployed or not and, if he/she was previously employed, which industry sector he/she came from is critical in helping to understand whether these gaming jobs are 'new' jobs or are simply jobs that have been redirected from other sectors of the economy.

A second, more useful source of information on gambling industry employment and wages among gaming employees is available from Statistics Canada. The Survey of Employment, Payrolls and Hours is derived from the Business Payroll Survey collected by Revenue Canada. Pertinent data from this survey is presented below in Table 32. This table indicates the annual number of employees in Alberta who can be classified as working for 'Gambling Industries' as defined by the North American Industry Classification System (NAICS) (code 7132). This includes everyone employed in 'casinos', 'lotteries' and 'other gambling industries'. However, it does not appear to include the estimated 3,084 full-time equivalent (FTE) positions of people who indirectly or directly worked in the horse racing industry in 2001 (Econometric Research, 2001) or the 2,753 estimated FTE positions in 2007 (Serecon Management, 2009).

Table 32 indicates that the number of gambling employees in Alberta increased from 2,800 in 1991 to 4,600 in 2009. However, this increase is roughly equivalent to the increases seen in the general Alberta workforce, with gambling employees constituting slightly less than 0.3% of the Alberta workforce throughout this period. This is a fairly small workforce for what is now an annual \$2.5 billion industry. However, since 1994 the large majority of Alberta gambling revenue has come from automated electronic gambling machines (VLTs and slot machines) (73% of all revenue in 2009), and EGMs are the least labour-intensive form of gambling.

The wages and working conditions of Alberta gambling employees do not tend to be as favourable as employees in other sectors of the Alberta workforce. For one thing, the large majority of gambling employees in Canada are paid by the hour rather than on salary, with this percentage increasing from 80% in 1997 to 85% in 2009. By comparison, 61% of Canadian non-gambling employees were paid by the hour in 1997 and 65% in 2009 (Marshall, 2010). Average wages are also lower, as seen in Table 32. For hourly gambling employees, their hourly wage is not only lower than the Alberta workforce, but has steadily gone down as a percentage of the Alberta hourly wage, from approximately 77% in 1991 to 64% in 2009. Wages tend to be more favourable for salaried gambling employees, whose wages have tended to be in the range of 70% to 90% of Alberta salaried employees in this time period. In general, the lower wages of the gambling workforce is likely reflective of the fact that many gambling employees are not highly skilled (53% of gambling employees in Canada in 2009 had a high school education or less compared to 40% in the general Canadian workforce) (Marshall, 2010). Other relevant factors are that gambling employees have also tended to be slightly younger than the Canadian workforce and have historically been more likely to be female (although there is now an equal sex ratio as of 2009) (Marshall, 2010).

Table 32: Alberta Gambling Employees Compared to the Alberta Workforce.

	Number of Alberta Gambling Employees	Number of Alberta Employees	Gambling Employees as % of Alberta Workforce	Standard Work Week Hours of Alberta Gambling Employees	Average Hourly Wage of Alberta Gambling Employees paid a Fixed Salary	Average Hourly Wage of Alberta Employees paid a Fixed Salary	Average Hourly Wage of Salaried Gambling Employees as a % of Alberta Employees	Average Hourly Wage of Alberta Gambling Employees paid by the Hour	Average Hourly Wage of Alberta Employees paid by the Hour	Average Hourly Wage of Alberta Hourly Gambling Employees as a % of Alberta Employees
1991	2,796	1,077,406	0.26%	34.3	\$16.22	\$18.75	86.5%	\$10.57	\$13.61	77.7%
1992	3,003	1,041,403	0.29%	34.2	\$16.95	\$19.26	88.0%	\$10.31	\$14.09	73.2%
1993	3,734	1,037,632	0.36%	34.1	\$16.17	\$19.54	82.8%	\$11.39	\$14.42	79.0%
1994	3,610	1,080,082	0.33%	33.3	\$17.06	\$19.73	86.5%	\$10.96	\$14.28	76.8%
1995	3,482	1,088,098	0.32%	33.4	\$16.93	\$20.04	84.5%	\$10.64	\$14.05	75.7%
1996	3,320	1,107,093	0.30%	33.9	\$17.14	\$20.78	82.5%	\$12.66	\$14.57	86.9%
1997	3,631	1,181,770	0.31%	35.3	\$16.58	\$21.33	77.7%	\$11.94	\$15.07	79.2%
1998	3,585	1,220,540	0.29%	34.0	\$15.25	\$21.99	69.4%	\$9.81	\$15.85	61.9%
1999	3,458	1,229,369	0.28%	35.2	\$15.60	\$22.25	70.1%	\$9.22	\$16.67	55.3%
2000	3,615	1,293,962	0.28%	33.8	\$16.30	\$23.04	70.8%	\$11.23	\$16.86	66.6%
2001	3,823	1,375,133	0.28%	36.8	\$17.74	\$23.96	74.0%	\$10.14	\$16.86	60.1%
2002	4,343	1,413,622	0.31%	37.7	\$18.36	\$24.48	75.0%	\$9.64	\$17.18	56.1%
2003	3,801	1,440,718	0.26%	38.5	\$21.10	\$25.23	83.6%	\$12.00	\$18.03	66.6%
2004	3,955	1,486,879	0.27%	37.0	\$22.37	\$26.28	85.1%	\$10.73	\$18.46	58.1%
2005	4,366	1,561,081	0.28%	36.2	\$23.96	\$27.12	88.4%	\$11.36	\$19.48	58.3%
2006	4,698	1,659,478	0.28%	35.6	\$25.61	\$28.20	90.8%	\$12.49	\$20.65	60.5%
2007	4,634	1,729,599	0.27%	38.6	\$22.69	\$29.80	76.1%	\$14.34	\$21.75	65.9%
2008	4,955	1,776,925	0.28%	37.0	\$23.83	\$31.76	75.0%	\$14.87	\$23.14	64.3%
2009	4,632	1,729,785	0.27%	--	--	\$32.77	--	--	\$23.33	--

Sources: Statistics Canada. Table 281-0024 – Employment; Table 281-0038 Standard Work Week; Table 281-0036 Average Hourly Earnings for Salaried Employees; Table 281-0030 Average Hourly Earnings for Employees Paid by the Hour.

An additional Statistics Canada survey provides information on a) the employment status of people before they entered the gambling industry; b) which industry they came from; c) which industry they left the gambling industry to go to; and d) wage differentials between gambling and non-gambling employment. This is the Labour Force Survey, where a stratified sample of 54,000 survey participants from economic regions within each province are contacted monthly for a 6 month period. Data from this survey was tabulated by Dr. Brad Humphreys from the University of Alberta from the period 1996 to 2009. The data set showed a weighted count of 1,081 Alberta gambling employees in 1997, increasing to 2,669 in 2009.

The first thing of note from this data set (Table 33) is that a significant percentage of people newly employed in the gambling industry from 2003 to 2009 were previously unemployed. This is important as all of these jobs represent 'new' jobs rather than jobs that have been lost in other industry sectors. Furthermore, it is likely that a significant percentage of these individuals would have either been receiving unemployment or welfare benefits or other forms of public assistance prior to their new employment in the gambling sector. It is interesting to note that the unemployment rate among new hires in the gambling industry was considerably higher than the quite low unemployment rate in the fairly robust Alberta economy (relative to Canada) during this time period.

Table 33: Prior Employment Status of New Gambling Employees.

	Unemployment Rate among New Alberta Gambling Employees	Alberta Unemployment Rate (age 15+)	Canadian Unemployment Rate (age 15+)
2003	55.9%	5.1%	7.6%
2004	38.5%	4.6%	7.2%
2005	49.0%	3.9%	6.8%
2006	30.1%	3.4%	6.3%
2007	17.5%	3.5%	6.0%
2008	28.8%	3.6%	6.1%
2009	11.5%	6.6%	8.3%

Source: Statistics Canada Labour Force Survey and Statistics Canada Table 109-5304-Unemployment Rate.

This data set also showed that new gambling employees were found to most frequently come from relatively low skilled employment categories in the construction, retail, food services, education and mining and gas extraction sectors (see left side of Table 34). These also tend to be the most common sectors of employment in Alberta in 2006, indicating that gambling employees do not come from any specific industry sectors. (Health care was the only common employment sector that was under-represented in new gambling employees). The right column of Table 34 illustrates the primary industry sectors that people go to when they end their employment in the gambling industry. As can be seen, there is a similar general dispersion among a wide variety of different (relatively low skilled) sectors for people leaving the gambling industry.

Table 34: North American Industry Code System (NAICS) Codes of Workers Entering and Leaving the Gambling Industry.

Entering Gambling Industry		Leaving Gambling Industry	
Code	Job Sector	Code	Job Sector
2382	Building Equipment Contractors	4453	Beer, Wine and Liquor Stores
2383	Building Finishing Contractor	5614	Business Support Services
4521	Department Stores	4521	Department Stores
6111	Elementary and Secondary Schools	7224	Drinking Places (alcohol)
7221	Full Service Restaurants	5613	Employment Services
4451	Grocery Stores	7221	Full-Service Restaurants
7222	Limited Service Eating Places	4451	Grocery Stores
2361	Residential Building Construction	7222	Limited-Service Eating Places
5617	Services to Buildings and Dwellings	6215	Medical and Diagnostic Laboratories
7223	Special Food Services	6212	Offices of Dentists
2131	Mining, Oil, & Gas Extraction Support	6213	Offices of Other Health Practitioners
		6211	Offices of Physicians
		7139	Other Amusement & Recreational Industries
		4529	Other General Merchandise Stores
		2389	Other Specialty Trade Contractors
		7111	Performing Arts Companies
		7212	RV Parks and Recreational Camps
		7112	Spectator Sports
		7211	Traveler Accommodation

Source: Statistics Canada Labour Force Survey. Data tabulated by Dr. Brad Humphreys (University of Alberta).

Statistics Canada data (Table 281-0023) also shows there to be a relatively high degree of month to month change in workforce numbers, with the average month to month percentage change in the period January 1991 to July 2010 being either an increase of 3.8% or a decrease of 3.5% (but ranging as high as 28% increases and 21% decreases). What these changes indicate is a high degree of workforce instability with a significant number of new hires each year to replace a significant number of people who have either quit or been fired or laid off.

Statistics Canada data also revealed that the hourly wage in the person's previous employment was not statistically different from the hourly wage in his/her new job in the gambling sector (although this does not take into account the fact that 31% of gambling employees also receive tips, a rate much higher than most other industries, Marshall (2010)). On the other hand, the data indicates that the hourly wage for people who leave the gambling industry tended to be significantly higher than in their previous employment.

In summary, gambling employees only represent a small fraction (~ 0.4%) of the Alberta workforce. This percentage has not changed appreciably in the past 20 years despite significant increases in gambling revenue (likely due to the fact that the major generator of this increased revenue (EGMs) is not a labour-intensive form of gambling). A significant percentage of people newly employed in the gambling industry were previously unemployed, and thus their employment represents 'new jobs' (~2,000) created by gambling rather than jobs that have been cannibalized from other industries. Newly hired gambling employees tend to come from

relatively low skilled employment categories in a wide variety of different industries. There is also a high degree of turnover among these employees, with these individuals moving into a similar wide variety of relatively low skilled industry sectors. The wages and working conditions of most Alberta gambling employees do not tend to be as favourable as employees in other sectors of the Alberta workforce. The lower wages is reflective of the fact that many gambling employees are not highly skilled and they have tended to be somewhat younger than the Canadian workforce.

Leisure Activity

One of the important positive impacts of gambling is that it offers entertainment value and an additional leisure option for the population. Furthermore, the fact that the majority of people in western countries participate in some form of gambling and that gambling revenue in many jurisdictions is in the billions of dollars provides evidence of its value to society. Gambling is also a popular leisure activity for Albertans. As the earlier Table 18 (p. 103) documents, the large majority of the population has participated in one or more forms of gambling over the past 20 years. Furthermore, as the earlier Figure 18 (p. 96) illustrates, roughly about 2.5% - 3.0% of Albertan's after tax income is currently spent on gambling.

However, to put this leisure benefit in context it must be remembered that the purchase of lottery tickets is actually the only 'normative' gambling activity for Albertans, with about 3/5 adults participating on an annual basis. All other forms are patronized by the minority of the population: approximately 2/5 participate in raffles; 1/3 purchase instant win tickets; 1/5 engage in social gambling; 1/7 gamble at out-of-province casinos, 1/7 play slot machines; 1/8 play VLTs; 1/11 bet on sports; 1/11 purchase high risk stocks; 1/11 play casino table games; 1/20 play bingo; 1/25 bet on horse racing; and about 1/35 engage in Internet gambling. For those who do gamble, the average number of forms engaged in was 2.4 (in 2008).

Similarly, it must also be remembered that the large majority of gambling revenue comes from a very small percentage of the population (i.e., ~6% of the population account for 75% of the revenue; Figure 22, p. 109). Thus, while the average annual adult Albertan expenditure on government-sponsored gambling is currently in the range of \$851 (Figure 17, p. 95), the self-reported median and modal expenditure on gambling in 2008/2009 is only \$120 per person per year.

In addition to these behavioural indices, it is instructive to know the extent to which Albertans *report* valuing gambling as a leisure activity. The 2008 population survey asked the question "How important is gambling to you as a recreational activity?", with response options varying from not at all important to very important (this question was not asked in the 2009 population survey). As seen in Table 35, despite high levels of patronage for certain forms, only 4.6% of respondents indicated they considered gambling to be an important recreational activity for them.

Table 35: Importance of Gambling as a Recreational Activity in 2008.

Not at all important	75.8%
Not very important	19.6%
Somewhat important	3.7%
Very important	0.9%

Further analysis established that there was a significant positive correlation between individuals reporting gambling to be an important leisure activity, and his/her frequency of gambling ($r = .42, p < .00001, N = 2995$) as well as the number of gambling formats he/she engages in ($r = .47, p < .00001, N = 2995$). Problem gamblers were the group most likely to report that gambling was a somewhat or very important recreational activity to them (35.3%).

The impact of gambling on leisure activity was also investigated by asking the question in the 2008 population survey “Has gambling replaced other recreational activities for you in the past 5 years?”. Only 2.6% of the overall sample said “yes”, with a wide range of different activities identified as having been replaced: participating in sports (playing, coaching) (33.8%), outdoor leisure (e.g., walking, camping, driving, off-roading, horseback riding) (16.2%), going to the movies (10.3%), drinking (going to bar) (10.3%), interacting/spending time with friends (7.4%), artistic activities (drawing/painting, singing, playing music, dancing, photography, writing, designing, etc.) (7.4%), watching television (4.4%), attending cultural activities (4.4%), travelling (2.9%), other hobbies or crafts (e.g., collecting, knitting/sewing, puzzles, etc.) (2.9%), interacting/spending time with family (2.9%), reading (1.5%), gardening (1.5%), computer activities (surfing Internet, gaming, etc.) (1.5%), playing card or board games (1.5%), shopping (1.5%), other forms of gambling (1.5%), other (7.4%).

Here again, the likelihood of gambling replacing other recreational activities was significantly correlated with frequency of gambling ($r = .20, p < .00001, N = 2997$) and number of gambling formats engaged in ($r = .22, p < .00001, N = 2997$). Problem gamblers were the group most likely to report that gambling had replaced other recreational activities (41.5%).

In summary, the fact that most Albertans have participated in some form of gambling in the past year provides evidence that certain forms of gambling (primarily lotteries and raffles) are valued leisure activities. A much smaller percentage of Albertans participate in multiple forms of gambling on a frequent basis. These are also the individuals most likely to report that gambling is actually an important leisure activity to them (something that most Albertans do not report).

Consumer Surplus

Some economists have attempted to quantify the leisure benefits of gambling in terms of ‘consumer surplus’, which is the difference between what people would be willing to pay for a

product or service versus what they actually pay. The utility of this approach is that it provides a more tangible quantification of one of the primary positive impacts of gambling that is often not taken into account when assessing the costs and benefits of gambling, and it also serves as a counterpoint to the more tangible monetary costs of gambling.

However, there are both theoretical and practical difficulties with this approach. The main theoretical problem concerns whether it is appropriate to apply monetary quantification to something that is primarily non-monetary in its nature and value (i.e., leisure activity). The argument made in the first section of this paper is that it is a mistake to try to quantify social impacts (e.g., suicide, divorce, psychic trauma of being a problem gambler, leisure benefits) into monetary terms. A more practical problem concerns the fact that trying to calculate consumer surplus for gambling is very difficult, as a) demand for gambling is not independent of its legal availability, b) it is unclear how to reliably establish what gamblers would be willing to pay for this service, c) a significant portion of the demand and consumption of this service comes from problem gamblers (Williams & Wood, 2004, 2007) (i.e., it is difficult to argue they derive benefit from their addictive consumption).

Quality of Life/Public Health/Social Capital/Subjective Well-Being

Arguably the most important consideration in examining gambling impacts is its overall impact on the quality of people's lives. Some people have argued that legalized gambling promotes capitalism and materialism, which are not necessarily conducive to social and societal harmony. Other people argue that this is true, but that gambling and a capitalistic orientation also promotes risk-taking and entrepreneurship, which is fundamental to economic success, and thereby, societal well-being.⁶⁶ Yet another argument is that gambling is not compatible with genuine entrepreneurship as it tends to promote the notion that something can be gained for nothing.

Unfortunately, impacts in this area are also the most difficult to measure. One problem concerns some lack of agreement on what constitutes 'quality of life' and how it should be measured. The second problem concerns the need for great scientific rigour in empirically disentangling these effects. For example, it is just as likely that western society's capitalistic/materialistic orientation is part of the reason why people have increasingly engaged in gambling and why political leaders have increasingly legalized it. (Although a more important reason likely concerns society's increased liberal attitudes toward historically prohibited activities such as prostitution, substance use, sexual orientation, etc.).

From a theoretical perspective it may be unrealistic to anticipate gambling to have population wide impacts on quality of life, when regular gambling involvement occurs in just a small

⁶⁶ Indeed, the research literature shows that the most common report of improved quality of life associated with gambling occurs with the introduction of a successful casino hosted by an impoverished U.S. Aboriginal community (Williams, Rehm, & Stevens, 2011).

percentage of the population (i.e., remembering that about 25% of people do not gamble at all, and for those that do gamble, most only buy the occasional lottery and raffle ticket). The possible exceptions to this are reserve communities hosting an economically successful casino, where widespread economic and social benefits typically occur (Williams, Rehm, & Stevens, 2011).

Thus, a more pertinent (and answerable) question concerns the impact of gambling involvement at an individual level. One way of addressing this question is through an examination of subjective well being; more specifically, self-reported levels of happiness and stress as a function of whether a person engages in gambling or not. Gambling participation as a function of self-reported stress and happiness was asked in the 2008 population survey (not in the 2009 survey) and the results are reported in Table 36. For comparison purposes the lower levels of happiness and higher levels of stress observed among problem gamblers (measured by the PPGM) are also presented. A Chi Square test found that happiness ratings were significantly different between gamblers and nongamblers (Chi square (4 df) = 27.8, $p = .000014$). A z test of column proportions determined that the specific differences were higher levels of 'very high' happiness among the nongamblers, and correspondingly lower levels of 'high' happiness relative to gamblers. Here again, it is impossible to know whether nongambling is more conducive to happiness or whether happier people are just less likely to gamble.⁶⁷ In either case, these results indicate that *nongambling* bears a somewhat stronger association with self-reported happiness.

In contrast to levels of happiness, no significant difference was found for levels of stress between gamblers and nongamblers (Chi Square (4 df) = 4.43, $p = .351$).

Table 36: Self-Rated Stress and Happiness as a Function of Past Year Gambling Status (2008).

		Non-Gambler		Gambler		Problem Gambler	
		#	%	#	%	#	%
In the past 12 months how would you rate your overall level of happiness?	Very Low	8	1.0%	23	1.1%	3	4.5%
	Low	21	2.6%	68	3.1%	7	10.6%
	Moderate	298	35.7%	795	36.9%	34	51.5%
	High	321	38.5%	961	44.6%	15	22.7%
	Very High	184	22.1%	310	14.4%	7	10.6%
In the past 12 months how would you rate your overall level of stress?	Very Low	129	15.6%	305	14.2%	2	3.0%
	Low	162	19.5%	480	22.3%	8	12.1%
	Moderate	370	44.7%	902	42.0%	35	53.0%
	High	114	13.8%	312	14.5%	12	18.2%
	Very High	53	6.4%	149	6.9%	9	13.6%

⁶⁷ A multiple regression on this same data set shows that although nongambling is still a statistical predictor of level of happiness, that it is less predictive than several other things (i.e., absence of addictive behaviour, age, nonuse of tobacco, gender).

It is also instructive to look at the association between *level* of gambling involvement and level of happiness and stress when removing both problem gamblers and nongamblers from the analysis. When this is done, no significant association between happiness and level of gambling involvement was found as a function of number of formats engaged in ($r = .036, p = .095$, 2 tail, $N = 2091$); frequency of gambling ($r = .024, p = .265$, $N = 2091$); or net/win losses on gambling ($r = -.022, p = .350, N = 1885$). Similarly, no significant association between level of stress and level of gambling involvement was found as a function of number of formats engaged in ($r = -.035, p = .114$, 2 tail, $N = 2082$); or net/win loss on gambling ($r = -.014, p = .548$, 2 tail, $N = 1877$). However, there was a significant negative association between level of stress and frequency of gambling (indicating a higher frequency of gambling is associated with *lower* stress) ($r = -.093, p = .000022$, 2 tail, $N = 2082$). The percentage of variance accounted for with this latter result is very small, however (less than 1%).

In general, the impact that gambling has on quality of life and subjective well-being is very difficult to establish. What the present results indicate is that nongamblers are somewhat more likely to be 'very happy' compared to gamblers and that over involvement in gambling (i.e., problem gambling) is associated with less happiness and more stress. When excluding nongamblers and problem gamblers from the analysis, there is no significant association between level of gambling involvement and level of happiness and essentially no meaningful association between level of stress and level of gambling involvement.

Socioeconomic Inequality

Virtually all prior studies of gambling have found it to be regressive, with lower income people contributing proportionally more to gambling revenue than higher income people, although the average amounts contributed tend to increase with income group (Williams, Rehm & Stevens, 2011).

Similarly, the most recent data from Statistics Canada Survey of Household Spending (SHS), seen in Table 37, suggests that although lower income Canadians report a slightly lower average amount of gambling expenditure, as a proportion of total income it represents a higher percentage than higher income groups (Marshall, 2010). (Note: as mentioned earlier, there is a poor match between reported household expenditure on gambling in the SHS relative to actual revenue per household (e.g., Alberta households reported spending \$363 in 2008 on gambling compared to approximately \$2,000 per household in actual revenue). Nonetheless, because the bias/flaws in the question wording are similar across income groups, comparisons between income groups may still be valid).

Table 37: Household Past Year Reported Expenditure on Gambling in Canada by Household Income Group in 2008.

Household Income	% who Gamble	Average Household Gambling Expenditure		Gambling as a % of Total Income	
		All Households	Households that Gamble	All Households	Households that Gamble
Less than \$20,000	51%	\$200	\$395	1.5%	2.8%
\$20,000 to \$39,999	66%	\$330	\$500	1.1%	1.7%
\$40,000 to \$59,999	73%	\$345	\$475	0.7%	1.0%
\$60,000 to \$79,999	77%	\$305	\$390	0.4%	0.6%
\$80,000 and over	78%	\$430	\$555	0.4%	0.5%
AVERAGE	70%	\$335	\$480	0.5%	0.6%

Source: Statistics Canada, Survey of Household Spending.

On the other hand, earlier research (Table 22a, p. 111) has also documented that the roughly 6% of people who contribute 75% of reported Alberta gambling revenue tend to be in somewhat higher income brackets compared to the general population. Thus, a more detailed examination of Alberta gambling expenditure as a function of income group is warranted.

The primary source of data on gambling expenditure comes from the population surveys. Table 38 presents the combined data from the 2008 and 2009 Alberta population surveys (i.e., General Population + Online + Targeted Samples) that contain reports from 12,587 adult Albertans ($N = 15,166$ minus 2,579 missing cases for people who did not report income). Aggregate personal monthly expenditure on all government-sponsored gambling (i.e., everything except Internet gambling, social gambling, and gambling on high risk stocks), was determined for individuals in each income group and multiplied by 12 to produce a yearly amount.

Results are similar to what was found with the Canadian Survey of Household Spending, in that people in higher income brackets spend proportionately less of their income on gambling than do people in lower income brackets.⁶⁸ However, the highest average expenditure occurs in people within the highest income bracket (although the second highest average occurs in the < \$20,000 income group). Further to this point, although gambling in Alberta is clearly regressive, the last column of Table 38 shows that the majority of total reported gambling expenditure (52.5%) comes from people with higher than average incomes (i.e. \geq \$50,000) (median personal income in 2008 in Alberta was \$35,550⁶⁹). It is also important to recognize that Table 37 shows that *average* gambling expenditure is many times higher than *median* expenditure because of a

⁶⁸ It is worth remembering that lower income people spend proportionally more of their income on *most* consumer products compared to higher income people.

⁶⁹ *Statistics Canada Table 111-0008. Individuals by Total Income Level, by Province and Territory.*

very small percentage of people in each group with very high expenditures. Hence the higher regressivity of gambling revenue (that still occurs with median expenditure) is essentially inconsequential for the large majority of people. This serves to remind us that problem gambling status is a much stronger predictor of gambling expenditure (see Table 22b, p. 111) than is income.

Table 38: Past Year Reported Expenditure on Gambling in Alberta by Personal Income Group in 2008/2009.

Personal Income Category	Average Past Year Gambling Expenditure	% of Income Average Past Year Expenditure Represents	Median Past Year Gambling Expenditure	% of Income Median Past Year Expenditure Represents	% of Total Past Year Reported Expenditures
Less than \$20,000	\$1,982	9.9%	\$120	0.6%	26.4%
\$20,000 to \$40,000	\$1,109	3.7%	\$144	0.5%	21.1%
\$50,000 to \$70,000	\$1,254	2.1%	\$144	0.2%	21.3%
\$80,000 to \$100,000	\$981	1.1%	\$180	0.2%	9.9%
\$110,000 and Higher	\$2,280	1.8%	\$168	0.1%	21.3%

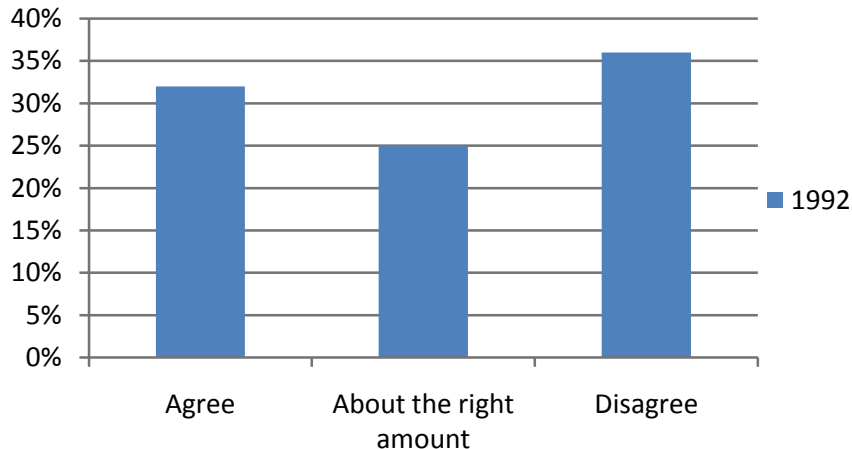
Note: Income group was self-reported, with the person asked to indicate to the nearest \$10,000 how much personal income they made in the past calendar year.

Attitudes

An argument can be made that the general public's current support or non-support of gambling is as important as gambling's objective beneficial or detrimental effects. Attitudes toward gambling have not been assessed as frequently as participation rates or problem gambling prevalence. In 'modern times', the first population survey that inquired about Albertan's attitudes toward legal gambling was done in 1992 (see Appendix B for details). In that year 1,277 adult Albertans were asked whether they agreed or disagreed with the statement "There is too much legal gambling in Alberta". As can be seen in Figure 32, in 1992 more people disagreed with this statement than agreed.⁷⁰ However, this survey was carried out when there were only 7 casinos offering just table games, and before the introduction of VLTs (in March of that year), slot machines, and satellite bingo.

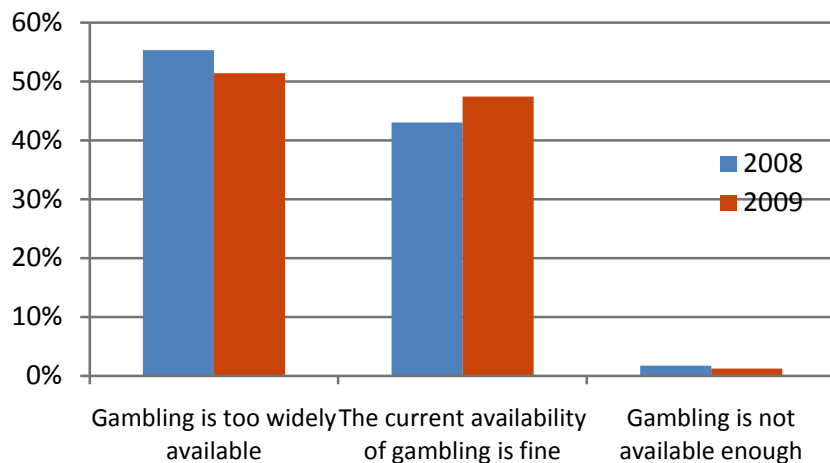
⁷⁰ Agree and disagree response options have been collapsed into just Agree or Disagree categories. Original response options were: strongly disagree, moderately disagree, slightly disagree, slightly agree, moderately agree, strongly agree.

Figure 32: There is too much legal gambling in Alberta?



A similar question was asked in the 2008 and 2009 population surveys (sample size of 3,001 in 2008 and 1,004 in 2009), where much different results were obtained (Figure 33). Although a significant number of people are content with the current availability of gambling, the majority of people in both 2008 and 2009 believe that gambling is too widely available. Very few people believe that gambling is not sufficiently available.

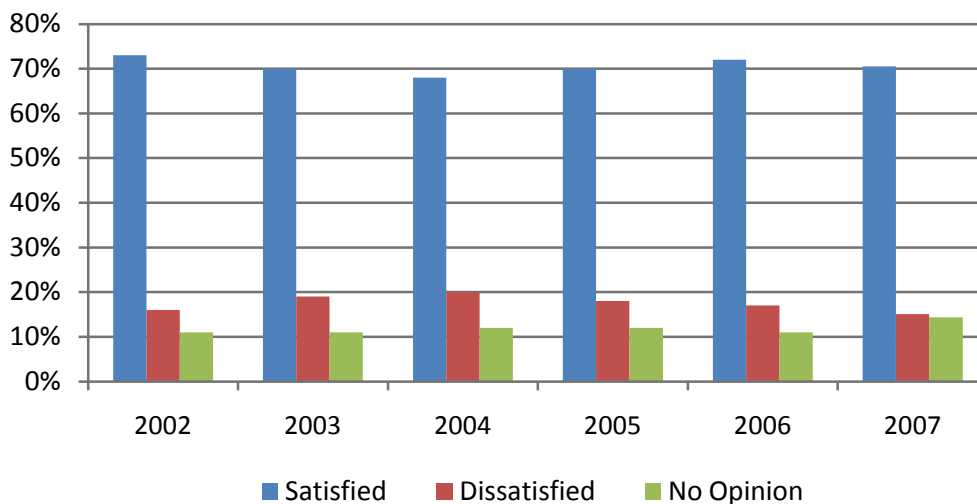
Figure 33: Which of the following best describes your opinion about gambling opportunities in Alberta?



The Alberta Gaming and Liquor Commission has conducted their own attitude surveys over the years with sample sizes of approximately 1,000 in each year (see Appendix B for details). One of the interesting findings from these surveys is that most Albertans have limited awareness of how gambling revenue is used. For example, despite being the repository for government gambling revenue since 1989, most people continue to be unaware of the Alberta Lottery Fund (i.e., only 44% were aware in 2002, 47% in 2003, 45% in 2006, 43% in 2007).

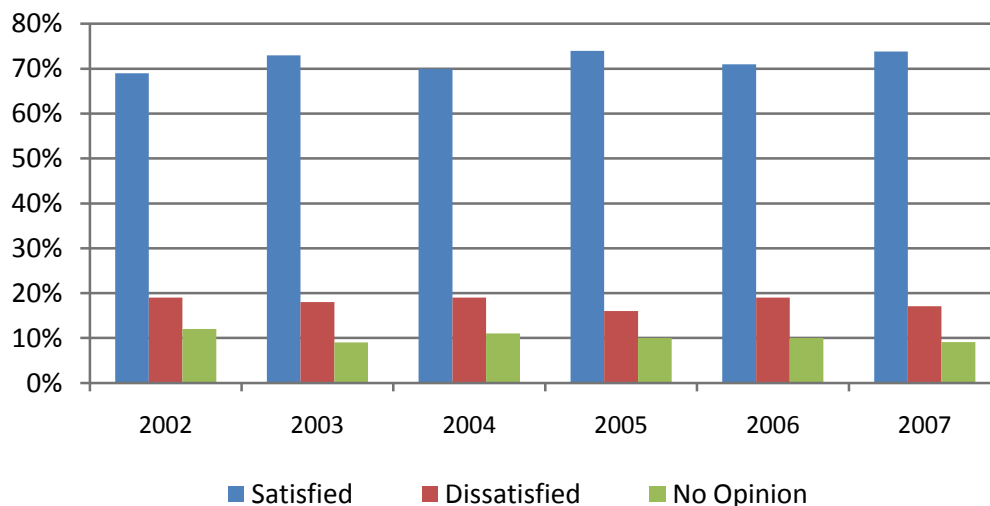
That being said, when people are informed about how the money from this fund is used (i.e., provision of grants to charitable groups and to support publically funded government services), most people are very supportive of this use of the monies, as seen in Figure 34.

Figure 34: Overall, how satisfied are you with how the Alberta Lottery Fund is used?



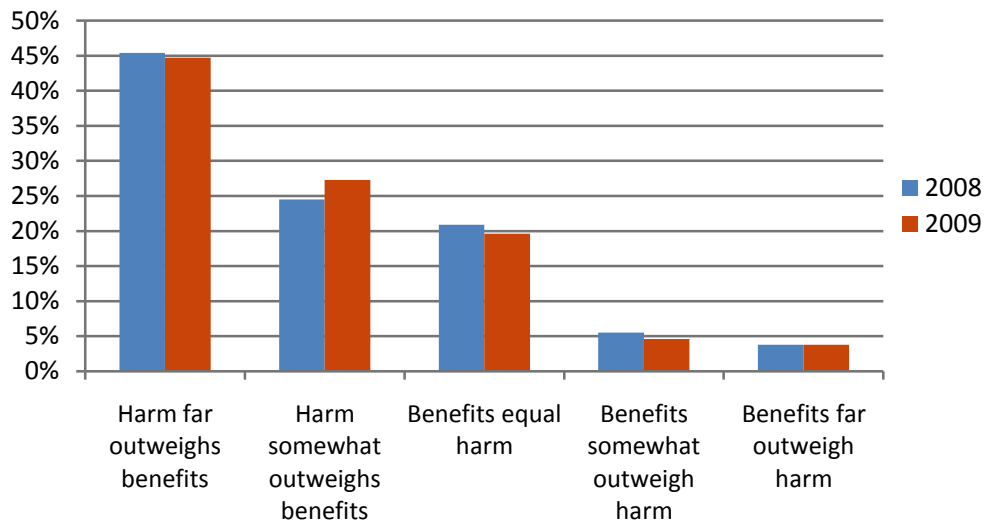
Not only are Albertans supportive of how the Alberta Lottery Fund is used, but they are generally satisfied with how legal gambling is managed, as seen in Figure 35. Indeed, one of the usual benefits of government-run gambling is that it has the reputation of being managed in a more transparent and scrupulous way. There have been no major 'scandals' associated with AGLC or its predecessors, of which the present authors are aware.

Figure 35: Overall, how satisfied are you with the conduct of legal gaming entertainment in Alberta?



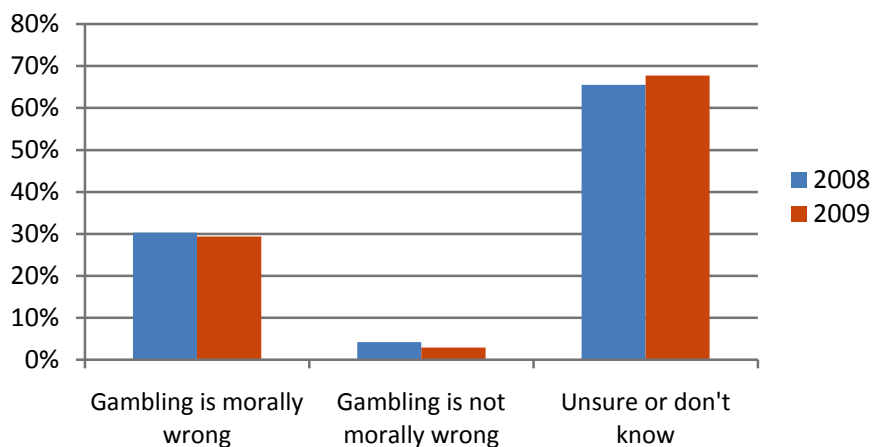
Although Albertans are satisfied with how gambling proceeds are used and how gambling is managed, this does not translate into general support for gambling. Rather, the 2008 and 2009 surveys show that most Albertans have a negative view of gambling, with the majority indicating that the harm of gambling outweighed the benefits (Figure 36).

Figure 36: Which best describes your belief about the benefit or harm that gambling has for society?



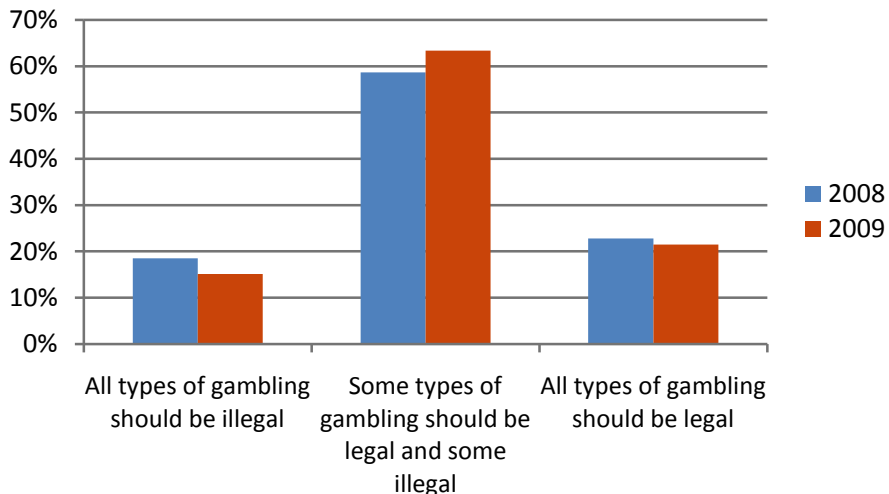
On the other hand, only a minority of people in 2008/2009 believe that gambling itself is morally wrong (Figure 37), a percentage that is almost certainly lower than historical opinions on this topic.

Figure 37: Do you believe that gambling is morally wrong?



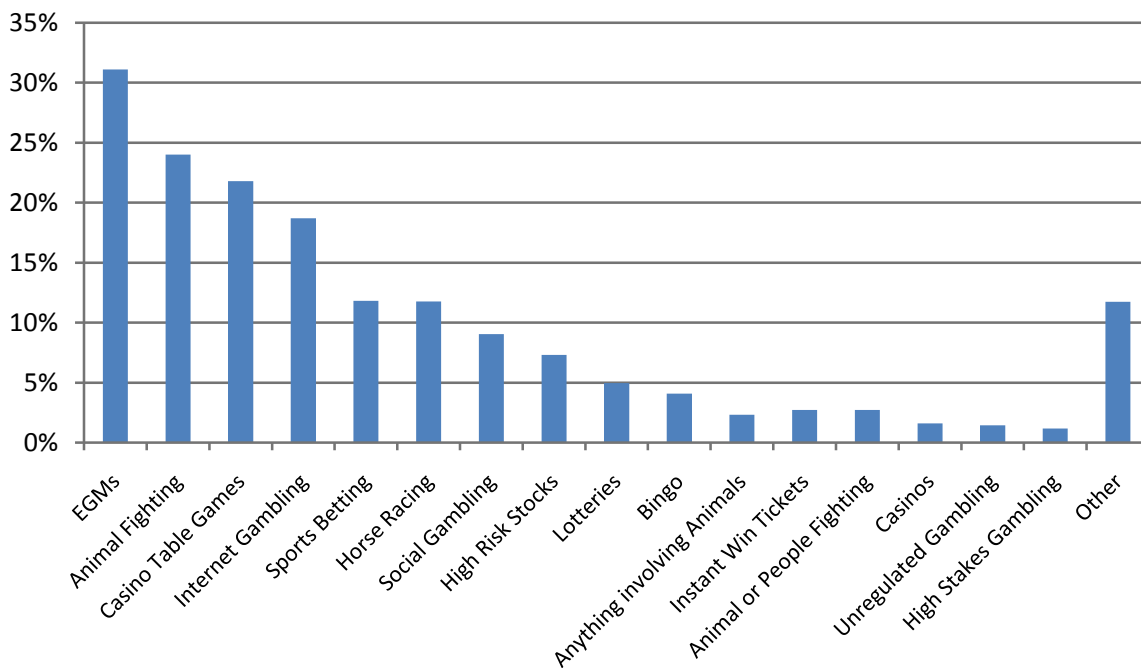
Most Albertans support the legal availability of some, but not all forms of gambling, as seen in Figure 38.

Figure 38: Which of the following best describes your opinion about legalized gambling?



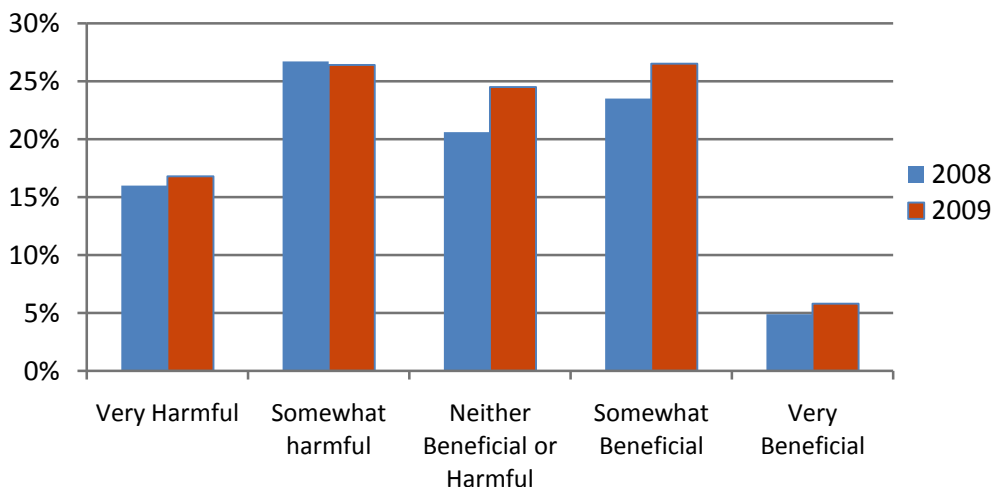
People who indicated that some forms should be illegal were asked “which ones?”. Their answers to this question were wide ranging, and there was not an overwhelming identification of any particular form. Nonetheless, certain forms were mentioned more than other forms, with the most commonly identified ones being: EGMs, animal fighting (e.g., cock fighting, dog fighting), casino table games, and Internet gambling (Figure 39).

Figure 39: Which types do you believe should be illegal? (2008 and 2009 combined).



A final attitude question asked in the 2008 and 2009 population surveys concerns the perceived impact of local casino(s) on that person's community. Interestingly, even though overall attitudes toward gambling are quite negative (Figure 36), there were somewhat less negative attitudes toward the person's local casino, as seen in Figure 40. This may be reflective of the fact that a large number of local charity/community groups receive their funding from this casino(s). In general, it is fair to say that opinion about the impact of the person's local casino is quite mixed, although overall, there are still more negative than positive attitudes.

Figure 40. What sort of overall impact do you believe the casino or casinos in your local region have had for your community?



As mentioned in our Research Approach section, a 'Targeted' population survey was conducted in 2008 and 2009 in addition to our 'General Population' survey. This survey targeted people living in 4 geographic areas that did not have casinos until recently ('New Casino Areas'): Camrose area (casino introduced in October 2006); Cold Lake area (September 2007); Whitecourt area (January 2008); and the Morley area (June 2008) and 5 communities that had casinos for many years ('Established Casino Areas'): Fort McMurray area (casino introduced in 1994), Grande Prairie area (1999), Red Deer area (1995), Lethbridge area (1993), and the Medicine Hat area (1996). The geographic range for each area was 75 km from the casino (50 km for Morley and Camrose so as not to sample Calgary and Edmonton respectively). The sample sizes were roughly 500 per community in 2008 (total sample size of 4,512) and 400 per community in 2009 (total sample size of 3,624).

There are 2 questions of interest here. The first question concerns whether there are regional differences in attitudes toward the local casino. The answer to this appears to be 'yes'. Figure 41 combines the results from the 2008 and 2009 surveys (approximate sample size per region = 900). Regions are ordered from most negative attitudes toward the local casino (on the left) to most positive attitudes (on the right). Similar to the General Population survey results, the majority of communities have predominantly negative attitudes about the impact of the local casino(s). However, there is significant regional variability. The ratio of people who reported that the local casino was harmful relative to the number of people who reported that the

casino was beneficial is as follows: 2.2 (i.e., 54.8%/20.4%) for Cold Lake; 1.8 (Whitecourt); 1.7 (Fort McMurray); 1.6 (Lethbridge); 1.5 (Camrose); 1.4 (Red Deer); 1.3 (Morley); 1.3 (Grande Prairie); 0.9 (Medicine Hat). The Medicine Hat region is an interesting exception as the only area where more people believed the casino was more beneficial than harmful.

The second question concerns whether attitudes toward the casino varied as a function of how long the casino had been in the region (i.e., whether the person was from an Established Casino area (bars with red/orange coloration) or a New Casino area (bars with blue/purple coloration). The answer to this question appears to be 'no'. Although the most negative attitudes are in a New Casino area (Cold Lake), and the most positive attitudes are in an Established Casino area (Medicine Hat), Figure 41 fails to show consistent differences in attitudes in New Casino areas relative to Established Casino areas.

A final analysis investigated whether there were changes in attitudes in the New Casino areas between 2008 and 2009 compared to the Established Casino areas. The results are presented in Figure 42. Although no formal statistical comparisons were conducted, it seems fairly evident from these figures that opinions are relatively unchanged between the two years.

Figure 41: What sort of overall impact do you believe the casino or casinos in local region have had for your community (2008 and 2009 combined)?

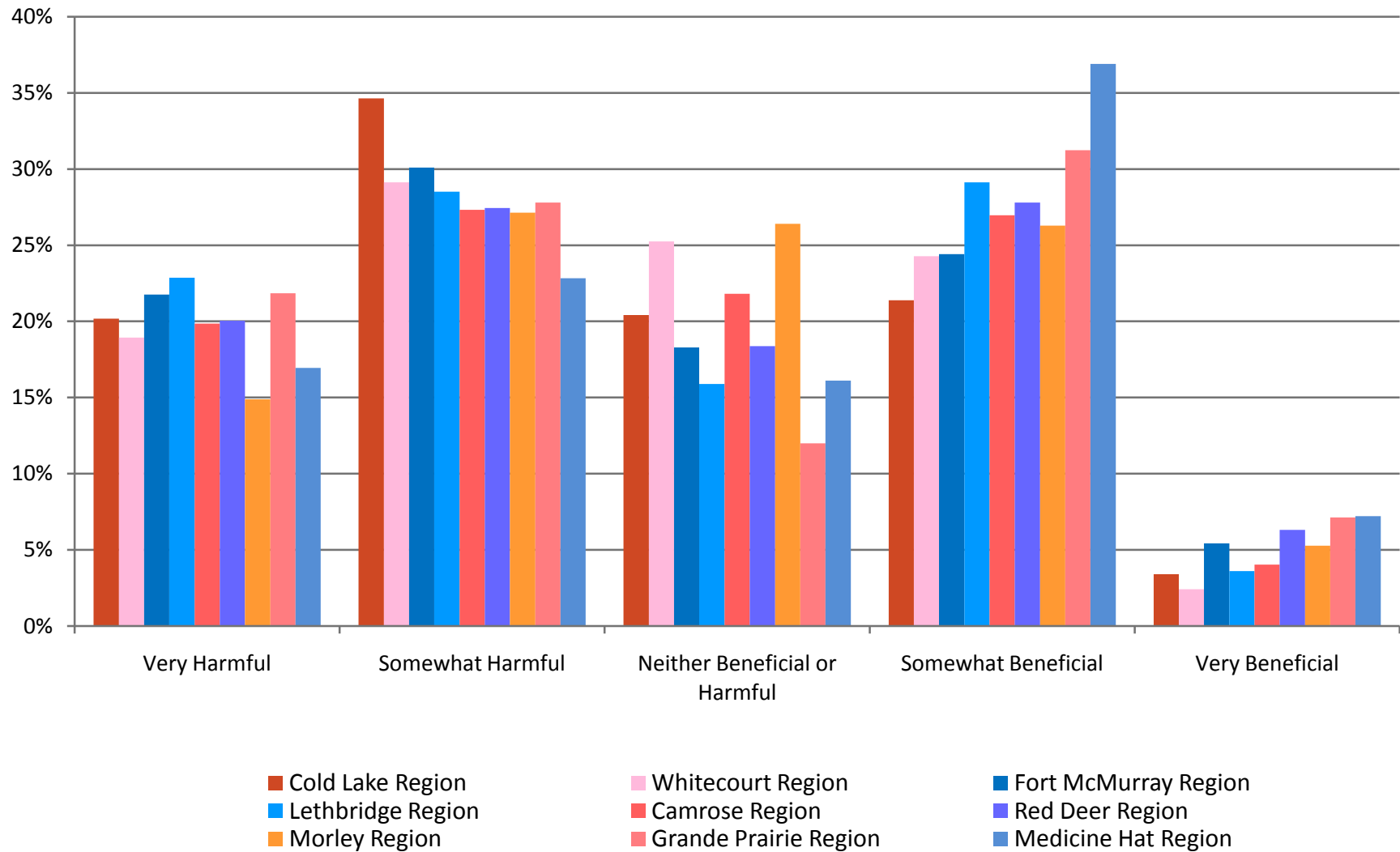
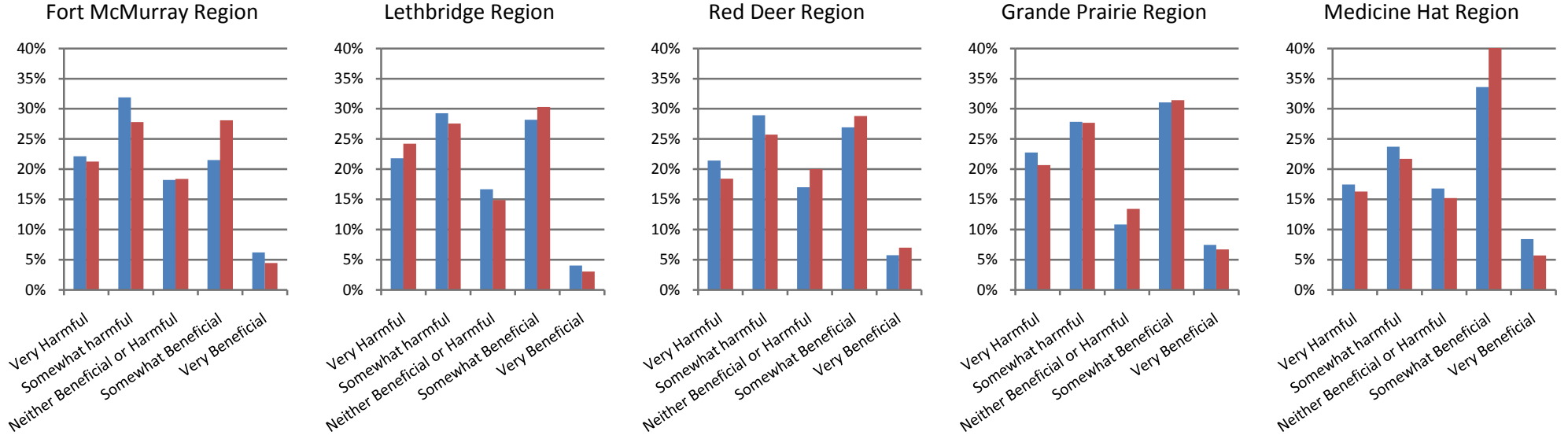
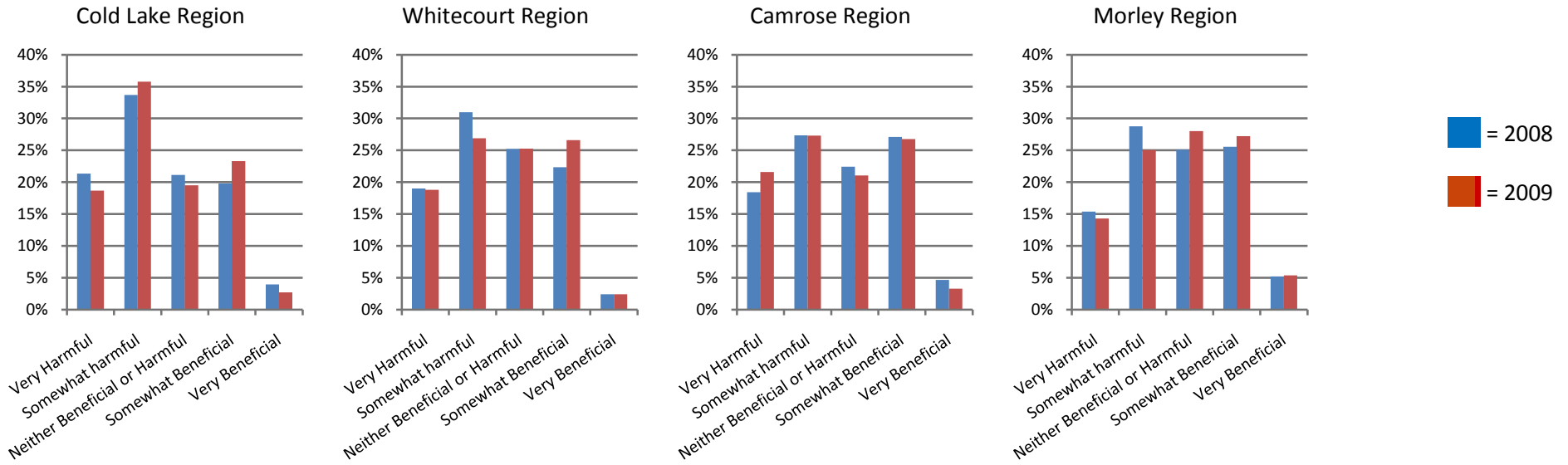


Figure 42: What sort of overall impact do you believe the casino or casinos in local region have had for your community?

ESTABLISHED CASINO REGIONS



NEW CASINO REGIONS



Problem Gambling and Related Indices

Prevalence

The impact of legalized gambling problem gambling is a particularly important question. The first thing to recognize is that significant rates of problem gambling were shown to exist in the United States in the 1970s even before the widespread introduction of legal gambling (Kallick et al., 1979). The same is almost certainly true of Alberta, although there are no prevalence studies prior to 1993 to document how significant a problem it was.

What is available are 12 population prevalence surveys of gambling and problem gambling conducted between 1993 and 2009. The details of these studies are contained in Appendix B. Methodological differences make comparisons between surveys difficult. This issue was briefly mentioned earlier in this report with respect to comparing participation rates for each form of gambling from one year to the next. However, these considerations are much more impactful for problem gambling prevalence compared to gambling prevalence, as there is very little variation (or debate) about how to ask about past year participation in gambling activities, participation questions are much less 'sensitive' than questions about problem gambling, and the higher prevalence rates of gambling participation mean that methodological noise has a proportionally smaller impact.

Indeed, Williams & Volberg (2009, 2010) have documented that problem gambling prevalence rates can vary by a *magnitude of 5* depending on which assessment instrument is used, how the survey is described to potential participants (i.e., 'gambling survey' versus a description that does not clearly indicate it is a gambling survey), how it is administered (face-to-face versus telephone), and the threshold used to ask questions about problem gambling (i.e., any past year gambling versus gambling at least once a month). Further illustration of the importance of methodology is the difference in problem gambling prevalence rates obtained in traditional telephone surveys versus online panel surveys. Alberta online panel surveys have been conducted in 2006, 2007, 2008, and 2009 (with the present study conducting them in 2008 and 2009). In all cases, the prevalence of problem gambling was approximately *twice as high* as the rates obtained via telephone surveys (it is beyond the scope of the present paper to discuss this in detail, but the evidence compiled by Dr. Robert Williams indicates that the telephone surveys produce the more accurate rates) (Williams & Volberg, 2010).

Thus, while it is potentially problematic to make comparisons between surveys, there are some things that make this less difficult in the present situation. The fact that the methodological procedures were very similar in many of these studies⁷¹ (i.e., telephone administration, survey being described as a 'gambling survey', use of any past year gambling being only criterion for being asked problem gambling questions). The exceptions were a) the 2002 Statistics Canada survey that was administered face-to-face and was described as a survey assessing 'well-being

⁷¹ This is also related to the fact that Dr. Harold Wynne conducted the 1993, 1998, and 2001 studies and Dr. Robert Williams conducted the 2007, 2008, and 2009 studies.

and health practices', and b) the 2008 and 2009 surveys where problem gambling questions were only administered to people who reported a minimal amount of gambling involvement (e.g., 1/month on some form). In general, research indicates that these latter procedures produce more accurate rates of problem gambling (Williams & Volberg, 2009, 2010) (thus, surveys in other years are producing rates that are slightly higher than 'true' rates).

Three different problem gambling assessment instruments have been used in the Alberta population surveys: the South Oaks Gambling Scale (using a past year time frame) (Lesieur & Blume, 1987), the Canadian Problem Gambling Index (Ferris & Wynne, 2001), and the Problem and Pathological Gambling Measure (PPGM) (see Appendix E) (Williams & Volberg, 2010).

The PPGM is a relatively new instrument that has been tested and refined over the past 8 years by Dr. Robert Williams (unpublished data). It has 4 categories of Recreational Gambler, At Risk Gambler, Problem Gambler, and Pathological Gambler (with the latter two groups being collectively identified as 'problem gamblers'). In a large scale validation study involving a sample of 7,273 individuals from 105 countries (including 977 clinically assessed problem gamblers), the PPGM evidenced good internal consistency (Cronbach's alpha = .81), as well as good concurrent validity by virtue of its significant correlation with scores on other problem gambling instruments (Pearson correlation of .75 with the SOGS, .70 with the CPGI, and .82 with the NODS) (Williams & Volberg, 2010). Most importantly, however, the problem/nonproblem categorizations of the PPGM have considerably higher correspondence to clinically assessed problem/nonproblem categorizations than either the CPGI, SOGS, or NODS (all 4 instruments were administered to these 7,273 individuals).⁷² The sensitivity of the PPGM is 99.7%, specificity is 98.9%, positive predictive power is 93.5%, negative predictive power is 99.9%, overall diagnostic efficiency is 99.0%, and the ratio of instrument identified problem gamblers relative to clinically assessed problem gamblers is 1.07 (Williams & Volberg, 2010).⁷³ This strong association with clinically assessed problem gambling is largely due to the PPGM's comprehensive assessment of *all* potential harms of gambling, the fact that designation as a problem gambler requires evidence of gambling-related harm plus evidence of impaired control (to better correspond to the most commonly accepted definition of problem gambling, Neal, Delfabbro, & O'Neil, 2005), and assessment procedures that significantly reduce the presence of both false positives and false negatives (see scoring details of the PPGM in Appendix E for further details). Also, unlike other instruments, the classification accuracy of the PPGM is unaffected by the age, gender, and ethnic origins of the sample (Williams & Volberg, 2010).

⁷² Clinicians were asked to ascertain the presence or absence of features that would classify the person as a problem or nonproblem gambler as defined by the definition put forward by Neal, Delfabbro, & O'Neil (2005).

⁷³ By comparison, the CPGI 3+ has 91.2% sensitivity, 85.5% specificity, 49.4% positive predictive power, 98.4% negative predictive power, 86.3% diagnostic efficiency, and a ratio of instrument assessed PG prevalence over clinically assessed PG prevalence of 1.9. The traditional CPGI 8+ threshold for problem gambling has a 44.4% sensitivity, 99.2% specificity, 89.9% positive predictive power, 92.0% negative predictive power, 91.9% diagnostic efficiency, and a ratio of instrument assessed PG prevalence over clinically assessed PG prevalence of 0.49.

Williams & Volberg (2010) also calculated conversion factors that can be used to estimate what rates using one instrument are likely to be if another instrument had been used. Although these projected estimates are affected to some extent by response rates and weighting, they nonetheless provide a rough estimate that is useful for comparison purposes. This is the procedure that has been used in the present study to convert SOGS and CPGI rates to PPGM rates for all assessment years. In addition, a CPGI 5+ rate has also been calculated, as this research has determined that a score of 5 or higher is the optimal cut-off point for the designation of problem gambling so as to maximize classification accuracy (Williams & Volberg, 2010).⁷⁴ Results are contained in Table 39. Bracketed numbers represent figures that have been estimated based on this conversion procedure.

There are several important observations that can be derived from this table. First, regardless of which year is examined, the overall prevalence of problem gambling is low (less than 4%). To put this in context, in 2004 approximately 7.6% of Albertans aged 15+ reported that alcohol had caused some harm for them in the past year and 2.8% reported that illicit drug use had caused some harm in the past year (AADAC, 2006). Second, despite quite dramatic increases in per adult gambling expenditures from 1993 to 2009 (see earlier Figure 17, p. 95) as well as significant increased availability of EGM and casino gambling (see earlier Figures 7 to 13, p. 62 - 70), there is no evidence that problem gambling rates have increased in this same time period. If anything, problem gambling prevalence was higher in 1993 compared to the present time. (Note: although there were no problem gambling prevalence surveys prior to 1993, it is reasonable to speculate that the 'peak' rate might have been sometime between 1993 to 1996, as this was coincident with the rapid introduction of VLTs from 1992 to 1996, a doubling of the number of casinos/RECs from 7 to 14, and the period with the most dramatic rise in per capita gambling expenditure).

Table 39: Prevalence of Problem Gambling in Alberta among Adults (18+) as a Function of Year and Assessment Instrument.

SURVEY YEAR	1993	1998	2001	2002	2007	2008	2009
SAMPLE SIZE	1804	1821	1804	3394	680	3001	1054
SOGS 3+	5.4%	4.8%	--	--	--	--	--
CPGI 5+	(3.7%)	(3.3%)	2.7%	1.7%	1.4%	1.8%	2.5%
PPGM	(3.9%)	(3.4%)	(2.8%)	(1.8%)	1.3%	2.1%	3.1%

No data weighting occurred in the 1993 and 1998 surveys. However, there was less need for weighting because of good response rates (50% in 1993 and 67% in 1998) as well as a good match between the obtained sample and demographic characteristics of Albertans. Data in 2001 was weighted by age x gender (not done in the original 2001 report). Data in 2002, 2007, 2008, 2009 were weighted by household size and age x gender. Note: the 2008 PPGM rate of problem gambling represents ~58,000 problem gamblers in Alberta and the 2009 rate represents ~ 87,000 problem gamblers.

⁷⁴Use of a CPGI 5+ threshold for problem gambling results in a 74.2% sensitivity, 95.6% specificity, 72.5% positive predictive power, 96.0% negative predictive power, 92.8% diagnostic efficiency, and a ratio of instrument assessed PG prevalence over clinically assessed PG prevalence of 1.02.

This is consistent with the general stabilization (and/or decrease) of problem gambling prevalence rates that have occurred in many western jurisdictions since about 2001 or 2002 (AGRI, 2011). It is also consistent with the 'adaptation' hypothesis (LaPlante & Shaffer, 2007; Shaffer et al., 2004) that states that most harms associated with gambling occur after it is first introduced because the population has little experience/knowledge about the product, and its novelty encourages high rates of participation. However, with time, participation rates go down because the novelty has worn off, and the population's familiarity with the product (and potentially adverse experience) helps inoculate them from further harm.

There are three important caveats to the above points. First, problem gambling affects more than just the problem gambler. These Alberta population surveys have established that about half of problem gamblers are currently married or living common-law. Many also have children. The 2007 national survey is the only that investigated this latter issue, where it was found that 76% of problem gamblers reported having children (average number = 3.1). Thus, it is reasonable to assume that the percentage of people potentially impacted by problem gambling is actually 3 or 4 times the general prevalence rate (Kalischuk et al., 2006; Shaw et al., 2007). There is also an important inter-generational impact, as children of problem gamblers are at high risk for developing problem gambling themselves (Kalischuk et al., 2006; Shaw et al., 2007).

The second caveat is that Table 39 reports *past-year* prevalence of problem gambling. Evidence indicates that while the severest forms of problem gambling tend to be relatively stable, less severe forms are not (e.g., Abbott et al., 1999; DeFuentes-Merillas et al., 2004; Slutske, Jackson, & Sher, 2003; Wiebe, Cox, Falkowski-Ham, 2003; Wiebe, Single, Falkowski-Ham, 2003). Thus, a stable prevalence rate of problem gambling over an extended number of years hides the fact that a significant number of new problem gamblers have been created each year to replace an equivalent number of problem gamblers who have remitted. Thus, over time, the harm of gambling has affected a larger and larger percentage of the general population, steadily increasing *lifetime* rates of problem gambling within Alberta (this may be why overall attitudes toward gambling have become increasingly negative over time; see Attitude Section).

The third point is that there is some evidence that rates may have increased in 2009 relative to the past two years (this same trend was seen in the online panel data from 2008 to 2009). However, it is also important to note that this trend is not statistically significant (i.e., using the PPGM problem/pathological gambling rate, a Chi Square (1df) probability value of .097 was obtained).

Features of Problem Gamblers

The types of problems most commonly reported by PPGM problem gamblers were examined in the 2008 and 2009 data sets,⁷⁵ and is presented below in Table 40. As can be seen, the most commonly reported problems are mental health and financial problems, with social problems, illegal activity and work/school problems being less prevalent.

Table 40: Prevalence of Different Problems among Problem Gamblers.

	2008	2009
	<i>N</i> = 242	<i>N</i> = 161
Mental Health Problems	54.4%	50.0%
Financial Problems	51.0%	51.6%
Relationship/Social Problems	30.2%	24.8%
Neglect of Children or Family	12.2%	9.3%
Illegal Activity	7.9%	5.6%
Work or School Problems	5.8%	8.1%

Another important question concerns the types of games that have the strongest association with gambling-related problems. As indicated earlier, it is important to recognize that most Alberta gamblers do not limit themselves to just one form of gambling. In the 2008 Population Survey, only 34% of gamblers just gambled on one form, whereas 25% gambled on 2 forms, 18% on 3, 12% on 4, 6% on 5, 3% on 6, 1% on 7, and 1% on 8 forms. The average number of forms gambled on for all gamblers in 2008 was 2.4. This patronization of multiple forms of gambling is especially true of problem gamblers. In 2008 only 3.5% of PPGM problem gamblers gambled just on one form, whereas 10.1% gambled on 2 forms, 17.3% on 3 forms, 18.2% on 4 forms, 17.7% on 5 forms, 18.2% on 6 forms, 4.8% on 7 forms, 6.7% on 8 forms, and 3.5% on 9 forms. The average number of forms gambled on for problem gamblers was 4.7.

Thus, to some extent, asking problem gamblers which gambling format contributes most to their problem is like asking alcoholics what type of alcoholic beverage causes the most problems (i.e., although there may be preferred alcoholic beverages, all alcoholic beverages contribute to some extent).⁷⁶ Not surprisingly, then, when directly asked if there were particular types of gambling that contributed to their problems more than others, a sizeable percentage of problem gamblers (roughly 44%) said 'no' (see Table 41). That being said, 56% of problem gamblers did indicate that certain forms of gambling were more contributory, with EGMs overwhelmingly being identified as the form that was most responsible (see Table 39).

⁷⁵ For this analysis the General Population data set was combined with the Targeted data set and the Online data set to produce sample sizes of 9,532 in 2008 and 5,634 in 2009 (a total of 403 problem gamblers).

⁷⁶ The analogy to alcoholism is not a perfect one, as while the range of alcohol content in alcoholic beverages varies by a factor of 10 (e.g., 4% to 40%), the 'potency' of gambling arguably has a much larger variation. 'Bet frequency' in gambling varies from twice a week for lotteries to every 5 seconds for an EGM.

Table 41: Is there a Type of Gambling that has Contributed to your Problems more than Others?

	2008	2009
NO	43.8%	44.2%
YES	56.2%	55.8%
EGMs (VLTs or slot machines)	63.9%	65.1%
Casino Table Games	7.6%	12.0%
Bingo	6.3%	0%
Lotteries	6.3%	4.8%
Games Against other People (e.g., Poker)	4.9%	6.0%
Instant Win Tickets	4.9%	3.6%
High Risk Stocks	2.1%	6.0%
Sports Betting	2.1%	1.2%
Horse Racing	2.1%	1.2%
Internet Gambling	0%	0%

Impact of New Casinos on Problem Gambling

To further investigate the relationship between the impact of increased gambling availability and changes in gambling and problem gambling, a specific investigation was made of the change in the prevalence rate of gambling and problem gambling between 2008 and 2009 in 5 communities that had had casinos for many years (Established Casino Areas): Fort McMurray area (casino introduced in 1994), Grande Prairie area (1999), Red Deer area (1995), Lethbridge area (1993), and the Medicine Hat area (1996) compared to 4 communities that recently received casinos (New Casino Areas): Camrose area (casino introduced in October 2006); Cold Lake area (September 2007); Whitecourt area (January 2008); and the Morley area (June 2008).

This investigation was done by conducting additional telephone surveys of these regions during the same time period the General Population surveys were conducted (i.e., June to August 2008 and June to August 2009) (also using the same questionnaire). The geographic range for each region was defined as a 75 km distance from the location of the casino (with the exception of a 50 km for Morley and Camrose so as not to disproportionately sample Calgary and Edmonton residents respectively), and was not restricted to Alberta (mostly relevant for the Cold Lake and Medicine Hat areas). The sample was recruited by random selection of listed telephone numbers within each geographic range. A minimum of 500 people were sampled from each geographic region in 2008 (total sample size of 4,512) and 400 per region in 2009 (total sample size of 3,614). CASRO (1982) response rate was 23.3% in 2008 and 24.1% in 2009. Further details of this 'Targeted Survey' are contained in Appendix A.

The results of this investigation are reported in Table 42. Chi-Square tests found no significant change in past year slot machine or table game patronage between 2008 and 2009 for either New Casino Areas or Established Casino Areas. Similarly, Mann-Whitney U tests found no

significant change in reported casino expenditure between 2008 and 2009 either for New Casino Areas ($p = .12$, 2 tail) or for Established Casino Areas ($p = .31$, 2 tail).

With regards to gambling status on the PPGM, a significant change in PPGM categorization in the New Casino Areas occurred from 2008 to 2009 (Chi Square (3df) = 34.7, $p < .001$). Similarly, a significant change from 2008 to 2009 was observed in the Established Casino Areas (Chi Square (3df) = 102.8, $p < .001$). However, in both cases, pairwise comparisons showed this to be due to a decrease in the proportion of Non-Gamblers and a corresponding increase in the proportion of Recreational Gamblers from 2008 and 2009 (i.e., although the rate of problem gambling increased somewhat in the New Casino Area and decreased somewhat in the Established Casino Area, these changes were not statistically significant). The reason for this change in general gambling prevalence is unclear, as it is not mirrored in the General Population data (the Alberta-wide prevalence of gambling in 2008 was 72.2% versus 73.5% in 2009) (Table 18, p. 103). It is possible that increased gambling participation in 2009 in these regions is related to the worldwide recession that occurred in 2008/2009 (Statistics Canada reports that the recession in Canada lasted from the fall of 2008 to the summer of 2009).

	New Casino Area		Established Casino Area	
	2008	2009	2008	2009
Past Year Slot Machine Patronage	19.6%	19.1%	16.4%	16.9%
Past Year Table Game Patronage	7.1%	7.0%	7.0%	5.2%
Average Monthly Casino Expenditure	\$59	\$94	\$48	\$67
Median Monthly Casino Expenditure	\$20	\$20	\$20	\$20
PPGM Non-Gambler	25.5%	17.3%	30.1%	17.3%
PPGM Recreational Gambler	66.3%	73.5%	61.8%	72.7%
PPGM At Risk Gambler	6.3%	6.6%	5.8%	7.9%
PPGM Problem & Pathological Gambler	1.9%	2.6%	2.3%	2.0%

Change within individual regions may be obscured by these aggregated results. Thus, change in casino expenditure and problem gambling prevalence for each individual region from 2008 to 2009 is reported in Table 43. Only the Fort McMurray area (Established Casino area) had a statistically significant change (increase) in gambling expenditure from 2008 to 2009 (Mann-Whitney $U = 4258$, $p = .04$, 2 tail). The relatively small sample sizes for each region (500 per region in 2008 and 400 in 2009) limit the ability to show statistically significant differences in problem gambling rates if they did exist. And indeed, no statistically significant differences in PPGM problem gambling prevalence was observed in any region from 2008 to 2009, with one

important exception. This concerned the Morley region, where the change in the problem gambling prevalence rate of 1.0% in 2008 to 2.8% in 2009 was statistically significant (Chi Square (1df) = 3.9, $p = .048$). The change in casino expenditure was close to significance ($p = .07$, 1 tail). It is interesting to note that the Morley region received the most recent casino of all these regions (in June 2008). Thus, it is possible that casino impacts on problem gambling do occur, but the impacts occur within a very short time span (e.g., within the first year). Further evidence that there may have been a small but significant increase in problem gambling within the Morley region is found in the First Nations section of this report (the Morley region casino is a First Nations casino, as were the casinos in the Whitecourt and Cold Lake regions).

Table 43: Gambling and Problem Gambling in Each Established and New Casino Community in 2008 and 2009.

Geographic Region	Year of Casino Introduction	2008 Monthly Casino Expenditure	2008 Median Casino Expenditure	2008 Problem Gambling (PPGM)	2009 Monthly Casino Expenditure	2009 Median Casino Expenditure	2009 Problem Gambling (PPGM)
Lethbridge	1993	\$47	\$15	0.8%	\$35	\$20	1.6%
Fort McMurray	1994	\$19	\$20	2.4%	\$118	\$30*	1.8%
Red Deer	1995	\$22	\$20	2.4%	\$75	\$30	2.4%
Medicine Hat	1996	+\$16	\$20	2.8%	\$65	\$20	2.2%
Grande Prairie	1999	\$155	\$20	3.0%	\$27	\$20	2.3%
Camrose	Oct 2006	\$82	\$20	2.6%	\$58	\$20	2.2%
Cold Lake	Sep 2007	+\$6	\$20	2.4%	\$110	\$40	2.7%
Whitecourt	Jan 2008	\$52	\$20	1.8%	\$126	\$20	2.4%
Morley	Jun 2008	\$123	\$10	1.0%	\$66	\$20	2.8%*
* p < .05							

Impact of Gambling Proximity on Problem Gambling

Another analysis bearing on the issue of the relationship between gambling availability and problem gambling concerns the statistical association between driving distance to the nearest casino (from the person's residence) and problem gambling prevalence. This relationship is examined in Table 44. An analysis of driving distance data earlier in this report documented that casino proximity is related to both casino patronage and expenditure, with casino gamblers who live within 5 km contributing 1.54 times more revenue than their population prevalence. The present table also documents an association between casino distance and problem gambling prevalence, albeit nonsignificant because of the small number of pairs ($r = .32$, $p = .15$, 1 tail, $N = 13$). On an individual basis, the correlation between casino distance category and PPGM problem gambling status was much weaker, but statistically significant. In 2008 the correlation was $.04$ ($p = .006$, 1 tail, $N = 8431$) and the correlation for 2009 was $.03$ ($p = .013$, 1 tail, $N = 5634$).

Table 44: Driving Distance to the Nearest Casino as it Relates to Prevalence of Problem Gambling (2008 and 2009).

Distance	N	PPGM Problem Gambling Prevalence
0 - 5 km	3353	3.01%
5.1 - 10 km	2816	3.07%
10.1 - 20 km	1598	2.50%
20.1 - 30 km	827	2.48%
30.1 - 40 km	738	1.23%
40.1 - 50 km	888	2.19%
50.1 - 60 km	306	3.38%
60.1 - 70 km	466	1.53%
70.1 - 80 km	362	1.97%
80.1 - 90 km	432	1.89%
90.1 - 100 km	254	2.83%
100.1 - 200 km	572	1.06%
200.1 km +	146	2.82%
Total	12758	2.56%

Characteristics Distinguishing Problem Gamblers from Non-Problem Gamblers

A final approach to understanding the importance of gambling availability to problem gambling involved conducting a logistic regression to determine the relative importance of casino distance to problem gambling status relative to other variables that are plausibly related to problem gambling and/or have been identified as correlates in other research. This multivariate approach is superior to the typical cross-tabular presentation of demographic correlates of problem gambling that has been done in previous studies, as it illustrates the *relative* importance of different variables and also shows the importance of variables when

their shared variance is taken into account (e.g., the true association of Aboriginal background to problem gambling when their higher level of stress, higher level of mental health problems, and younger average age is controlled for).

A SPSS logistic regression investigated characteristics differentiating PPGM problem gamblers from Non-Problem gamblers in 2008. All 3 data sets (General Population, Targeted, Online) were used in the analysis so as to produce a large sample size of gamblers ($n = 7,150$). The following predictor variables were used: gender, age, level of education, income, ethnic origins (European, Asian, Aboriginal, Other), past year engagement or nonengagement in each form of gambling, motivation for gambling, residential driving distance to the nearest casino/REC, past year tobacco use, past year illicit drug use, past year substance abuse problems, past year self-reported presence of other addictions (overeating, shopping, sex/pornography, exercise, Internet, other), past year level of stress, past year level of happiness, and past year self-reported presence of mental health problems. All categorical variables were dummy coded. Missing values for all continuous variables were replaced with the series mean. Missing values for all categorical variables were replaced with the mode. Entry of the variables into the equation was forward stepwise. Variable entry order was determined by the size of the Wald statistic, with a minimum entry level of $p = .01$ and a removal level of $p = .05$. Data from 7150 people were available for analysis: 242 Problem Gamblers and 6908 Non-Problem Gamblers. Problem Gamblers were weighted to make them represent 50% of the total sample.⁷⁷

Maximal discrimination between the groups occurred with a constant and 22 predictors. In order of importance the variables that best predicted that someone was a Problem Gambler were: motivation for gambling (to escape or to win money), playing VLTs or slot machines, playing casino table games, gambling on the Internet, gambling on high risk stocks, purchasing instant win tickets, male gender, having mental health problems, gambling on bingo, higher stress, less education, less income, Aboriginal race/ethnicity, tobacco use, gambling outside Alberta, betting on horse racing, *older* age, less happiness, casino/REC proximity, purchasing lottery tickets, and having other addictions. A test of the full model with the 22 predictors against a constant-only model was statistically significant, $\chi^2(29) = 7915$, $p < .00001$, indicating that the 22 predictors, as a set, reliably distinguish between Problem Gamblers and Non-Problem Gamblers. The variance accounted for was quite good, with Nagelkerke R squared = 58.1%. Overall prediction success was 81.5%, with 80.6% of Problem Gamblers correctly classified and 82.5% of Non-Problem Gamblers correctly classified. Table 45 shows regression coefficients, Wald statistics, and odds ratios for each of the 22 statistically significant predictors, with the predictors ordered from strongest to weakest by virtue of their Wald statistic.

The present analysis is illuminating for several reasons. First, it confirms that virtually everything that the literature has posited as a risk factor for problem gambling is confirmed as

⁷⁷ Equal weighting is needed in this type of analysis otherwise maximal classification accuracy will occur with equations that simply designate everyone to be Non-Problem Gamblers.

an independent risk factor when done in a multivariate analysis.⁷⁸ Second, it establishes the relative importance of these risk factors. Thus, while gambling proximity is confirmed as a risk factor for problem gambling, it is much less important compared to gambling motivation, types of games one chooses to gamble on, and various personal attributes (gender, mental health problems, stress, education, income, race/ethnicity, age).

Table 45: Logistic Regression of Characteristics Differentiating Problem Gamblers from Non-Problem Gamblers in 2008.

	B	Wald	Significance	Odds Ratio
Gambling Motivation		718.766	.000	
To escape	2.198	613.722	.000	9.007
To win money	.961	205.512	.000	2.615
Makes me feel good about myself	1.367	30.307	.000	3.922
To socialize	.358	20.686	.000	1.430
To support worthy causes	.061	.232	.630	1.063
Other reason	.737	58.933	.000	2.089
VLT Gambler	1.293	571.233	.000	3.643
Slot Machine Gambler	1.127	436.146	.000	3.087
Table Game Gambler	1.299	367.022	.000	3.665
Internet Gambler	1.133	150.417	.000	3.104
High Risk Stock Gambler	.913	148.218	.000	2.492
Instant Win Gambler	.627	141.667	.000	1.871
Gender	-.617	138.757	.000	.539
Having Mental Health Problems	.784	138.626	.000	2.190
Bingo Gambler	.758	108.553	.000	2.134
Level of Stress	.258	99.627	.000	1.294
Education	-.190	99.485	.000	.827
Income	-.075	97.541	.000	.928
Race/Ethnicity		79.770	.000	
Aboriginal	.795	57.801	.000	2.214
Other	-.298	14.119	.000	.742
Asian	.120	.682	.409	1.128
Tobacco User	.394	59.324	.000	1.483
Gambles Outside Alberta	.454	58.976	.000	1.574
Horse Racing Gambler	.620	52.378	.000	1.858
Age	.010	32.568	.000	1.010
Level of Happiness	-.175	32.203	.000	.839
Casino Distance	-.043	29.415	.000	.958
Lottery Gambler	.305	16.967	.000	1.356
Presence of Other Addictions	.300	16.066	.000	1.350
Constant	-1.996	79.197	.000	.136

⁷⁸ The exception to this is that younger age was not confirmed to be a risk factor. Thus, it may be that younger age is no longer a risk factor when their different game preferences are taken into account (EGMs, casinos, Internet gambling) as well as their lower income and somewhat higher levels of stress.

Treatment Numbers and Costs

Treatment for problem gambling in Alberta is provided by many different agencies and individuals. The main provincially-funded body is the Addiction and Mental Health division of Alberta Health Services (AHS), with AHS reporting to the Alberta Ministry of Health and Wellness. The origin of provincially-funded addiction treatment dates back to 1965 when Alcoholism Foundation of Alberta became the Division of Alcoholism under the Alberta Department of Health.⁷⁹ In 1971, Alberta passed the *Alcoholism and Drug Abuse Act*, which created the Alberta Alcoholism and Drug Abuse Commission (AADAC), a semi-autonomous government agency reporting to the Ministry of Health. AADAC was mandated to provide treatment and prevention for alcoholism and drug dependency. It accomplished this through the provision of both inpatient and outpatient services as well as providing funding to autonomous addiction treatment agencies. In 1994 AADAC's mandate was expanded to include the prevention and treatment of problem gambling. AADAC continued as the provincially-funded addiction treatment agency until April 1, 2009. At that time it ceased operations pursuant to the *Health Governance Transition Act* and its programs were transferred to the newly created Addiction and Mental Health division of the Alberta Health Services Board. (This reorganization was ostensibly done to provide a more seamless integration of addiction and mental services).

In addition to the provincially-funded programs, Albertans receive addiction treatment from self-help groups (e.g., [Alberta Gamblers Anonymous](#)), their family physician, psychiatrists, their pastor/minister/priest, private therapists, therapists associated with Employee Assistance Programs, and telephone help lines.⁸⁰

The 2008 and 2009 population surveys asked people a) whether they ever wanted help for gambling problems in the past 12 months, b) whether they ever sought help for gambling problems in the past 12 months, and c) where they had sought help from. Results from 2008 and 2009 are combined ($n = 4,005$) and are reported below in Table 46. As can be seen, it is estimated that only about 27% (an estimated 19,436/72,456) of problem gamblers desired assistance for their gambling problem and only about 11% (an estimated 8,330/72,456) actually sought help. For those who did seek assistance the most common source of help was Gamblers Anonymous (31.5%) and counselling services (e.g., AADAC) (25.0%). The projected number of people who reported attending a counselling service in Alberta (25% of 8,330 = 2,083) is very close to AADAC's own treatment numbers (see Table 47). Only about 44% (~3,649) of people reported seeking out a service that was paid for by tax dollars (i.e., AADAC, family physician, psychiatrist).

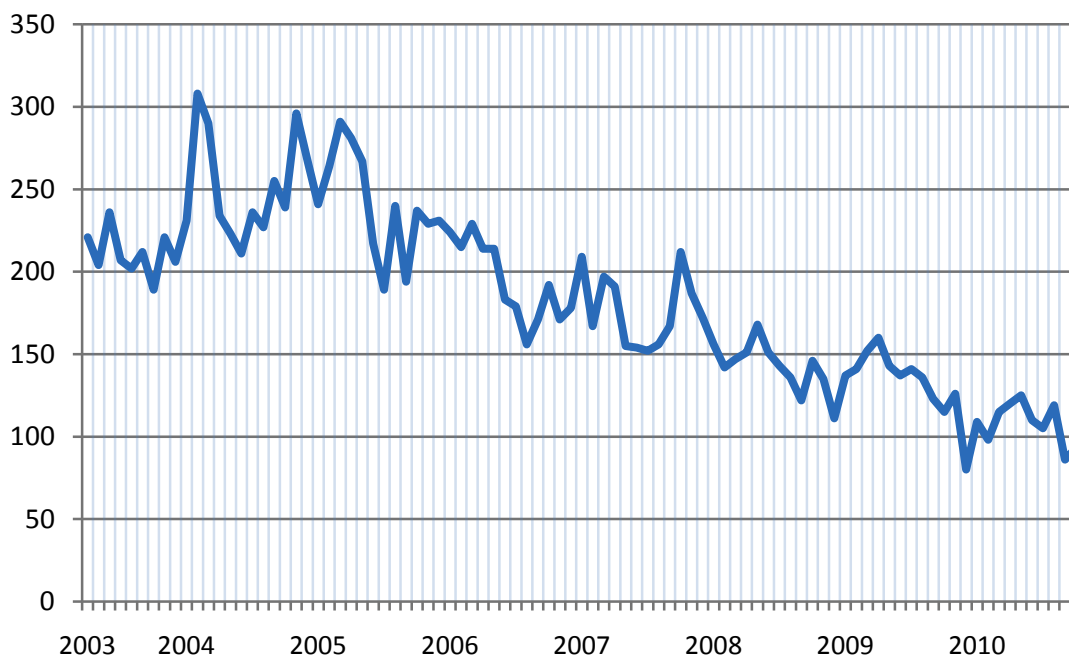
⁷⁹ The Alcoholism Foundation of Alberta (AFA) had been formed in 1951 when the College of Physicians and Surgeons, Alcoholics Anonymous and other concerned citizens created this agency. In 1953 AFA opened its first clinic in Edmonton and in 1954 a similar centre opened in Calgary.

⁸⁰ AADAC and now Alberta Health Services has operated a toll-free Helpline for many years offering information about alcohol, drugs, tobacco and problem gambling as well as support and referral services.

Table 46: Treatment Seeking among Problem Gamblers in 2008/2009.		
	2008 and 2009 Combined General Population Samples	Projected # in the AB Adult Population in 2008/2009
Problem Gamblers (PPGM)	2.6%	72,456
Wanted help for gambling problems	26.8%	19,436
Sought help for gambling problems	11.5%	8,330
Where did you seek help from?	Gamblers' Anonymous	31.3%
	Counselling Service	25.0%
	Psychiatrist	12.5%
	Family	12.5%
	Family Doctor	6.3%
	Other	12.5%

The monthly volume of calls to the Alberta Gambling Helpline from April 2003 to October 2010 was supplied to the Research Team by Alberta Health Services and is illustrated below in Figure 43. Calls to the Alberta Gambling Helpline are influenced by media exposure/advertising as well as actual need. Nonetheless it seems clear that there has been a steadily decreasing utilization of the help line since 2005.

Figure 43: Monthly Call Volume to the Gambling Helpline: Apr 2003 - Oct 2010.



The only readily available figures documenting the actual number of people receiving problem gambling treatment are the statistics tabulated by AADAC, presented below in Table 47. We must presume that there was an increased demand for treatment in the early 1990s which led to AADAC expanding its purview to provide problem gambling treatment in 1994. Unfortunately, however, AADAC has no record of treatment numbers prior to 2003. Rather, all that is available is a snapshot from 2003 to 2009. Table 47 shows that the number of clients receiving treatment for gambling problems from AADAC declined from 2003 to 2009 in terms of raw numbers, percentage of the adult population, and percentage of AADAC clients. Annual budget documents for Alberta Health and Wellness show that provincially funded addiction prevention and treatment services cost \$61,001,000 in 2003/2004, \$67,269,000 in 2004/2005, \$77,444,000 in 2005/2006, \$92,644,000 in 2006/2007, and \$102,177,000 in 2008/2009. Thus, the approximate provincial government cost of treating problem gambling in this time period has been in the range of \$5 or 6 million dollars (far right column of Table 47). It is difficult to estimate the costs of other services such as publicly funded physicians and psychiatrists, but it would be reasonable to speculate that the cost might be equivalent, such that the total cost of providing problem gambling treatment in Alberta would be in the range of \$10 - \$12 million dollars a year.

Table 47: AADAC Clients Receiving Treatment for Gambling Problems.

Year	Number	Number per 10,000 Albertan Adults	% of all AADAC Clients	% of AADAC Budget
April 2003 to March 2004	2013	8.4	8.0%	\$4,880,080
April 2004 to March 2005	2124	8.7	8.0%	\$5,381,520
April 2005 to March 2006	N/A	N/A	N/A	N/A
April 2006 to March 2007	2134	8.0	6.9%	\$6,392,436
April 2007 to March 2008	1883	7.0	6.2%	N/A
April 2008 to March 2009	1893	6.9	6.1%	\$6,232,797

Note: 88% of clients received outpatient treatment in 2006/2007 and in 2007/2008. Also, 52% of clients treated for problem gambling received treatment for gambling problems alone in 2006/2007 (whereas 37% also received treatment for alcohol, 29% for other drugs, 11% for tobacco), and 49% received treatment for gambling problems alone in 2007/2008 (41% also received treatment for alcohol, 33% for other drugs, 13% for tobacco).

Note: Records were not available in 2005/2006 or prior to 2003.

Other Financial Impacts

Although the financial impacts of treating and preventing problem gambling may be relatively low, there are other important financial impacts with apparently much larger monetary costs. The 2008 and 2009 population surveys asked people several questions that bear on the potential financial impacts of problem gambling. More specifically, people were asked: a) whether their gambling caused them any financial problems in the past 12 months, b) how much money they have borrowed or obtained from selling possessions in order to gamble in the past 12 months, and c) whether they had ever filed for bankruptcy because of gambling.

In the combined 2008/2009 data set, a total of 52/4005 people (13.0% \pm 3.3% with a 95% confidence interval) indicated that their gambling had caused them financial problems in the past 12 months. Out of an estimated adult population of 2,780,004, this projects to roughly 36,095 Albertans.

Borrowed Money or Sold Possessions

A total of 403 PPGM problem gamblers were identified in the combined 2008 and 2009 General Population, Targeted, and Online population surveys out of a total sample size of 15,166. One hundred and six of these individuals (26.3% \pm 4.3%) reported they had borrowed money or sold possessions to gamble, with an average amount borrowed equaling \$7,776 (median = \$500). The average prevalence rate of problem gambling in 2008/2009 is 2.6%, which means there would be approximately 72,456 problem gamblers (\pm 13,622 with a 95% confidence interval) in the Alberta population in each of these years. A 26.3% prevalence rate of borrowing money or selling possessions to gamble among these individuals would represent about 19,058 individuals a year. Multiplied by \$7,776 would produce an aggregate value of borrowed money or sold possessions of \$148,195,008 per year. Some economists refer to this as 'abused dollars'.

Consumer Insolvencies

Of 403 PPGM problem gamblers identified in the combined 2008 and 2009 General Population, Targeted, and Online population surveys, 11 individuals reported declaring bankruptcy in the previous 12 months because of gambling, which represents a 2.7% \pm 1.6% prevalence rate of bankruptcy among these individuals. Again, assuming 72,456 problem gamblers in the general Alberta population, this would represent about 1,956 bankruptcies a year.

Another source of information on bankruptcies concerns data collected by the Office of the Superintendent of Bankruptcy Canada (OSB). This agency keeps track of the number of bankruptcies, consumer proposals, and total insolvencies in each economic region within each province, with this data being available from 1987 to the present time. In Canada an insolvent person⁸¹ can attempt to negotiate a settlement between himself/herself and his/her creditors instead of filing bankruptcy. This procedure is defined as a 'consumer proposal' and is added to the number of formal bankruptcies to arrive at the total number of insolvencies each year. (From 2007 to 2009 the ratio of bankruptcies to consumer proposals was 4.5 to 1). OSB also distinguishes between personal or 'consumer' insolvencies versus business insolvencies. However, this is somewhat of an artificial distinction when one considers that OSB reports that 72% of business bankruptcies in 2004 represented the failure of single proprietorships.

⁸¹ Defined by OSB as someone unable to pay their debts as they become due or having liabilities that exceed the total value of assets.

OSB reports there were a total of 7,912 insolvencies in Alberta in 2008 (7,388 consumer and 524 business) and 12,562 in 2009 (12,076 consumer and 486 business). If the population survey projection of gambling-related bankruptcies/insolvencies is correct, then gambling-related insolvencies would represent an average of 19% of all insolvencies each year (95% confidence interval of 8% to 30%).

However, there is some evidence that suggests these figures may be too high. OSB does not electronically record the causes of bankruptcy, although this information is available on the written record. OSB collected a random sample of 1,000 files drawn from people over the age of 55 who had declared bankruptcy between 2003 and 2005 (Redish, Darra, & Schabis, 2006). The reported causes of bankruptcy were manually extracted from the files and a method of standardizing the reported causes was developed. It was determined that 2% of Albertans 55+ who declared bankruptcy reported that they did this because of gambling (2.4% for Canada as a whole) (Redish et al., 2006). However, there are some important caveats to this finding. One caveat noted by OSB is that what the person puts down as the cause of bankruptcy is influenced by the advice given by the person's bankruptcy trustee (and there may be potential disadvantages of reporting a gambling-related cause). Second, there is more of a stigma attached to gambling than other causes and so the person may be less likely to admit this cause to the trustee in the first place. Third, trustees themselves indicated to OSB that the prevalence seems much higher than 2.4% (Redish et al., 2006). Finally, age 55+ is statistically a low risk age group for problem gambling (only 18% of problem gamblers in 2008 were in this age bracket). Hence, the percentage of gambling-related bankruptcies would almost certainly be higher for problem gamblers of all ages.

Another way of examining the relationship between gambling and bankruptcy is by looking at the association between overall bankruptcy rates and population measures of gambling involvement. This tends to be a relatively weak way of examining this issue, as the causes of bankruptcy are many and varied, and are somewhat specific to the particular jurisdiction. The primary reasons in North America include things such as job loss, marital separation/divorce, medical problems, easy access to credit, and perhaps a decreasing stigma associated with declaring bankruptcy (deMagalhaes & Stokes, 2005). Thus, any positive or negative association between bankruptcy rates and gambling involvement will be confounded by the influence of these other, probably more important, factors. Furthermore, there is usually several months to years between when the financial problems occurred and the eventual declaration of bankruptcy that works against obtaining a statistical association in the same calendar year.

With these limitations in mind, Table 48 displays the Alberta insolvency rate per 1000 adults in addition to the per adult expenditure on gambling in 2010 dollars (from Figure 17, p. 95), and the estimated PPGM prevalence of problem gambling. To gauge the relative contribution of general economic factors on insolvency rates, Alberta GDP per adult in 2010 dollars is also presented as is the Alberta unemployment rate. Somewhat surprisingly, the Pearson correlation between consumer insolvency and GDP is nonsignificant ($r = .09, p = .693, N = 22$) and the relationship with unemployment rates is both *negative* and nonsignificant ($r = -.23, p = .287, N = 23$). In contrast, the association between consumer insolvency and gambling

expenditure per year is both sizable and significant ($r = .51, p = .013, N = 23$). However, the relationship between consumer insolvency and problem gambling prevalence, although in the right direction, is nonsignificant ($r = .21, p = .700, N = 6$).

Table 48: Alberta Consumer Insolvency Rates as they Related to Gambling Expenditure, Problem Gambling Prevalence, and Economic Indicators.

	Consumer Insolvency Rate per 1000 Adults	Per Adult Expenditure on Gambling (2010 dollars)	Prevalence of Problem Gambling	Alberta GDP per Adult (2010 dollars)	Alberta Unemployment Rate (age 15+)
1987	1.5	\$304	--	\$64	9.5
1988	1.4	\$296	--	\$65	8.0
1989	1.4	\$300	--	\$65	7.1
1990	2.1	\$295	--	\$65	6.9
1991	2.9	\$297	--	\$60	8.2
1992	3.1	\$311	--	\$60	9.4
1993	2.9	\$348	3.9%	\$64	9.6
1994	3.2	\$509	--	\$67	8.8
1995	4.2	\$639	--	\$67	7.8
1996	5.0	\$643	--	\$69	6.9
1997	5.0	\$664	--	\$72	5.9
1998	4.0	\$739	3.4%	\$69	5.6
1999	4.3	\$766	--	\$72	5.7
2000	4.2	\$797	--	\$84	5.0
2001	4.0	\$867	2.8%	\$84	4.7
2002	4.0	\$901	1.8%	\$79	5.3
2003	4.4	\$904	--	\$84	5.1
2004	4.1	\$912	--	\$90	4.6
2005	3.5	\$947	--	\$100	3.9
2006	2.5	\$963	--	\$101	3.4
2007	2.2	\$973	1.3%	\$100	3.5
2008	2.7	\$1,001	2.1%	\$107	2.6
2009	4.4	\$951	3.1%	N/A	6.6

A final way of examining the consumer insolvency issue concerns the OSB reported consumer insolvency rate in each Alberta economic region as it relates to the opening of new casinos and RECs. This data is displayed in Table 49. A map of Alberta's economic regions is contained in Appendix F. Here again, there are a multitude of other factors influencing local insolvency rates so that the unique contribution of gambling is almost impossible to establish. However, what this table does illustrate is that, consistent with the contention that increased gambling availability bears a relationship to increased rates of insolvency, local consumer insolvency rates went up 13 times out of 22 in the year subsequent to the casino/REC introduction (going up by an average of 0.85 insolvencies per 1000 adults) compared to going down 9 out of 22 times (by an average of 0.66 insolvencies per 1000 adults).

Table 49: Consumer Insolvency Rates (per 1000 adults) in Alberta Economic Regions in Relation to the Opening of New Casinos or Racing Entertainment Centres (shaded cells).

	Lethbridge – Medicine Hat	Camrose – Drumheller	Calgary	Banff-Jasper-Rocky Mountain House	Red Deer	Edmonton	Athabasca – Grande Prairie- Peace River	Wood Buffalo-Cold Lake
1987	1.2	0.7	2.0	1.5	1.1	1.7	1.0	0.9
1988	1.3	0.6	1.8	1.2	1.1	1.6	1.0	1.1
1989	1.5	0.6	1.9	0.9	1.5	1.5	0.8	0.9
1990	2.1	0.8	2.8	1.1	1.9	2.1	1.2	1.8
1991	3.0	1.3	3.9	2.3	2.5	2.9	1.7	2.4
1992	3.1	1.6	4.4	2.5	3.0	2.8	2.0	2.5
1993	2.9	1.4	4.2	2.4	2.2	2.8	1.6	1.9
1994	3.1	1.6	4.3	1.6	2.1	3.3	1.6	2.5
1995	4.0	2.3	5.1	2.3	2.8	4.9	2.5	3.0
1996	4.5	2.6	5.5	3.1	4.3	6.3	3.7	3.9
1997	3.9	2.7	4.8	3.8	4.1	6.8	4.1	4.2
1998	3.7	2.9	3.4	3.4	3.7	5.4	3.7	4.5
1999	3.9	3.9	3.5	4.2	4.1	5.7	4.8	4.5
2000	4.1	4.1	3.6	3.6	3.7	5.6	4.4	3.9
2001	4.0	4.0	3.8	3.5	3.9	5.0	3.3	2.7
2002	3.9	3.9	3.9	3.9	4.8	4.7	3.9	3.0
2003	4.4	4.4	4.1	3.5	5.1	5.3	4.5	3.5
2004	4.6	4.6	3.8	3.7	5.2	4.8	4.1	3.7
2005	3.9	3.9	3.5	3.2	4.1	4.2	3.1	2.1
2006	3.2	3.2	2.1	2.2	2.8	3.0	2.8	2.3
2007	3.1	3.1	1.9	2.1	3.0	2.5	2.5	1.9
2008	3.8	3.8	2.3	2.5	3.1	2.9	3.0	1.8
2009	5.8	5.8	4.1	4.5	5.5	4.5	5.4	2.4

In summary, it is clear that insolvency/bankruptcy is an occasional consequence of severe problem gambling (occurring in perhaps 2.7% of Alberta problem gamblers in any given year), and that a significant portion of insolvencies in Alberta (probably in the range of 10% to 20%) can be attributed to excessive gambling. This finding is consistent with the reliable association between the introduction of gambling and subsequent rates of bankruptcy found in most socioeconomic studies that have examined this issue (Williams, Rehm, & Stevens, 2011).

Mental Health Impacts

Table 36 (p. 151), seen earlier in this document, established that the levels of unhappiness and stress are much higher in problem gamblers compared to both nongamblers and nonproblem gamblers. Further evidence of this finding is that in the 2008 and 2009 population surveys (combined), 31.2% of problem gamblers reported having a serious problem with depression, anxiety or another mental health problem in the past 12 months compared to 9.0% for the general population.

Unfortunately, this well established association does not tell us the degree to which problem gambling has created poor mental health, as there is good anecdotal evidence that people with mental health problems may be more likely to get heavily involved with gambling (a form of escape for some). To try to better understand the causal impact that gambling has had on mental health problems, the 2008 and 2009 General Population surveys asked people a) whether their involvement in gambling *caused* significant mental stress in the form of guilt, anxiety, or depression for you or someone close to you in the past 12 months, b) whether in the past 12 months they had thought of committing suicide *because of gambling*, and c) whether they have attempted suicide *because of gambling* in the past 12 months.

A total of 75/4005 people (1.9% \pm .4%) indicated that their gambling had caused significant mental stress in the form of guilt, anxiety or depression. This projects to roughly 52,060 adult Albertans.

Suicide Attempts

Among the 403 problem gamblers from the 2008 and 2009 population surveys, there were 6 individuals who reported attempting suicide in the previous 12 months because of gambling. This number translates into a prevalence rate of 1.5% \pm 1.2%, which would represent about 1,079 suicide attempts a year in 2008 and 2009 among the estimated 72,456 problem gamblers in the Alberta population. Statistics Canada reports that the Canadian Community Health Survey administered in 2000/2001 determined that approximately 8,816 Albertans age 15 and older reported attempting suicide in the past 12 months. If we assume that the per capita ratio of suicide attempts is the same in 2008/2009, and adjust for the population increase from 2001 to 2009, then roughly 10.1% \pm 8.0% of suicide attempts in Alberta are currently gambling-related.

Completed Suicides

It is quite difficult to establish the actual number of *completed* suicides in Alberta due to gambling. One way would be to assume that the ratio of suicide attempts in Alberta that were gambling-related would be the same as the ratio of suicides that are gambling-related. The Office of the Chief Medical Examiner reports there have been an average of 457 suicides in Alberta between 2001 to 2008 (Table 50). If we assume that 10.1% \pm 8.0% of these were gambling-related, then this represents roughly 46 \pm 36 cases per year in this time period.

Another approach is to establish the rate of attempted suicides to completed suicides. With an average of 450 documented suicides in 2000 and 2001 in Alberta, the ratio of reported attempted suicides in that time period (8,816) to completed suicides is approximately 19.6. This is fairly consistent with the World Health Organization's (WHO) estimate of 20 attempts to 1 completion (WHO, 2002). Thus, with this ratio applied to the estimated 1,079 problem gamblers who reported attempting suicide in 2008/2009, this would predict 55 gambling-related suicides each year.

Obviously, this estimated number is very much predicated on the accuracy of the attempted suicide to completed suicide ratio. Other Canadian research examining *hospitalization* for suicide attempts has found the ratio to be 6 to 7 hospitalized suicide attempts for every complete suicide (Langlois & Morrison, 2002). Another problem concerns the fact that Canadian completed suicide statistics are an underestimate of the true number of suicides as they do not include accidents where suicidal intent could not be unambiguously established (e.g., single occupant motor vehicle accidents). A final issue is that a large proportion of problem gamblers experience associated, and to some extent, independent problems in the areas of mental health, substance abuse, relationships, and employment that are contributors to suicidality. If these associated problems had not been present then the likelihood of gambling problems leading to a suicide attempt would have been lessened.

These predicted numbers of gambling-related suicides are considerably higher than the official number of gambling-related suicides in Alberta as reported by the Office of the Chief Medical Examiner. These latter statistics are also presented in Table 50. However, it is important to recognize that these numbers are recognized as significant underestimates, as the Medical Examiner in Alberta only records information about gambling if a relative or friend mentions it, or if there is other evidence of gambling at the scene of the death (e.g., suicide note).

Similar to the earlier noted declines in treatment and helpline calls, it appears that rates of gambling-related suicides have declined since 2000.

Table 50: Gambling-Related Suicides in Alberta as Identified by the Chief Medical Examiner.

YEAR	# Suicides	# of Unambiguous Gambling Related Suicides	% Gambling Related Suicides
1975	287	--	--
1980	400	--	--
1985	395	--	--
1990	400	--	--
1995	457	--	--
2000	418	8	1.9%
2001	482	11	2.3%
2002	441	12	2.7%
2003	459	6	1.3%
2004	455	8	1.8%
2005	427	7	1.6%
2006	457	3	0.7%
2007	472	9	1.9%
2008	460	3	0.7%
Total	4071	67	1.6%

Source: Data compiled by Kim Borden, Research Officer with Office of the Chief Medical Examiner. March 20, 2009.

Family Impacts

The family impacts of problem gambling have been addressed to some extent in an earlier part of this report where it was indicated that about half of problem gamblers are married and many have children. Typically, negative impacts in the problem gambler's immediate social network affect 2 to 4 other family members.

The 2008 population survey sheds more light on family impacts as it also inquired whether a) involvement in gambling had caused significant problems in their relationship with their spouse/partner or important friends or family in the past 12 months; b) gambling had caused the person to repeatedly neglect their children or family in the past 12 months; c) gambling had caused an instance of domestic violence in their household in the past 12 months; d) involvement in gambling had resulted in separation or divorce in the past 12 months; and e) whether child welfare services had become involved in the past 12 months because of gambling.

Among the 403 problem gamblers from the 2008 and 2009 population surveys, 17 individuals reported that gambling had caused an instance of domestic violence (4.2% \pm 1.9%), 17 reported

that gambling had resulted in separation or divorce ($4.2\% \pm 1.9\%$), and 4 reported that child welfare services had become involved because of their gambling ($1.0\% \pm 0.97\%$). These numbers, in turn represent about 3,043 cases a year of domestic violence, 3,043 cases a year of divorce/separation⁸², and 724 cases of child welfare involvement in 2008 and 2009 among the estimated 72,456 problem gamblers in Alberta.

Work/School Impacts

The magnitude of work and school impacts caused by problem gambling was also assessed through questions in the 2008 and 2009 population surveys. These surveys asked: a) Has your involvement in gambling caused significant work or school problems for you or someone close to you in the past 12 months or caused you to miss a significant amount of time off work or school?, b) In the past 12 months, about how many work or school days have you lost due to gambling?, c) In the past 12 months, have you lost your job or had to quit school due to gambling?, and d) In the past 12 months, have you received unemployment benefits or welfare payments as a result of losing your job because of gambling?

A total of 14/4005 ($3.5\% \pm .6\%$) people indicated that gambling has caused significant work or school problems for them in the past year. This projects to about 9,718 Albertans a year.

Among the 403 problem gamblers from the 2008 and 2009 population surveys, there were 27 individuals who reported that gambling had caused them significant work or school problem and/or miss a significant amount of time off work of school (with an average of 20 days lost); 5 individuals who reported that gambling had caused them to lose employment; and 4 individuals who reported that gambling had resulted in them receiving unemployment benefits or welfare payments. This translates into prevalence rates of $6.7\% \pm 2.4\%$ for significant work/school problems and/or missing work/school, $1.2\% \pm 1.1\%$ for loss of employment and $1.0\% \pm 0.97\%$ for unemployment/welfare benefits.

These numbers, in turn represent about 97,091 days lost for 4,855 Albertans (representing 0.3% of the Alberta workforce), 899 cases per year of lost employment, and 716 cases per year of unemployment/welfare benefits in 2008 and 2009, among the estimated 72,456 problem gamblers.

⁸² There were 8,075 divorces in Alberta in 2005 (CANSIM Table 101-6501).

Crime

It is a common perception that increased gambling is associated with increased crime. However, in many ways this may be a vestige of the well publicized involvement of organized crime in the development of legal gambling in the United States in the 1940s. The actual empirical evidence of an association is mixed, with almost as many studies finding no impact on crime as studies that have found increases in crime as a result of increased availability of gambling (Williams, Rehm & Stevens, 2011).

Theoretically, the introduction of legal gambling should influence crime rates in one of several ways. One way is by decreasing the rate of illegal gambling. A second is by increasing the number of problem gamblers, a minority of which engage in crimes (primarily property crime) to support their gambling. A third is because certain forms of gambling (e.g., casinos) offer increased opportunities for illegal activity to occur (e.g., passing counterfeit money, money laundering, cheating-at-play). A fourth is by creation of venues that serve alcohol and thereby potentially contribute to alcohol-related offences, and/or venues that disproportionately attract a clientele with criminal tendencies. A fifth and final way is by increasing the overall number of visitors to the area (this population is often not taken into account when determining a jurisdiction's crime rate per capita).

Population Surveys

Several questions in the 2008 and 2009 Alberta population surveys potentially shed light on the rate at which gambling problems directly lead to criminal activity: a) "Has your involvement in gambling caused you or someone close to you to write bad cheques, take money that didn't belong to you or commit other illegal acts to support your gambling in the past 12 months?", b) "In the past 12 months has gambling ever caused an instance of domestic violence in your household?", c) "In the past 12 months, how much money have you illegally obtained in order to gamble?", d) "In the past 12 months has your gambling been a factor in your committing a crime for which you have been arrested?", e) "Were you convicted for this crime?", and f) "Were you incarcerated for this crime?". (Note: Earlier in this report domestic violence was addressed under family impacts of problem gambling. However, because domestic violence is also an assault violation in the Criminal Code of Canada it will be dealt with in this section as well).

Among the 403 problem gamblers from the combined 2008 and 2009 surveys, 29/403 (7.2% \pm 2.5%) indicated that their gambling had caused them to commit an illegal act, 17/403 (4.2% \pm 1.9%) indicated that gambling was the cause of an incident of domestic violence, 25/403 (6.2% \pm 2.4%) indicated they had obtained money illegally for their gambling, 5/403 (1.2% \pm 1.1%) indicated they had been arrested for committing a gambling-related crime, 2/403 (0.5%) indicated they were convicted for this crime, and 1/403 (0.2%) indicated they were incarcerated for this crime.

Applying these prevalence rates to the estimated 72,456 problem gamblers in Alberta in 2008/2009 would suggest that annually there would be about 5,214 Albertans who commit gambling-motivated illegal acts, 4,494 who illegally obtain money to gamble, 3,043 cases of domestic violence due to gambling,⁸³ 899 people who are arrested because of gambling-related offences, 360 who are convicted for this gambling-related offence, and 180 who are actually incarcerated for this gambling-related offence.

Direct Examination of Police Records

A second method of studying gambling-related crime is by examination of police reports. While the offence category of any police involvement is available from secondary sources such as Statistics Canada Uniform Crime Survey, the cause of these incidents is only potentially available from the original police report.

In Alberta, most of the major cities have municipal police services, with the rest of the province served by the federal police force, the Royal Canadian Mounted Police (RCMP). The Research Team contacted each of Alberta's major police services (Calgary, Edmonton, Lethbridge, Medicine Hat, and the RCMP) to request access to their case files for the purpose of examining them for gambling-related incident reports. Two of these agencies agreed to allow the Research Team access to their files: Lethbridge Regional Police Service (LRPS) and the Medicine Hat Police Service (MHPS).

Unfortunately, cause(s) of crime are not automatically recorded in police reports. However, there is an option for police officers to record details and mitigating factors of an occurrence within the narrative of their report. Thus, the process for determining the presence of gambling-related offences in police incident reports is doing key word searches of these narratives, with the recognition that the observed frequency of gambling-related offences will be an underestimate (i.e., for gambling to be recorded in the report there needs to be: a) actual gambling-related involvement, b) a police officer aware that the incident is gambling-related, and c) a police officer who feels that it is important to record the gambling-related nature of the incident in his/her report).

A member of the Research Team (Jennifer Arthur) electronically searched through the 2005 to 2009 incident reports of the Lethbridge Regional Police Service, whereas the Medicine Hat Police Service assigned an officer to conduct the key word searches on the Research Team's behalf for the period 2004 to 2009. Key words used for these searches were 'gamble', 'gambling', 'VLT', 'lottery', 'casino', and 'bingo'. Whenever one of these words was found then

⁸³ Canadian Criminal Code statistics do not identify whether assaults are domestic-related or not. However, there is a rough way of inferentially estimating the percentage of domestic violence incidents that are gambling related. In the 2008/2009 Targeted population surveys of the Lethbridge area, 1/903 people indicated that gambling led to domestic violence. This projects to 75 cases on average per annum among the estimated 72,456 problem gamblers. Given that the average number of domestic violence incidents reported in Lethbridge police incident reports for 2008/2009 was 947, gambling-related domestic violence would have accounted for approximately 7.9% of all incidents.

the entire file was read to ascertain a) whether the incident was gambling related or not, b) the type of incident, and, c) details of the incident. As a reference point, the number of total reported offences as a function of year and offence type were obtained for Lethbridge and Medicine Hat. The data for Lethbridge was taken from the Lethbridge Regional Police Services annual reports posted on their website. The data for Medicine Hat was provided directly by the Medicine Hat Police Service. Incident occurrence data can be broken down into 5 general categories: a) Crimes against Persons (e.g., murder, robbery, assault, domestic violence, etc.), b) Crimes against Property (e.g., break and enter, theft, fraud, etc.), c) Vice Crimes (gaming, liquor, drugs, prostitution, etc.), d) Criminal Code Traffic Violations (impaired operation of motor vehicle, refusal to provide breath sample, hit and run, etc.), and e) Other (incidents that are not criminal in nature, but still require police assistance (e.g., attempted suicide, child neglect/abandonment, breach of probation).

The results of this investigation are presented below in Table 51, with the results for Lethbridge at the top, Medicine Hat in the middle, and the combined communities at the bottom. These figures indicate a few things. First, that consistent with expectation, the most common type of gambling-related incident is property related, accounting for 48.7% (184/378) of all cases. Second, consistent with some other indices of problem gambling examined in other sections of this report, the number of gambling-related incidents in recent years appears to be somewhat lower than earlier years. Third, the rate of overall gambling-related incidents is quite low, representing only 0.6% of all incident reports (378/64280).

This low rate of occurrence is similar to what was found by Smith, Wynne, & Hartnagel (2003) in their examination of Edmonton police records for 2001 using a very similar methodology. These investigators found a 2.7% rate (338/11198)⁸⁴ among the files they examined. Presumably, the 2.7% rate is higher than our 0.6% rate primarily because Smith et al. (2003) only searched for gambling-related incidents in crime categories that were deemed to be most likely to contain these events,⁸⁵ as opposed to the examination in all categories as was done in the present study (thus, their rate would be lower if their denominator was the total number of incidents in *all* categories in 2001). This does not negate the possibility that there may also be true differences between the rates due to different time periods and different communities (both of which might favour higher rates in the Smith, Wynne, & Hartnagel (2003) study).

To help gauge the degree of underestimation of gambling-related incidents in the police records, a comparison was made between the number of incidents of gambling-related domestic violence and illegal acts in the police records for the years 2008 and 2009, compared to the number of reported instances in the Lethbridge and Medicine Hat Targeted population surveys for 2008 and 2009. In the police records there are only 8 cases of

⁸⁴ 338 is an estimated number that combines the 234 cases that were identified among the 5196 files, plus 104 cases projected to occur in the 6002 files that were not examined.

⁸⁵ Murder, Attempted Murder, Manslaughter, Extortion, Robbery, Counterfeiting, Fraud, Betting house, Gaming House, Other Gaming & Betting, Organized Crime Occurrence, Cocaine Trafficking, Suicides, Attempted Suicides, Family Disputes.

gambling-related illegal acts and 8 cases of gambling-related domestic violence in both cities combined for these two years. By comparison, in our Targeted population surveys, there were 4/1805 people in the Lethbridge and Medicine Hat regions who indicated that gambling had resulted in the commission of illegal acts in 2008/2009 and 5/1805 people who reported an incident of gambling-related domestic violence. With a combined population of approximately 135,000 people between the 2 cities, this would project to 299 cases of gambling-related illegal acts per annum and 374 cases of gambling-related domestic violence per annum. It is true that only a portion of gambling-related crime is ever reported or detected. However, the size of the discrepancy between our Targeted population survey data and police record data would also suggest that even when gambling-related crime is reported, it is not routinely documented.

Table 51: Reported Criminal Offences as a Function of City and Year.

Lethbridge	2004	2005	2006	2007	2008	2009	TOTAL
Property Crimes (PC)	N/A	5,448	5,195	6,077	5,730	5,708	28,158
Gambling-Related PC	N/A	0	32	20	24	15	91
Crimes against Persons (CP)	N/A	958	935	1,185	1,271	1,447	5,796
Gambling-Related CP	N/A	0	8	6	6	9	29
Vice Crimes (VC)	N/A	320	898 ⁸⁶	754	884	941	3,797
Gambling-Related VC	N/A	1	6	12	11	8	38
Impaired Motor Vehicle Operation (IMVO)	N/A	471	239	258	314	309	1,591
Gambling-Related IMVO	N/A	0	6	11	1	5	23
Other Gambling-Related Incidents	N/A	0	9	17	10	10	46
<i>TOTAL INCIDENTS</i>	<i>N/A</i>	<i>7,197</i>	<i>7,267</i>	<i>8,274</i>	<i>8,199</i>	<i>8,405</i>	<i>39,342</i>
<i>TOTAL GAMBLING-RELATED INCIDENTS</i>	<i>N/A</i>	<i>1</i>	<i>61</i>	<i>66</i>	<i>52</i>	<i>47</i>	<i>227</i>

Medicine Hat	2004	2005	2006	2007	2008	2009⁸⁷	TOTAL
Property Crimes (PC)	3,433	2,592	2,862	2,800	2,400	2,548	16,635
Gambling-Related PC	23	16	12	17	15	10	93
Crimes against Persons (CP)	532	531	598	638	663	773	3,735
Gambling-Related CP	3	0	3	4	3	4	17
Vice Crimes (VC)	419	483	431	594	626	557	3,110
Gambling-Related VC	4	5	5	7	5	1	27
Impaired Motor Vehicle Operation (IMVO)	183	173	187	272	294	349	1,458
Gambling-Related IMVO	1	1	1	1	1	1	6
Other Gambling-Related Incidents	1	3	3	2	2	1	12
<i>TOTAL INCIDENTS</i>	<i>4,567</i>	<i>3,779</i>	<i>4,078</i>	<i>4,304</i>	<i>3,983</i>	<i>4,227</i>	<i>24,938</i>
<i>TOTAL GAMBLING-RELATED INCIDENTS</i>	<i>32</i>	<i>25</i>	<i>24</i>	<i>31</i>	<i>26</i>	<i>13</i>	<i>151</i>

Both Communities Combined	2004	2005	2006	2007	2008	2009	TOTAL
Property Crimes (PC)	3,433	8,040	8,057	8,877	8,130	8,256	41,793
Gambling-Related PC	23	16	44	37	39	25	184
Crimes against Persons (CP)	532	1,489	1,533	1,823	1,934	2,220	9,531
Gambling-Related CP	3	0	11	10	9	13	46
Vice Crimes (VC)	419	803	1,329	1,348	1,510	1,498	6,907
Gambling-Related VC	4	6	11	19	16	9	65
Impaired Motor Vehicle Operation (IMVO)	183	644	426	530	608	658	3,049
Gambling-Related IMVO	1	1	7	12	2	6	29
Other Gambling-Related Incidents	1	3	12	19	12	11	58
<i>TOTAL INCIDENTS</i>	<i>(4,567)</i>	<i>10,976</i>	<i>11,345</i>	<i>12,578</i>	<i>12,182</i>	<i>12,632</i>	<i>64,280</i>
<i>TOTAL GAMBLING-RELATED INCIDENTS</i>	<i>(32)</i>	<i>26</i>	<i>85</i>	<i>97</i>	<i>78</i>	<i>60</i>	<i>378</i>

⁸⁶ The significant change in rates under vice crimes between 2005 and 2006 is due to a change in LRPS records system. In 2005 public consumption and public intoxication is not captured in this figure.

⁸⁷ 2009 data for Medicine Hat is missing data from Nov and Dec. To compensate for these missing months the authors took the average occurrence per month from January 1st, 2009 to October 31st 2009 and applied this average to November and December 2009 to create a full year.

It is important to remember that the figures in Table 51 represent incidents that are directly caused by gambling as well as incidents that are *associated* with gambling in some way. Thus, further scrutiny of these events is needed to better understand their nature. Detailed analysis established that the large majority of these incidents represented offences that had been identified in the key word search because the offence *occurred in a gambling venue (i.e., casino) or in the immediate vicinity of a gambling venue*. This was true for 276 out of the 378 total incidents (73.0%). As speculated earlier, it is quite possible that gambling venues either attract people with greater criminal tendencies and/or provide more opportunities for criminal activity. However, the actual causal role of the gambling venue is difficult to establish in most of these situations.

In fact, there were only 62 cases among the entire data set where the report contained enough information such that the criminal offence could be unambiguously attributed to gambling-problems. Twenty one of these cases (33.9%) involved Domestic Violence due to gambling. Eighteen cases (29.0%) involved Fraud. These fraud cases ranged from not paying a taxi driver because of insufficient funds to fraudulently obtaining \$83,000 from an employer to support gambling. (The average monetary amount involved in these cases was \$18,972). Seventeen cases (27.4%) involved Theft Under \$5000. Average amount stolen to support gambling in these cases was \$898 (median of \$180). Five cases (8.1%) involved Theft Over \$5000. Four out of 5 of these cases involved employees stealing from their employers (average of \$20,750 stolen for all 5). Finally, there was one case of Break and Enter (1.6%).

There were also 7 suicide attempts related to gambling. The majority of these individuals were young males. One was a college student who was despondent because he had spent all his student loan money on gambling. There were 4 cases of child neglect related to gambling, with the child (age 2.5 to 6) being left in the car while the parent gambled. Two of these involved mothers playing VLTs.

The present analysis has some similarities and some differences with the results of the Smith et al. (2003) study. The most important difference is that 62.5% of the 208 gambling-related incidents reported in Smith et al. (2003) involved passing counterfeit currency, whereas there were no such gambling-related incidents identified in the present study. The high rate of counterfeiting in Smith et al. (2003) was attributed to the fact that counterfeit bills would presumably be less likely to be detected in the high volumes of cash that are circulated in gambling venues. Aside from this important difference, there were several similarities between the two studies in terms of the most common gambling-related incidents. Smith et al. (2003) found that fraud-related offences were the second most common gambling-related offence (22.1% of the 208 incidents), domestic disputes were the third most common (7.7% of the 208 incidents), and suicides and attempted suicides were the fourth most common (1.9% of the 208 incidents). Theft, which was an important category in the present study, was not assessed in Smith et al. (2003).

Notable in both studies is the absence of incidents associated with loan-sharking, money laundering, and cheating-at-play, all of which undoubtedly occur to some extent.

Alberta Gaming and Liquor Commission Data

Part of AGLC's mandate is to license, regulate, and monitor gambling and liquor activities in Alberta in accordance with the *Gaming and Liquor Act*, Gaming and Liquor Regulation, and the *Criminal Code of Canada*. To help meet this part of their mandate the Regulatory Division of AGLC has an investigations arm which is primarily responsible for a) enforcing terms and conditions of AGLC licensing agreements, b) performing background checks on gambling owners, employees, volunteers, and suppliers, c) investigate criminal occurrences related to licensed gambling, d) coordinate with municipal law enforcement agencies to gather, analyze, and disseminate intelligence.

Within the investigations branch of the Regulatory Division of AGLC is a multi-agency task force called the Gambling Investigations Team (GIT) (formed in 2001). This task force is funded by AGLC and is responsible for investigating crimes that occur on licensed gaming premises (e.g., cheating at play, theft) as well as illegal gambling (unlicensed gaming houses, bookmaking, etc.). GIT investigators are RCMP and municipal police officers whose wages are paid by AGLC. There are 2 full time RCMP officers, one in Calgary and one in Edmonton. There are 4 half-time officers, with one in Camrose, one in Lethbridge, one in Medicine Hat, and one in the Tsuu T'ina First Nation.

Gambling venues are required to report to GIT any illegal activity on their premises for investigation. A request for data was made to the Executive Director of the Regulatory Division of AGLC (Gill Hermanns). Mr. Hermanns indicated that this data was kept by the police and not the AGLC. However, in a telephone interview he indicated he was confident that illegal gambling activity has decreased with the infusion of legal gambling, and attributed this decrease to the notion that people feel more secure going to a legal gambling venue when presented with the choice of both legal and illegal gambling, therefore decreasing the market for illegal gambling. Mr. Hermanns also pointed out that while illegal gambling has decreased it has not been abolished, and made reference to a recent investigation where "gray machines were seized from the backroom of a restaurant".

There is some historical data that is useful to examine. Prior to the formation of AGLC, the Gaming Control Branch in the Attorney General's office was responsible for the control and regulation of gambling. The Gaming Control Branch reported investigation statistics in their annual reports from 1991 to 1995, reported in Table 52. Essentially these data confirm the police incident report data in that theft and fraud tend to be the most common types of offences, along with various forms of cheating.

Table 52: Criminal Charges Laid by Inspectors from the Gaming Control Branch.

Offence	1991	1992	1993	1994/1995 (fiscal year)
Theft Over \$1000	14	20	11	10
Theft Under \$1000	8	4	4	5
Cheating at Play	3	6	7	9
Conspiracy to Commit Fraud			5	6
Fraud Under \$5000			3	1
Fraud Over \$5000			8	1
Mischief			1	7
Offering Secret Commissions			4	
Uttering a Forged Document			3	
Obstruction of Justice				2
Uttering Slugs (VLTs)				1
Break, Enter, & Theft			1	
Counsel an Offense ⁸⁸			8	
Operating Lottery Scheme Contrary to Licence Terms & Conditions			12	
Other		34		1
TOTAL	28	64	67	43

Source: Alberta Gaming Commission and Gaming Control Branch Annual Reports.

Statistics Canada Data

The main utility of the police record data is that it provides guidance concerning the types of crimes to look for in aggregate crime statistics. Thus, this was used to selectively examine certain categories of Alberta crime statistics as reported by Statistics Canada's Uniform Crime Reporting Survey. The information from this annual census comes from the Canadian Centre for Justice Statistics which collects reports of crime-related incidents from police forces across Canada.

Table 53 displays crime-related incidents in Alberta per 100,000 people from 1962 to 2009 in the categories of All Criminal Code Offences (except traffic), All Violent Offences, All Property Offences, All Theft Offences, All Fraud Offences, Counterfeit Money Offences, and All Illegal Gambling Offences. Note that there were important changes in the way certain offences were categorized after 1997 (violent crimes, property crimes, counterfeiting) that make comparisons with the previous time period tenuous (and not possible at all with regard to counterfeiting).

One important and obvious trend in the data is the continuous decrease over time in the rate of illegal gambling. This makes sense considering that the increased availability of legal gambling should dampen the demand for illegal gambling opportunities. There is a particularly large

⁸⁸ Counseling someone to commit an offense.

decrease in illegal gambling coincident with the 1969 Criminal Code change legalizing ‘lottery schemes’. Another decrease appears to occur coincident with the 1985 Criminal Code change giving control over lottery schemes to the provinces and permitting them to offer electronic forms of gambling. However, it is important to note that some of these decreases actually preceded the 1969 and 1985 legislative changes (particularly the decrease from 1965 to 1968). This likely reflects the greater tolerance for illegal gambling and less diligent enforcement of the law that often tends to precede legislative changes.

To empirically examine the relationship of these crime rate trends to gambling, the statistical degree of association between these indices and several different indices of gambling availability was examined.⁸⁹ More specifically, these crime indices over time were correlated with changes in the following gambling availability indices over the same time period: number of pull ticket licences per 1000 adults; number of bingo events per 1000 adults; number of ticket lottery centres per 1000 adults; number of VLTs per 1000 adults; number of VLT locations per 1000 adults; number of permanent casinos and RECs per 1000 adults; number of slot machines per 1000 adults; number of total EGMs per 1000 adults; and per adult net gambling expenditure (in 2010 dollars). These correlations appear in Table 54.

Several significant (and somewhat surprising) correlations were observed, with the significant correlations being represented by shaded cells. It was found that the per capita rate of total Criminal Code incidents was significantly and positively associated with the per adult prevalence of pull ticket licences, bingo events, and lottery ticket centres. The per capita rate of violent crime was significantly positively associated with per adult prevalence of lottery ticket centres, VLTs, VLT locations, casinos and RECs, slot machines, EGMs, and net gambling expenditure. The per capita rate of property crime was significantly positively correlated with per adult prevalence of pull ticket licences and ticket lottery centres. The per capita rate of theft was significantly *negatively* associated with per adult prevalence of pull ticket licences and bingo events, but positively associated with per adult prevalence of ticket lottery centres, VLTs, VLT locations, casinos and RECs, slot machines, EGMs, and net gambling expenditure. The per capita rate of fraud was significantly positively associated with the per adult prevalence of pull ticket licences and bingo events, but *negatively* associated with per adult prevalence of VLTs, VLT locations, casinos and RECs, slot machines, EGMs, and net gambling expenditure. The per capita rate of illegal gambling was significantly negatively associated with per adult prevalence of ticket lottery centres, casinos and RECs, slot machines, EGMs, and net gambling expenditure.

Some of these correlations do not make any theoretical sense (i.e., increased gambling availability being associated with decreased theft and fraud). It would seem that most of these are likely spurious correlations that have capitalized on the general increase over time of gambling availability coincident with the general nation-wide increase in crime rates up to the

⁸⁹ Although a broad range of gambling availability indices were used, there was somewhat more of a focus on the ones plausibly related to crime. In the 2008 and 2009 population surveys we examined types of gambling reported by the small subset of people reporting engaging in illegal activities to support their gambling. Sixty two and one-half percent of these individuals indicated there was a particular form causing more problems than others, with EGMs (42%) and casino table games (19%) being identified as the most problematic.

early 1990s, that was followed by a general nation-wide decrease in crime up to the present time (the exception being violent crime in Alberta which has not decreased). There simply is not enough year-to-year variability in either gambling availability or crime rates to fairly evaluate whether crime indices would move up and down coincident with up and down changes in gambling availability. Thus, there appears to be very little in the way of reliable findings from this analysis. The one exception is the significant decrease in illegal gambling that can be plausibly attributed to the increases in legal gambling availability.

Summary

In summary, there is a relationship between crime and gambling by virtue of the fact that a small percentage of problem gamblers (~7%) report commit offences as part of their addiction (particularly domestic violence, fraud, and theft) and because gambling venues provide some additional opportunities for crime (cheating-at-play, passing counterfeit bills, money laundering, loan-sharking, theft, impaired operation of motor vehicle). The self-reported rate of gambling-related crime is much higher than the observed/detected incidents of gambling-related crime (which is true of most crime). However, neither the self-reported or detected incidents of gambling-related crime represent a significant portion of overall crime in Alberta. This finding is true even within categories where gambling-related crime occurs (i.e., as a reference point there were roughly 76,000 incidents of theft and 12,600 incidents of fraud reported in Alberta in 2009). A possible exception is domestic violence, where very tentative evidence indicates that 8% of domestic violence incidents in Lethbridge might be gambling-related (see footnote 81). These overall low rates of gambling-related crime are partly due to the fact that gambling-related criminal activity only occurs in about 7% of problem gamblers, and problem gamblers only account for 2% to 3% of the adult population. It is also important to recognize that a portion of this problem gambling driven crime would likely have occurred independent of the increased availability of legal gambling, as significant rates of problem gambling existed even prior to legal availability. Of final note, there has been quite a significant decrease in illegal gambling since the 1960s, which offsets increases in gambling related crime.

Table 53: Crime-Related Incidents per 100,000 Population in Alberta.

	All Criminal Code	All Violent Crimes	All Property Crimes	Theft	Fraud	Counterfeiting	Illegal Gambling
1962	3932	311	2559	1457	371	--	22.6
1963	4206	369	2708	1570	395	--	22.6
1964	4344	371	2845	1628	382	--	25.5
1965	4018	395	2482	1456	323	--	27.8
1966	4635	492	2807	1670	364	--	24.9
1967	5179	558	3130	1821	397	--	22.4
1968	5595	590	3515	1976	459	--	13.8
1969	6066	626	3936	2217	526	--	6.9
1970	6953	687	4717	2774	575	--	7.8
1971	6993	720	4788	2837	536	--	4.9
1972	6958	745	4749	2731	581	--	4.8
1973	7225	768	4885	2745	572	--	4.6
1974	7845	771	5126	2883	554	--	4.7
1975	8427	789	5517	3104	641	--	4.0
1976	8742	804	5601	3293	508	--	5.2
1977	8749	773	5648	3276	500	3.7	2.6
1978	8175	751	5291	2998	491	4.2	3.5
1979	8521	751	5506	3145	495	2.0	4.4
1980	9265	780	6089	3438	659	3.1	2.9
1981	9690	787	6478	3738	657	3.2	3.4
1982	9746	843	6576	3855	603	8.7	3.1
1983	9291	806	6199	3751	546	1.6	2.3
1984	8497	804	5505	3317	548	7.2	2.4
1985	8558	861	5455	3300	551	3.8	1.7
1986	9562	901	6199	3749	608	3.9	1.7
1987	10715	900	7036	4498	553	6.9	1.9
1988	11046	959	7045	4488	543	5.2	1.2
1989	10873	992	6678	4223	543	7.0	0.9
1990	11482	1045	6943	4313	560	3.1	1.8
1991	12767	1267	7629	4520	602	17.6	1.0
1992	11886	1177	7132	3959	551	27.2	1.9
1993	10661	1149	6261	3451	498	13.1	0.9
1994	9379	1055	5420	2995	437	14.4	1.4
1995	9087	1006	5210	2953	497	13.3	3.6
1996	9000	1016	5102	2848	456	22.2	8.8
1997	9216	1077	5058	2844	429	50.5	2.0
1998	9137	1167	6342	2770	492	2.2	1.4
1999	9086	1111	6118	2707	448	6.6	1.3
2000	8802	1197	5827	2520	393	4.6	0.6
2001	9027	1253	5884	2485	385	5.0	0.8
2002	9211	1188	6104	2643	422	6.4	0.4
2003	9933	1207	6655	2863	437	6.1	0.6
2004	9980	1134	6639	2781	440	9.1	0.5
2005	9797	1135	6503	2691	417	5.3	0.3
2006	9362	1147	6229	2422	349	2.0	0.4
2007	9154	1335	6055	2315	362	2.7	0.3
2008	9035	1362	5711	2159	351	5.2	0.6
2009	8540	1348	5336	2066	341	3.6	0.5

Note: Prior to 1977 Total Offences included Criminal Code traffic offences. Note: Violent Crime, Property Crimes and Counterfeiting were coded in a different way subsequent to 1997. Thus, the rates between the two periods are not strictly comparable.

Source: Statistics Canada Uniform Crime Reporting Survey. Tables 252-0001, 252-0013, 252-0051.

Table 54: Correlation between Crime-Related Incidents per Year and Gambling Availability per Year in Alberta (1962 to 2009).

	# Pull Ticket Licences per 1000 Adults	# Bingo Events per 1000 Adults	# AB Ticket Lottery Centres per 1000 Adults	# VLTs per 1000 Adults	# VLT locations per 1000 Adults	# Casinos and RECs per 1000 Adults	# Slot Machines per 1000 Adults	# EGMs per 1000 Adults	Per Adult Net Gambling Expenditure (2010 dollars)
Criminal Code Incidents	0.66	0.52	0.85	-0.25	-0.25	-0.04	-0.20	-0.25	-0.15
<i>p</i>	.00	.00	.00	.14	.15	.82	.25	.15	.40
<i>N</i>	31	31	33	35	35	35	35	35	35
Violent Crime Incidents	-0.08	-0.17	0.90	0.70	0.68	0.88	0.74	0.80	0.83
<i>p</i>	.68	.37	.00	.00	.00	.00	.00	.00	.00
<i>N</i>	31	31	33	35	35	35	35	35	35
Property Crime Incidents	0.37	0.21	0.83	-0.29	-0.28	-0.06	-0.05	-0.18	-0.09
<i>p</i>	.04	.26	.00	.09	.10	.74	.79	.31	.61
<i>N</i>	31	31	33	35	35	35	35	35	35
Theft Incidents	0.64	0.60	0.55	-0.77	-0.75	-0.68	-0.73	-0.83	-0.76
<i>p</i>	.00	.00	.00	.00	.00	.00	.00	.00	.00
<i>N</i>	31	31	33	35	35	35	35	35	35
Fraud Incidents	0.35	0.43	-0.06	-0.79	-0.77	-0.81	-0.79	-0.88	-0.86
<i>p</i>	.05	.02	.75	.00	.00	.00	.00	.00	.00
<i>N</i>	31	31	33	35	35	35	35	35	35
Counterfeiting Incidents	0.27	0.24	-0.08	0.44	0.46	0.18	0.34	0.28	0.36
<i>p</i>	.41	.46	.77	.25	.24	.06	.31	.33	.48
<i>N</i>	31	31	21	33	33	33	33	33	33
Illegal Gambling Incidents	-0.03	0.18	-0.77	-0.25	-0.24	-0.45	-0.54	-0.45	-0.47
<i>p</i>	.86	.32	.00	.15	.16	.01	.00	.01	.00
<i>n</i>	31	31	33	35	35	35	35	35	35

Note: For Counterfeiting a correlation was taken between data prior to 1998 and another correlation with data from 1998 to present. These correlation coefficients and *p* values were averaged together.

IMPACTS ON PRIVATE INDUSTRY

Private Sector Gambling Providers

The private sector part of Alberta's gambling industry consists of a) casino owners who host government owned slot machines and charity casino events; b) the lounges who host government-owned VLTs; c) ticket lottery retailers who sell government lottery, instant win, and sports betting tickets; d) the horse racing industry; and e) private bingo hall operators.

Although the private sector plays a central role in the actual provision of gambling in Alberta, it receives a comparatively small percentage of the net gambling revenue. Since 2001 private operators (excluding horse racing) have received between 16% to 17% of total net gambling revenue, with the horse racing industry receiving an additional 2% in the past few years (see Figure 28, p. 125). This amounted to approximately \$460 million dollars in revenue in 2010.

As seen in Figure 28, the percentage of revenue accrued by private operators has been relatively stable over the past 30 or 40 years, although it has varied from a low of 11% to a high of 23%. This stability is primarily because the private sector receives a fixed percentage of revenue from VLTs (15%), slots (15%), casino table games (50% to 75%), and ticket lotteries (6.5%), regardless of the actual amount gambled. In contrast, the percentage of net Alberta gambling revenue received by the horse racing industry continues to decline. Horse racing constituted as much as 21% of Alberta gambling revenue in the early 1980s, but now only represents about 2%.

It is important to recognize that Albertan citizens are directly and indirectly the beneficiaries of much of this \$500 million dollars that the private sector receives annually. This is because a sizeable portion of these profits are spent on wages to staff the casinos, VLT venues, lottery retail outlets, and the various employees involved in the horse racing industry. Another significant portion of these profits is spent on local supplies.

In jurisdictions where private operators are the primary beneficiaries of gambling revenue it would be important to establish exactly how much of their revenue is actually spent on wages and local supplies, and how much money leaves the jurisdiction to shareholders and/or to purchase out-of-jurisdiction supplies/equipment and/or to reinvest in out-of-province ventures. However, the amounts involved in the present situation are too small relative to overall Alberta gambling revenue to be consequential, and are therefore not examined in this report. It is also important to recognize that a significant portion of Alberta casinos are owned by Albertan companies and individuals (Table 15, p. 86). For those who are interested, there have been two recent studies of the Alberta horse racing industry (Econometric Research, 2001; Serecon Management, 2009) that provide more detailed information about revenue disbursement and the economic spin-offs of horse racing in this province.

Infrastructure Value

The private sector is also responsible for adding to the wealth of Alberta via the capital investment it has made in casino properties. As documented in Table 55, this has amounted to well over \$573.3 million. The true figure would likely be 2 to 3 times higher than this if the capital investment was calculated in current dollars and all of the capital costs of all the venues was known.

Table 55: Capital Investment of Alberta Casinos.

Casino	Initial Cost	Year	Expansion Costs	Year(s)
Baccarat Casino	\$2,200,000	1996		
Boomtown Casino	\$800,000	1994	N/A	2000; 2006
Camrose Resort Casino	\$20,000,000	2007		
Cash Casino Calgary	N/A	1980	N/A	N/A
Cash Casino Red Deer	N/A	1995		
Casino Calgary	N/A	1997	\$5,000,000	2004
Casino Dene	\$11,000,000	2007		
Casino Edmonton	N/A	1986		
Casino Lethbridge	N/A	1993	\$10,000,000	2004
Casino by Vanshaw	N/A	1996		
Casino Yellowhead	\$16,000,000	2000		
Century Casino & Hotel	\$35,800,000	2006		
Deerfoot Inn & Casino	\$40,000,000	2005		
Eagle River Casino & Travel Plaza	\$63,500,000	2008		
Elbow River Casino	N/A	1989	\$35,000,000	2005
Gold Dust Casino	N/A	1994	\$6,000,000	2010
Great Northern Casino	N/A	1999	N/A	2003
Grey Eagle Casino & Bingo	\$40,000,000	2007		
Jackpot Casino	N/A	1997	\$1,500,000	2006
Palace Casino	~\$2,700,000	1990	\$12,000,000	2001
River Cree Casino & Resort	\$178,000,000	2006		
Silver Dollar Casino	N/A	1996	N/A	
Stampede Casino	N/A	1969	\$44,000,000	2008
Stoney Nakoda Entertainment Resort	\$60,000,000	2008		

Sources: Alberta Gaming Research Institute: Alberta Casinos.

Changes in the value of neighbouring property is another potential impact of new casinos. Most studies that have looked at this issue have tended to find a positive or neutral effect of new casinos on neighbouring property values (Williams, Rehm, & Stevens, 2011). A thorough empirical analysis of property value change was not done as part of this study. However, according to a top 10 performing Calgary realtor who has been in real-estate for 35 years, she

has seen little or no impact of casinos on property values. This is partly because casinos have to be built in R3 zoned areas, which are non-residential.⁹⁰

Impacts on Non-Gambling Providers

A comprehensive review of the impact of gambling on other private sector industries (i.e., private sector industries not directly involved in the provision of gambling) has found that in some cases changes in employment, business starts, business failures, and business revenue have been found, and in other cases no impacts have been observed (Williams, Rehm & Stevens, 2011). When there have been impacts, in some situations it appeared to represent a substitution or cannibalization of competing industries, and in other situations it appeared to represent a net benefit to other industries (Williams, Rehm & Stevens, 2011).

There are important lessons to be learned from this literature. First, impacts are more likely to be seen when baseline levels of economic activity are low (i.e., First Nations communities). Second, and most importantly, when there have been impacts to other industries it has typically been associated with ‘destination casinos’ that draw their patronage from outside the immediate area (i.e., bringing in a true influx of wealth), require overnight stays involving food and accommodation, and are located in tourist areas that offer other entertainment and sightseeing opportunities. Also, the specific industries that tend to be impacted are in the hospitality, entertainment, and tourism sectors (i.e., other forms of gambling, hotels, restaurants, lounges, car rental, sightseeing, etc.).

This is generally not the nature of the casino sector in Alberta (the First Nations issue will be dealt with in its own section). As previously indicated, while Alberta does have important tourist destinations that attract out-of-province visitors (in particular: city of Banff, Rocky Mountain National Parks, world-class ski resorts, Dinosaur Provincial Park, the annual 10 day Calgary Stampede), there are no casinos in any of these areas other than Calgary. Rather, 23 out of Alberta’s 27 casinos and RECs are located in Alberta’s major urban centres and draw their patronage primarily from these cities (i.e., Edmonton, Calgary, Red Deer, Lethbridge, St. Albert, Medicine Hat, Fort McMurray, and Grande Prairie). Alberta is not marketed as a casino destination, and our provincial neighbours who constitute a large percentage of the out-of-province visitors have many casinos of their own, the largest of which are as large or larger than anything in Alberta. Thus, although the Statistics Canada Travel Survey of Residents of Canada estimates that Canadian tourists (who constitute 60% of Alberta visitors) who visit a casino as part of their trip to Alberta spend \$80 to \$90 million dollars per year during their trip, it can be assumed that very little of this is spent *in* casinos and, very little is spent *because* of casinos.

Thus, it seems clear that if the introduction of gambling does have impacts on other industries in Alberta, these impacts would have to derive primarily from travel *by Albertans* to gamble and/or Albertans redirecting their household expenditures to gambling from other things.

⁹⁰ Personal communication to Jennifer Arthur, November 2, 2010.

With respect to this first possibility, most forms of gambling in Alberta are pervasively available and require no significant travel. There are over 2,400 retail outlets to buy lottery tickets, instant win tickets, or bet on sports; over 1,000 bars that provide VLTs; and about 90 community and commercial bingo halls. The only things that might require some travel are racetracks (only 4 that are regularly operational) and casinos. However, patronage levels for horse racing are too low for their travel-related expenses to be very important. Table 18 (p. 103) has established that only 3% to 5% of Albertans bet on horse racing in the period 2007 – 2009, with a significant portion of these individuals betting at the much more widely distributed teletheatres rather than at the racetrack. Also, with 27 casinos distributed throughout the province, very few people have to travel very far. Nonetheless, a question was asked in the 2008 and 2009 population surveys that specifically addressed this issue. For the 19.9% of people who reported visiting an Alberta casino in the past year, they were asked “On average, how much would you estimate you spend on hotels, food, drinks, shopping or other attractions each time you visit your favourite (Alberta) casino?” The modal response was “nothing” (46% of respondents), the median was \$5, and the average was \$91. Thus, in summary, it seems unlikely that casino gambling in Alberta generates significant travel-related expenses that could potentially impact other travel-related industries.

The possibility still exists that gambling has resulted in the redirection of money from other sector(s) of the economy, and that private industry impacts could be manifest in this manner. However, there does not appear to be much evidence for such impacts. Another question in the 2008 population survey asked “Has gambling replaced other recreational activities for you in the past 5 years”.⁹¹ Only 2.6% of the overall sample said “yes”, with this endorsement mostly coming from the small percentage of Alberta gamblers who have been identified as contributing the lion’s share of Alberta gambling revenue (Tables 22a,b, p. 111). Furthermore, the most commonly endorsed activities that gambling had replaced tended to be things that did not cost money: participating in sports (playing, coaching), outdoor leisure (e.g., walking, camping, driving, off-roading, horseback riding), interacting/spending time with friends, etc.

A second way of investigating the possibility of redirected money is by examining whether annual changes in reported gambling expenditures are related to annual changes in other reported household expenditures. On an annual basis from 1997 to 2008 the Statistics Canada Survey of Household Expenditures has asked a large representative sampling of Albertans to estimate their past year household expenditures in 14 different categories: food, shelter, household operation, household furnishings and equipment, clothing, transportation, health care, personal care, recreation, reading materials, education, tobacco and alcohol, miscellaneous, and gambling. A Pearson correlation was conducted between reported gambling expenditure in each of these 12 years against expenditure in each of these 13 other categories. None of the 13 correlations with gambling expenditure was found to be statistically significant. All correlations but one were slightly positive, reflecting the fact there has been

⁹¹ Admittedly, a better question would have been whether the person is spending less on other things because of gambling.

increased expenditures in all categories since 1997. The one negative correlation concerned an increase in gambling expenditure coincident with a stable expenditure on reading materials during this time period. However, virtually all categories had a negative correlation with reading materials, as this was the one category where average reported expenditure did not change from 1997 to 2008.

In summary, from a theoretical perspective it seems unlikely that there would be significant impacts on private industry as a result of Alberta gambling. However, as a final check of this hypothesis, an examination was made of changes in employment, overall number of businesses, and business failures in specific regions of Alberta as a function of casino introduction to that region. This approach is still somewhat problematic as even if differences are found, it is very difficult to disentangle the contribution that gambling has amongst the myriad of economic forces at work responsible for changes in these global economic indices. This is especially true in situations where gambling constitutes a small part of overall GDP (i.e., gambling represents less than 1% of GDP in Alberta). Discussion of these 3 targeted examinations follows.

Employment

Data from the Statistics Canada Labour Force Survey was used to examine changes in overall employment levels in selected Alberta communities as a function of casino introduction. A limiting factor in this analysis is that data from the Labour Force Survey is only available for 5 Alberta cities and only goes back to 1987 for community level data. Nonetheless, it does permit a reasonable test of whether casinos produce significant changes in overall community-level employment, as there were 15 casinos introduced to these communities during this time period. This data is presented in Table 56, with shaded cells representing casino introduction.

There are several ways of analyzing this data. One method used here is by examining the percentage increase in employment from one year before the community received the casino to one year after the casino opened (allowing for the fact it may take 1 year before impacts are fully manifest). To control for the fact that employment in all these communities has increased over time, the comparison points will be the percentage increase in employment in the 2 year period immediately prior to this casino opening and the 2 year period subsequent to the primary evaluation period. For example, in the case of Medicine Hat, a comparison will be made between the employment increase from 1995 to 1997 versus the average employment increase in 1993 to 1995 and 1998 to 2000.

The data showed slightly greater increases in employment in the casino introduction period compared to the control periods. For example, there was a 5.6% increase in employment in Edmonton subsequent to casino introduction compared to a 1.8% increase in the comparison periods; a 6.8% increase in Calgary employment levels subsequent to casino introduction compared to a 6.0% increase in the comparison periods; an 8.0% increase in Medicine Hat compared to 7.4% in the comparison periods; a 9.5% increase in Red Deer compared to a 9.5%

increase in the comparison periods; and a 6.5% increase in Lethbridge compared to a 7.1% increase in the comparison periods.

The average percentage increase in employment levels subsequent to casino introduction was 6.6% compared to 5.7% in the control periods. However, these differences were not statistically significant: $t(27) = .51, p = .69$.

	Medicine Hat	Lethbridge	Calgary CMA	Red Deer	Edmonton CMA
1987	24.4	26.8	367.8	26.5	403.1
1988	26.7	27.3	379.6	27.5	414.4
1989	26.1	28.5	390.7	27.3	421.2
1990	24.8	27.2	395.4	28.9	428.6
1991	24.8	27.4	394.8	28.9	430.7
1992	24.6	26.7	392.4	28.7	430.9
1993	24.2	26.7	395.1	28.1	424.2
1994	26.1	30.5	403.1	29.5	431.4
1995	28.7	28.5	425.2	28.0	444.7
1996	29.0	30.1	450.7	29.4	444.6
1997	31.0	29.2	471.7	31.4	468.9
1998	33.6	32.2	499.1	34.0	477.0
1999	33.2	33.9	516.0	33.3	484.1
2000	32.3	34.3	541.9	36.9	491.1
2001	35.0	29.7	563.4	38.7	507.6
2002	35.5	31.3	573.0	39.8	523.2
2003	33.2	35.6	583.5	39.4	538.3
2004	37.2	34.2	598.7	39.7	553.8
2005	38.4	38.9	605.9	44.9	545.8
2006	36.7	40.2	655.1	44.3	561.3
2007	35.0	40.3	680.6	49.2	599.1
2008	38.9	39.7	704.1	49.0	621.1
2009	38.3	38.5	698.2	47.4	617.3

Sources: Statistics Canada Table 282-0057 and Table 282-0064- Labour Force Survey Estimates.

Business Counts

Data from the Statistics Canada Canadian Business Patterns was used to examine changes in overall number of business in Alberta census divisions (Appendix D) as a function of casino introduction to that census division. A limiting factor in this analysis is that data from the Canadian Business Patterns only goes back to 1998 for census level data (city-level data is not available). Nonetheless, there were 8 casinos that were introduced to these census divisions during this time period. The data is presented in Table 57, with shaded cells representing casino introduction. The same methodological approach used to evaluate whether there were any changes in employment levels was used to establish whether there were significant increases in business counts subsequent to casino introduction compared to control periods.

Here again, there was a slight, but nonsignificant tendency for business counts to be higher subsequent to casino introduction compared to control periods. In Census Division 19 (Grande Prairie) there was an 18.2% increase in business counts subsequent to casino introduction compared to 11.8% in the control period. In Census Division 11 (Edmonton) there was a 9.7% increase in business counts compared to a 0% increase in the control period. In Census Division 15 (Banff) there was a 9.1% increase compared to a 3% *decrease* in the control period. In Census Division 13 (Athabasca) there was a 3.6% increase compared to a 4.5% *decrease* in the control period. In Census Division 12 there was a 2.8% increase compared to 0.4% increase in the control period. In Census Division 10 (Camrose) there was a 3.7% *decrease* in business counts subsequent to casino introduction compared to a 0.2% increase in the control period. In Census Division 6 (Calgary) there was a 3.0% increase in business counts subsequent to casino introduction compared to 11.2% increase in the control period.

The average percentage increase in business counts subsequent to casino introduction was 5.7% compared to 2.2% in the control periods. Nonetheless, these differences were not statistically different: $t(12) = .55, p = .59$.

Table 57: Business Counts as a Function of Census Division and Year in Relation to Casino Opening (shaded cells)

		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Census Division	1	4769	5869	5938	6463	6531	6861	7080	7056	7142	7077	7156	6992
	2	9572	11822	11826	12760	12831	13232	13528	13336	13560	13887	14056	14562
	3	2707	3452	3498	3758	3743	3896	3893	3871	3901	3784	3778	3886
	4	1616	1918	1903	2010	1991	2009	2030	1992	1972	2393	2388	1972
	5	4365	5430	5398	5745	5808	6074	6162	6110	6135	6418	6487	6966
	6	64578	89877	91117	102039	104845	112709	116569	113271	116337	122941	123421	126574
	7	5122	6128	6040	6393	6403	6510	6502	6410	6442	6245	6306	6060
	8	10946	13970	14110	15668	15978	16858	17352	17318	17878	18897	18430	18933
	9	1659	2166	2172	2358	2384	2491	2521	2520	2550	3063	3168	3207
	10	7148	8905	8938	9861	10012	10351	10481	10313	10507	10006	10115	10797
	11	53302	70742	71383	78696	80313	84481	86805	83989	86767	92148	92684	96522
	12	3487	5076	5097	5500	5575	5715	5768	5763	5791	5816	5954	6365
	13	5558	6899	7022	7575	7686	7870	7869	8310	7936	7940	8106	8227
	14	2170	2731	2705	3017	3044	3144	3194	3162	3277	3154	3103	3163
	15	2348	2937	2980	3266	3320	3506	3556	3465	3437	3361	3579	3668
	16	2206	1787	1835	2055	2151	2322	2392	2381	2450	2738	2752	2991
	17	4011	5366	5372	5865	5893	5610	5642	5484	5521	5375	5344	5558
	18	1063	1471	1485	1590	1667	1715	1756	1501	1501	1579	1569	1573
	19	7674	9028	9072	10013	10266	11197	11542	11849	12244	12701	12667	13033

Source: Statistics Canada Canadian Business Patterns, Statistical and Geographical Data.

Commercial Insolvency

The final targeted analysis involved looking at data from the Office of the Superintendent of Bankruptcy concerning changes in the rate of commercial insolvencies in the different Alberta economic regions (Appendix F) as a function of casino introduction to that Alberta economic region. A limiting factor in this analysis is that data from the Office of the Superintendent of Bankruptcy only goes back to 1998 for economic region data (city-level and census-level data is not available). There were 7 casinos that were introduced to these economic regions during this time period. The data is presented in Table 58, with shaded cells representing casino introduction. The same analysis that was used for employment levels and business counts was used to establish whether there were significant increases in commercial insolvency rates subsequent to casino introduction compared to control periods. However, because insolvency rates are already standardized (i.e., per 1000 businesses), the raw change in rates, as opposed to the percentage change, will be reported.

There was no significant difference in the change in consumer insolvencies following casino introduction compared to the changes observed in the control periods. In the Edmonton economic region there was a decrease in commercial insolvency of 3.3 per 1000 businesses compared to 1.2 in the control period. In the Calgary economic region there was a decrease in commercial insolvency rates of 3.2 per 1000 businesses compared to a decrease of 1.4 in the control period. In the Camrose-Drumheller economic region there was a decrease of 1.5 per 1000 businesses compared to a decrease in 2.5 per 1000 for the control period. In the Athabasca-Grande Prairie-Peace River economic region there was an increase of 0.3 compared to a decrease of 1.2 in the control period. In the Wood Buffalo-Cold Lake economic region there was an increase in commercial insolvencies of 0.3 per 1000 businesses compared to a decrease of 2.6 per 1000 businesses in the control period.

The average change in commercial insolvency rates subsequent to casino introduction was a decrease of 1.0 per 1000 businesses compared to a decrease of 1.6 per 1000 businesses in the control periods. These differences were not statistically different: $t(12) = .52, p = .61$.

Table 58: Commercial Insolvency Rates (per 1000 businesses) in Alberta Economic Regions in Relation to the Opening of New Casinos or Racing Entertainment Centres (shaded cells).

	Lethbridge – Medicine Hat	Camrose – Drumheller	Calgary	Banff-Jasper-Rocky Mountain House	Red Deer	Edmonton	Athabasca – Grande Prairie- Peace River	Wood Buffalo-Cold Lake
1998	8	5.1	9.2	6.9	6.7	7.6	5.2	7.7
1999	9.6	9.2	7.2	4.1	6.9	7.5	9.7	4.7
2000	8.1	9.1	7.2	4.3	5.8	7.7	9.5	2.5
2001	7.2	6.7	7.6	4.4	7.6	7.5	8.2	2.1
2002	9.2	10.1	8.7	5.3	8.8	7.2	9.4	2.6
2003	8.5	4.2	6.7	7.0	10.0	5.9	5.2	3.6
2004	7.1	4.7	6.3	4.5	6.9	5.9	4.7	4.6
2005	5.8	2.9	4.9	4.4	6.7	4.7	3.5	5.3
2006	3.4	2.2	3.1	1.5	2.8	2.4	1.5	2.0
2007	1.9	1.6	1.9	1.0	2.2	1.4	1.2	1.2
2008	2.1	0.7	1.7	1.3	2.1	1.3	1.8	2.3
2009	0.5	0.8	1.6	1.0	1.9	1.2	2.5	3.6

Source: Office of the Superintendent of Bankruptcies

In summary, from a theoretical perspective it seems unlikely that there would be significant impacts on a region's general economic indices as a result of casino introduction in that region. Furthermore, from an empirical perspective, no significant differences were found. There are slightly greater increases in regional employment levels subsequent to casino introduction compared to control periods (6.6% versus 5.7%), as well as in total number of businesses (5.7%

versus 2.2%). Commercial insolvency rates tended to decrease subsequent to casino introduction (1.0 per 1000 businesses), but the decrease was actually larger in control periods (1.6 per 1000 businesses). While some of these trends are suggestive, it is important to remember that a) these differences were not statistically significant, and b) even if these trends were 'real', it is quite possible that casino introduction is timed to coincide with periods of better economic growth (something the comparison periods are unable to control for).

Impacts on Other Forms of Gambling

The last private sector impact examined was impact on other gambling forms. It is a common belief that new forms of gambling negatively impact older forms of gambling. This belief is largely based on an observation of declining participation and revenue in certain older forms (i.e., horse racing, bingo) coincident with increased participation and revenue with new forms (i.e., lotteries, instant win, sports betting, EGMs, casinos). While there is almost certainly some truth to this belief, it is important to recognize that there is very little empirical proof of this, and there are some things that argue against it. For one, horse racing began its decline in Alberta in the early 1980s, many years before the introduction of sports betting, VLTs, slot machines, and most casinos, many years *after* the introduction of lotteries, and years before casinos with table games generated significant revenue competition. It is true that bingo's decline in the late 1990s was more coincident with a significant expansion of casino and EGM type gambling and a significant increase in the revenue of the latter. However, it is important to note that bingo and horse racing have also declined in jurisdictions that do not have these newer forms of gambling. It is also worth noting that raffles, one of the oldest forms of gambling, have increased in terms of per capita licences as well as per capita revenue from the early 1980s to the present time. Lottery product revenue has also been stable for quite some time despite the introduction and subsequent expansion in casino and EGM revenue. Finally, the fact that per capita gambling expenditure has increased by a magnitude of 5 since the early 1980s (in inflation-adjusted dollars) argues against the notion that people have a fixed amount to spend and are opting to finance expenditures on new forms by using the money they would have spent on older forms.

QUALITATIVE ASSESSMENT OF IMPACTS

As mentioned in our Research Approach, a focused examination of changes occurring in communities receiving new casinos is both an important methodological strategy by which to measure impacts, as well as being one of the more important results within our larger mandate. Considerable quantitative data has already been presented on this issue. The purpose of the present section is to supplement this quantitative data with qualitative information obtained through key informant interviews.

Members of the Research Team met with 65 different mayors, police officials, city planners, municipal administrators, directors of addiction treatment centres, and political representatives in 20 different communities in Alberta: Medicine Hat, Lethbridge, Calgary, Edmonton, Camrose, Red Deer, Fort McMurray, Grande Prairie, Cold Lake, Whitecourt, Lloydminster, Vegreville, Drayton Valley, Lacombe, St. Albert, Tsuu T'ina Nation, Enoch Cree Nation, Alexis Nakoda Nation, Cold Lake First Nation, and Stoney Nation. (Note: results from the latter 5 communities are reported in the First Nations section).

Research Assistants initiated contact through telephone, email, and formal letters inviting individuals to participate. Mayors from the following 9 communities that hosted casinos were invited: Calgary, Edmonton, Red Deer, Lethbridge, Medicine Hat, St. Albert, Grande Prairie, Fort McMurray and Camrose. Two mayors chose not to participate: the mayor of Calgary and the mayor of Fort McMurray. A large number of community representatives from all cities/towns with casinos were also invited to participate in a telephone interview, and we succeeded in speaking with individuals from all provincial municipalities that hosted casinos. Through word-of-mouth we also extended interviews to community based Economic Development Officers and Health Officials (where they existed). The directors of several treatment and educational centres were also invited to participate, as were RCMP and regional police officers assigned to patrol and interface with casino management in each host community.⁹²

The purpose of these meetings was to solicit and record participants' general thoughts about the nature and magnitude of any gambling-related impacts they have observed in their communities. Particular focus was given to communities that recently received casinos.

The general format of the interviews involved the researcher engaging the participant in a discussion while posing a number of pre-determined questions designed to keep the interviewer attuned to the major themes being investigated. An attempt was made to elicit the participants' stories which, in this instance, act as a source of understanding (Cortazzi, 2001). Ferrier has argued, "knowledge is constructed by people and groups of people; reality is multiperspectival; truth is grounded in everyday life and social relations; life is a text but

⁹² There is some potential for responder bias in these interviews as representatives who were willing to talk to us may have had stronger opinions (one way or the other) on the issues.

thinking in an interpretative act; facts and values are inseparable; and science and all other human activities are value laden” (Mitchell & Egudo, 2003). The person-centred interview enabled the researchers to become further grounded in the context of social interface that led to specific meanings developing about gambling that were both culturally and regionally specific.

The specific questions that were posed were as follows:

1. What impacts, if any, have you seen as a result of the introduction of the new casino in your community?
2. Have you seen an increase in general business activity in the area?
3. Have you seen any change in crime in the area?
4. What have some of the beneficial impacts been?
5. What have some of the negative impacts been?
6. Overall, do you believe that the casino has been beneficial or harmful to your community?

The final phase of the research involved a thematic analysis to extract themes central to the pertinent issues through “careful reading and re-reading of the data” (Rice & Ezzy, 1999, p.258). This involved identifying an important comment or interview moment and coding it accordingly. Coding provided an organization and categorization of the data from which central themes were then identified and developed. Data collection and analysis proceeded simultaneously, and transcripts were re-read to ensure accuracy and thematic applicability to the original data.

The section that follows is an attempt to identify the major positive and negative features of gambling and local casinos from a municipal perspective. It is divided into Mayoral Perspectives and Community Representatives Perspectives. The subsequent section provides a more in-depth examination of the primary issues identified.

Mayoral Perspectives on Local Gambling and Casinos

Perceived Positive Aspects of Gambling and Casinos

The majority of mayors (5/7) considered their casino(s) to be a positive community feature. However, most were less supportive of VLTs. Four considered the casinos to be good corporate citizens based on their interface with the local community and their charitable actions. In this vein, gambling’s larger provincial role in supporting community activities was also cited as positive. All mayors indicated their appreciation of the additional gambling-related funding they had received for policing from AGLC.

Most mayors also believed there to be a positive economic impact of both gambling and the local casino. Casinos were considered to be economic generators by virtue of the fact they brought in tourist dollars, attracted local businesses, and provided employment opportunities.

Most mayors (4/7) did not believe that the casinos created any significant competition with other economic sectors. Most mayors were also pleased with casino and gambling related employment although they were less enthusiastic about its low-skilled nature. However, no mayor was able to provide statistical data to quantify or support these beliefs.

The mayors were all pleased with the fact that the casino operators were openly communicative and transparent in their dealings prior to and after construction. Excellent communication between local police and casino security was also highlighted by all participants.

None of the mayors cited significant physical infrastructure deterioration resulting from the casinos. In the few cases where infrastructure has deteriorated and required upgrading it was perceived to be offset as a result of gambling-related charitable/community funding.

Perceived Negative Aspects of Gambling and Casinos

All but one mayor indicated they believe that gambling and casinos had a minimal negative impact on their communities. Paradoxically, the mayors also regularly cited increased crime resulting from casinos and gambling, although they contextualized it in such a way as to downplay its impacts. The mayor of Lethbridge was the one person who indicated that he believed that gambling generally, and the casino more specifically, negatively impacted his community's social fabric by exacerbating problem gambling. He also suggested that provincial gambling represented a regressive taxation regime, and should be eliminated.

Concerns were expressed about the province of Alberta's unwillingness to properly fund addictions programs, with 4/7 mayors being dissatisfied with the poor state of provincial addictions treatment programs.

Four mayors complained about what they believed to be a lack of transparency about how provincial gambling revenues were being spent. A couple of mayors suggested that this lack of transparency has led to increasing municipal-provincial tensions because of the municipalities having to accept responsibility for development projects that are provincially-mandated.

All mayors conveyed the belief that the provincial government was 'addicted to gambling revenues'. Furthermore, that these revenues were being used to fund government operations at the expense of provincial charities. Related to this was the belief that the growth of casino gambling has hurt other traditional charity games types such as bingo, leading to one of the more provocative themes to emerge: *with casinos comes a corresponding loss of community*. This is due to the fact that charities now rely more on casino revenue to raise funds, and the waiting time between casino events is quite considerable (currently 30 months). Previously a sense of community resulted from conducting regular bingos, which connected charity workers with the public. This loss of regular contact has weakened public saliency.

The Edmonton mayor indicated he believed the nearby First Nation River Cree casino negatively impacted Edmonton by drawing Edmontonians away from spending their money at Edmonton casinos. A similar sentiment was expressed by the mayor of Whitecourt who complained the ability to smoke at the nearby First Nations casino negatively impacted local VLT revenue and associated businesses.

Community Representatives' Perspectives on Local Gambling and Casinos

The community representatives in this section represent 7 police service/RCMP officials, 9 city planners/municipal administrators, 5 representatives of provincial treatment centres, 3 provincial Members of Legislative Assembly, and one federal Member of Parliament.

Perceived Positive Aspects of Gambling and Casinos

Gambling and casinos were portrayed to be an accepted aspect of life in Alberta by most individuals due to the growth of gambling nationally and the perceived relatively low impact of gambling and casinos provincially.

All officials interviewed considered AGLC administration of gambling to be adequate, with the smaller centres unanimously indicating this.

Officials were all impressed with the provincial government's decision to pay for local police salaries, which benefited the municipalities and established formal lines of communication with the province.⁹³

The police interviewed were all impressed with casino security, which helped to reduce casino- and gambling-related crimes.

Almost all officials stated they believed casinos were catalysts for promoting and in certain cases realizing economic development or expansion. Officials in communities outside the city core expressed the greatest satisfaction in casinos expanding the business sectors. Officials from 2 communities (Cold Lake and Whitecourt) claimed that they benefited economically from local First Nations casinos, and expressed an interest in establishing formal business relationships with the host First Nations. In sum, casinos are generally seen by most community representatives as good corporate citizens. However, at the same time, most

⁹³ Within the investigations branch of the Regulatory Division of AGLC is a multi-agency task force, the Gambling Investigations Team (GIT) (formed in 2001). GIT investigators are municipal police officers and RCMP whose wages paid by AGLC. There are 2 full time RCMP officers with one in Calgary and one in Edmonton. There are 4 half-time officers, with one in Camrose, one in Lethbridge, one in Medicine Hat, and one in the Tsuu T'ina First Nation.

community representatives were concerned that dollars being gambled locally were not being returned in the form of charitable allocations.

A minimal toll on physical infrastructure was reported by most individuals. In some cases this minimal impact was due to taking infrastructure deterioration into account in future budgets.

In some communities outside of Calgary and Edmonton it was reported that the services created for the new casino permitted the respective city development agencies to promote expansion of new businesses.

Once again, tourism was cited as a positive for casinos, yet there is no available statistical data available from community representatives to provide verification or quantification of this.

Casino-casino competition was not considered to be an issue; nor were there many concerns expressed about casino placement near residential communities. In general, casinos were portrayed by most officials as relatively benign entities.

Perceived Negative Aspects of Gambling and Casinos

Little local public resistance to casinos was noted, although the discussion of VLTs inevitably raised concerns.

Many community representatives were highly critical of the provincially-controlled Alberta gaming model and of AGLC. One of the key issues voiced was the lack of influence that municipalities have over casino applications. The process as it currently exists involves 8 stages. However, the local municipality is not involved until stage 4 where the applicant has to demonstrate community support for the new facility to go forward. However, ultimately the province has overriding authority to decide on these applications. The only leverage the city has concerns the casino's need for a building permit, with this permit having to be obtained even prior to submitting the casino application.

AGLC and the provincial government were portrayed as a reluctant partner that was at times non-communicative and unwilling to respond to municipal concerns. Some officials reported that AGLC was slow in pulling licenses from problematic gaming establishments thus forcing municipalities to allocate resources to take care of gambling-related issues that were provincial in orientation but impacted people at the community/municipal level. Community representatives often reiterated concerns expressed by the mayors about a perceived lack of transparency about how provincial gambling revenues are distributed.

Finally, community representatives suggested the current organization of government gambling might be less than optimal from a cost perspective. When the Ministry of Gaming was dissolved in 2006, it is their perception that these responsibilities devolved to several different ministries, all of whom incur bureaucratic costs before distributing gambling revenue.

Several community representatives also expressed their disappointment at the provincial government's failure to increase municipal funding concomitant with increased gambling revenues, especially for social services. Variable funding for social services was presented as problematic, making it difficult to offer effective programs not knowing the next year's allocation. Edmonton in particular reported that social services was also under stress due primarily to problem gambling concerns.

Concern with casinos and gambling varied. Some Calgary officials were opposed to gambling from a moral perspective. Camrose officials expressed unease with casino development, reflecting perceptions of negative economic impacts. Gambling as a regressive form of taxation was occasionally mentioned, as was the concentration of casinos in economically deprived sectors of the community. One official from Edmonton stated that city infrastructure was being negatively impacted by casinos and VLT sites.

As regards First Nations casinos located adjacent to municipalities, an Edmonton official expressed concern that the Enoch grounds are so large as to hinder local business expansion, and that there have been no municipal economic spinoffs associated with this casino.

Main Themes

It is evident from the preceding analysis that the issues raised by the mayors and community representatives resonate with each other on many levels. Community representatives were somewhat more focused on community operations, and mayors were more focused on community-wide issues. In both cases, empirical data was rarely cited to support the opinions that were readily offered. It was also the case that there were almost no instances in which opinions on these issues were not expressed. To be fair, however, people would often preface their responses by indicating that what they were about to say was 'simply their opinion'. Underscoring this point is the fact that understanding the social and economic impacts of casinos and gambling at a municipal level is not a central focus, as this is just one of a myriad of issues these individuals face as part of their job.

The previous thematic analysis identified the key subjects most concerning mayors and community representatives. The present section presents these key themes and explores them in greater detail.

Economic Development and Employment

Each mayor interviewed indicated that they believed that their local casinos were important economic generators, specifically citing casino employment and tourism as the two primary benefits. Community representatives generally concurred.

The Camrose mayor, for example, stated that the planned casino complex located just east of town was “the whole anchor of the development out there [and] will become a strong part of the community” once construction begins. Unfortunately, because of a downturn in the economy, the proposed destination resort (casino, hotel, convention centre) plans were pared down to a stand-alone casino. Although the footings and infrastructure are in place, hotel and convention centre construction remains on hold. Locating the casino in that sector did however allow the town council to justify widening the highway and extending municipal water and sewage infrastructure at the casino owner’s expense. Now the sector is fully serviced. The casino also catalyzed the Camrose Regional Exhibition’s recent \$1 million campground construction, followed by the town servicing and the sale of many additional industrial-commercial lots. The Camrose mayor also pointed to improved tourist traffic attributable to the casino as one of its main economic contributions.

Likewise, the Cold Lake mayor was pleased with the casino (even though it is located on the Cold Lake First Nations) due to the increased number of people stopping in his town that might otherwise shop in a centre without a casino. For Grande Prairie, casino donations for community events combined with the jobs were considered the positive economic attribute. The Whitecourt mayor indicated that the casino was an important selling point in the town’s campaign to recruit new businesses. Community representatives from Red Deer reported that the two Red Deer casinos draw significant numbers of tourists and regional patrons who spend money in town.

Yet several mayors contradicted their commentary by concluding that the casinos were not living up to expectations, and that gambling in general was problematic to the community.

All participants cited casino tourism as an important economic driver. Yet no municipal statistics are kept measuring local tourism or the projected amounts spent at the casinos, or the projected amounts spent by casino patrons at local businesses.

Although proclaiming casino employment to be one of the important benefits, the majority pointed out that the jobs in question were low-skilled employment in a service-sector industry. Casino jobs were characterized as consisting of a small number of well-paid, permanent management positions and a large number of low paying jobs with limited upward mobility. The Cold Lake mayor was the only one to point to potential career advancement opportunities within casinos. The remainder were less optimistic that the jobs were emotionally or intellectually satisfying; or that casino employees would remain loyal in the face of an improved economy resulting in the availability of better paying employment opportunities.

Physical Infrastructure Issues

Gambling may contribute to incremental infrastructure costs, which are difficult to quantify. Calgary and Edmonton were the only communities to cite this issue, however, with traffic, public safety, and public transport being the main concerns. An example was provided by a municipal official from Edmonton, who explained “So much of our infrastructure ... is based on

daytime usage ... if it's shopping centre or hotel, it all wraps up at 11 or 12. And it ... impacts things like, how you run your bus service, how much police you put out there. If you stand at the corner of Whyte Avenue and 105th at 2 o'clock on a Friday afternoon you can count somewhere between 3,000 and 4,000 people. If you stand at the same intersection at 2 o'clock in the morning, you will get somewhere 20,000 and 30,000 people [because of casinos]. Because you've got more people there, more [are] at risk than you have during the day. We've tried couple of trials around bussing, the trouble with those is that ... we cannot fund it continuously ... So it very much changes the nature of your area when we have a casino."

For cities like Edmonton, the lack of funding to meet these additional infrastructure demands means that services have to be delivered in a more efficient fashion. For example, community representatives have initiated a program of synchronization with police and emergency response agencies to improve local land planning (i.e., road alignment). The goal is to try to improve services while reducing costs. The general concern raised was that the municipalities experience a minimal direct return on gambling but nonetheless bear the bulk of the infrastructure costs. As one informant stated, "I think certainly, the 2 big cities position on this has always been that it's not about saying "it shouldn't happen" it's just that if we are going to be required provide some of these services we need some of the money that goes along [to support it]."

Interestingly, the remaining five cities, all of which are considered rural, stated that neither casinos nor other gambling venues were negatively impacting their infrastructure. For example, at Whitecourt "We really did not see the impact on any major infrastructure as a result of the casino. So it's not using current road infrastructure like our Wal-Mart or Canadian Tire does. And we have a 10-year capital plan on this infrastructure. So, for example, our repaving programs, and our traffic light programs we have it allocated increases to go along with growth to the community." A Camrose official stated "Absolutely not. It's [the casino] is located on a highway. You know, highway 13, which is built to handle, I don't know, a hundred times the traffic that it has now. So the casino contribution has been absolutely negligible." Lethbridge, Cold Lake, Grande Prairie, and St. Albert have their casinos located outside the core, in or nearby industrial or commercial sectors. This may be why traffic and infrastructure issues were not a concern. The only community to fall outside this general model was Red Deer, which has two downtown casinos. Nonetheless, informants stated that infrastructure issues were not a concern.

Gambling as an Acceptable form of Entertainment

When asked about local attitudes about the casino and gambling in general, a municipal official from Camrose replied, "It's something that the Alberta society and maybe North American society has become accustomed to ... legalized gambling in their backyard. It's not much different from a bar at the corner." One mayor remarked " ... it's everywhere in Canada. It's well controlled, and people have faith that the province or the authority is looking after it to make sure it's fair."

Red Deer officials reported that the casino is also a primary stop for young men working in the natural resources industries looking to spend their disposable income. At Camrose, the casino is seen as a quiet alternative to the larger Edmonton casinos, which is said to be attractive to many regular patrons.

In general, very few people had moral or ethical objections to gambling. That does not mean that they did not cite significant social costs, however.

Problem Gambling, Crime, and Strain on Social Infrastructure

Gambling was often portrayed as a drain on local resources due to increased crime and increased problem gambling. In Edmonton community representatives indicated problem gambling was contributing to a “lack of attention of kids at home, family violence at home ... all those kinds of things have phenomenal impact on families,” which in turn impacts local service delivery. Lethbridge officials expressed similar concerns, specifically an increase in “family violence, and increased amount of gambling problems at home, and as a result of that, more work for our police department.” Most individuals indicated that problem gambling was a significant cause of family breakdown leading to increased costs for social services. For example, an official from St. Albert stated, “We’ve had our fair share of family breakdown and financial bankruptcies associated with gambling addictions”. An official from Edmonton stated “we were seeing a fair amount of increase in our service centers of people reporting addiction issues that related to gambling” adding that “the whole issue of VLT addictions was really not something anybody I think really anticipated.” From Red Deer one official concluded, “It’s the problem gambling that creates the issues for our communities and for our individuals in the communities.” The most vocal of those interviews was a Calgary official, who concluded that gambling “leads to family breakdown, bankruptcies and in certain cases, family violence and that kind of stuff. Now in terms of casino revenues of course, a chunk of those go back to help those agencies deal with that, but it’s kind of a stupid thing when you sit back and look at it – here we are creating problems by allowing casinos to exist and be readily accessible and we acknowledge that there are problems that arise because of that so we’ll some money back into treating those problems. It’s a bit stupid.” In Lethbridge an official stated “the poor and the disadvantaged are disproportionately impacted ... wealthy people may gamble larger sums, but the people who are impacted most harmed are those who can least afford it.” An official in advance of our telephone interview called a local Alberta Health official for more information, and conveyed to us that “the casino itself contributes very little social problems according to the people that I’ve talked to... now, ... once it gets into the VLTs ... those are another problem.”

Outside of eliminating the provincial gaming industry outright, which 3 individuals proposed, several recommendations were offered to combat the situation. Several people suggested expanding existing treatment programs by allocating a larger portion of annual provincial gambling revenues. In Red Deer, community representatives suggested additional educational programs were needed to inform people of the risks of gambling too much. The Edmonton mayor recommended establishing telephone help lines for people with gambling problems or family violence problems related to gambling.

Increased crime was a related issue. An administrator from Whitecourt indicated: “Because of gambling I would think we’ve seen an increase in petty crimes that have gone on within the community. We’ve seen an increase in our crime stats over the last two years of about 10%,” adding that “it’s hard to say if that’s in direct relationship to the casino or is it a direct relationship to the slowdown in industry and so and so forth.” Lethbridge officials expressed concern about organized crime. Many mayors indicated that most of these crimes could be classified as petty crimes. Only two times did a mayor mention fraud as a means of replacing gambling losses. The rest were break and enters and minor thefts. Crimes such as domestic abuse and endangering the welfare of a minor were also occasionally mentioned.

As reported by Lethbridge officials, the most common types of crime at the casino itself were break and enter into vehicles, and drunk and disorderly calls after abusive patrons had been evicted. A few instances of individuals trying to pass off \$10 chips as \$100 chips were cited. One innovative individual in Medicine Hat reportedly tied fishing line to a ‘loonie’ (\$1 coin) so he could retrieve the coin after it had been deposited into the VLT, thus allowing him to play continuously. The Medicine Hat casino was robbed some years back.

Not all individuals agreed with the suggestion that crime had increased. For instance, the mayor of Medicine Hat (who was a former police chief) indicated that gambling-related crime was not an issue. Similarly, a municipal administrator in Camrose indicated “there’s been absolutely no issues.” He indicated that the Camrose police attempted to briefly track gambling-related crimes only to admit that it was futile—there were so few crimes being committed that it was eventually deemed a waste of time.

Mixed Benefits for Community/Charitable Groups

Gambling’s role in supporting local charities and community groups was often identified as an important benefit of gambling. In fact, one mayor suggested that this funding offset the increased strain on social infrastructure.

However, an unanticipated consequence of this funding was a decreased saliency of charitable groups. An official in Edmonton summarized it by saying, “communities get a casino, make 80 grand for two days and they don’t do any of their fundraising or, the kind of community work they need to do the other 363 days a year. I think that has a negative impact on the strength of groups and what they do. It creates a bit of laziness in the community ... and I think then it has a negative impact on the volunteerism of communities. We’re finding a weakening of our communities, but you always manage to get enough people for casinos.”

First Nations Casinos/Municipal Relationships

There are currently five First Nations casinos operating in Alberta (Grey Eagle Casino, Tsuu T'ina Nation; River Cree Resorts & Casino, Enoch Cree Nation; Stoney Nakoda Resort, Stoney Nation; Casino Dene, Cold Lake First Nation, Eagle River Casino, Alexis Nation). Four are located immediately adjacent to a city or town: Calgary, Edmonton, Whitecourt and Cold Lake. Each impacts the neighbouring city or town in various ways, although these impacts vary. They are detailed in the First Nations section of this report.

Only the Edmonton mayor expressed overt concern about the River Cree Resort and Casino, located on the city's western edge. While most mayors highlighted casino tourism as a positive, the Edmonton mayor offered concern at how many city residents who once spent their money at local casinos are now traveling to and spending their money at the First Nation casino. [Although it was not mentioned that this was an interesting turnabout in that First Nations people have always spent a significant portion of their incomes in Edmonton, including Edmonton casinos]. Similar sentiments were conveyed by community representatives from Whitecourt, who also cited economic leakage as a concern.

IMPACT ON FIRST NATIONS

The impact of gambling on society also speaks to the impact of gambling on First Nations within Alberta. The focus of the present section is more specifically on the impacts on Alberta First Nations as a result of their foray into commercial gambling. The data used in the following analyses were drawn from 2 primary sources: the [Alberta Lottery Fund](#) website which lists the details of all First Nations Development Fund (FNDF) disbursements and [Alberta Gaming and Liquor Commission Annual Reports](#).

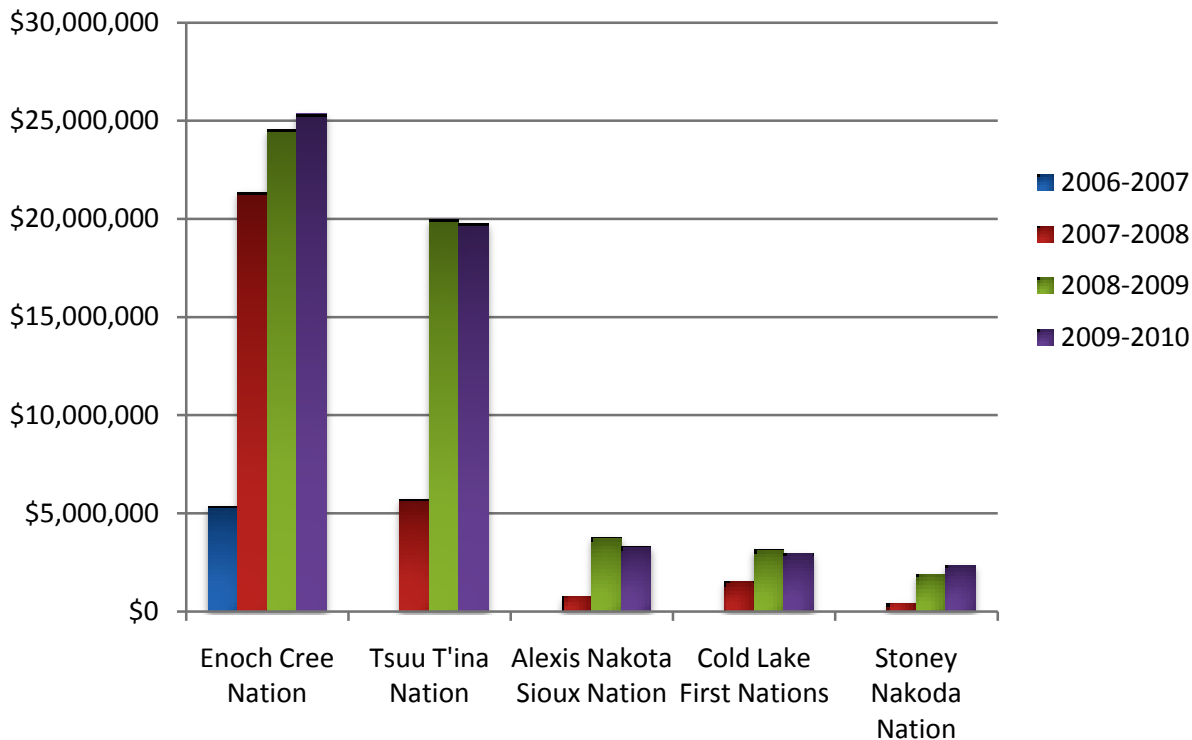
First Nations Gambling Revenue and its Disbursement

Alberta First Nations gambling revenue comes almost exclusively from casino profits from the 5 First Nation casinos (these casinos listed in Table 15, p. 86). One revenue stream is from the commission paid to the casino owner who provides the venue for the continuous 'charity casino event' (i.e., 50% to 75% of table game revenue, 15% of slot machine revenue, and 5% of keno revenue (Figure 14, p. 84). Bands have sole ownership of their respective casino. However AGLC requires that First Nations engage third-party managers to run the day-to-day operations. Thus, the revenue stream that goes to the owner is shared with this commercial partner, as per these agreements. A second revenue stream is from the commission paid to the local First Nation 'charity' (listed in Table 14, p. 82) for hosting the year-round casino event (i.e., 25% to 50% of table game revenue, 15% of slot machine revenue, and 5% of keno revenue). Both of these revenue streams are for the exclusive benefit of the 5 First Nations with casinos. The third revenue stream is from the 40% of slot revenue that goes to the First Nations Development Fund that Alberta First Nation tribes can apply to for community development grants. Seventy five percent of this grant money is reserved for the 5 casino host bands, and 25% is reserved for the 39 non-casino bands.

Charitable Gambling Revenue

Figure 44 illustrates First Nations charitable gambling revenue as a function of host casino. These are estimates based on the per-community proportioning of First Nations Development Fund disbursements, which are a direct function of slot machine revenue for each casino. These same proportions are then applied to the table game and keno charitable revenue for all 5 communities combined (from AGLC Charity Gaming Annual Reports). As can be seen, the charitable gambling revenue of the River Cree Casino (Enoch Cree) and the Grey Eagle Casino (Tsuu T'ina) far surpasses those of the other 3 First Nations casinos. In total First Nations charitable gambling revenue totalled approximately \$5,333,000 in 2006-2007, \$29,719,000 in fiscal 2007/8, \$53,370,000 in 2008/9, and \$53,773,000 in 2009/10. The total proportion of charitable gambling revenue derived from each game type in this time period is approximately 73.3% from slot machines, 26.7% from table games, and .01% from keno.

Figure 44: First Nations Charitable Gambling Revenue (Approximate)



These 'charity revenues' are allocated for local projects proscribed by the AGLC in its Host First Nation Charitable Casino Policies Handbook. The AGLC and the host First Nations jointly developed this handbook that identifies 17 categories that charities may receive funding in. A maximum of 10% is permitted to fund operational costs of the First Nations charity. The following breakdown in Table 59 provides a sense of community needs. As can be seen, housing and infrastructure constitutes the largest single area receiving funding. It is also important to recognize that applications are regularly denied. To date approximately 13% of accumulated charity funds remain undistributed.

Table 59: Use of First Nations Charitable Gaming Proceeds			
	2007-2008	2008-2009	Total
Housing & Infrastructure	\$7,498,000	\$21,056,000	\$28,545,000
Education	\$1,099,000	\$6,236,000	\$7,335,000
Debt Retirement	\$3,519,000	\$4,088,000	\$7,607,000
Charity Worker Wages & Expenses	\$1,492,000	\$3,802,000	\$5,294,000
Cultural Events/Historical Resources/Religion	\$422,000	\$3,135,000	\$3,557,000
Life Skills Training	\$1,052,000	\$2,932,000	\$3,984,000
Aid of the Distressed/Children/Youth/Adults in Care	\$320,000	\$2,463,000	\$2,783,000
Facility	\$6,343,000	\$1,814,000	\$8,157,000
Administrative Costs	\$829,000	\$1,643,000	\$2,472,000
Wages, Salaries, Fees for Services, & Honorariums	\$1,167,000	\$1,449,000	\$2,616,000
Sports	\$62,000	\$1,223,000	\$1,295,000
Addictions Treatment	\$351,000	\$939,000	\$1,290,000
Community Safety Programs	\$394,000	\$333,000	\$727,000
Elders	\$5,000	\$168,000	\$173,000
Donations within Alberta	\$21,000	\$49,000	\$70,000
Emergency Funds	\$278,000	\$0	\$278,000
Equipment	\$20,000	\$0	\$20,000
Total	\$24,863,000	\$51,340,000	\$76,203,000

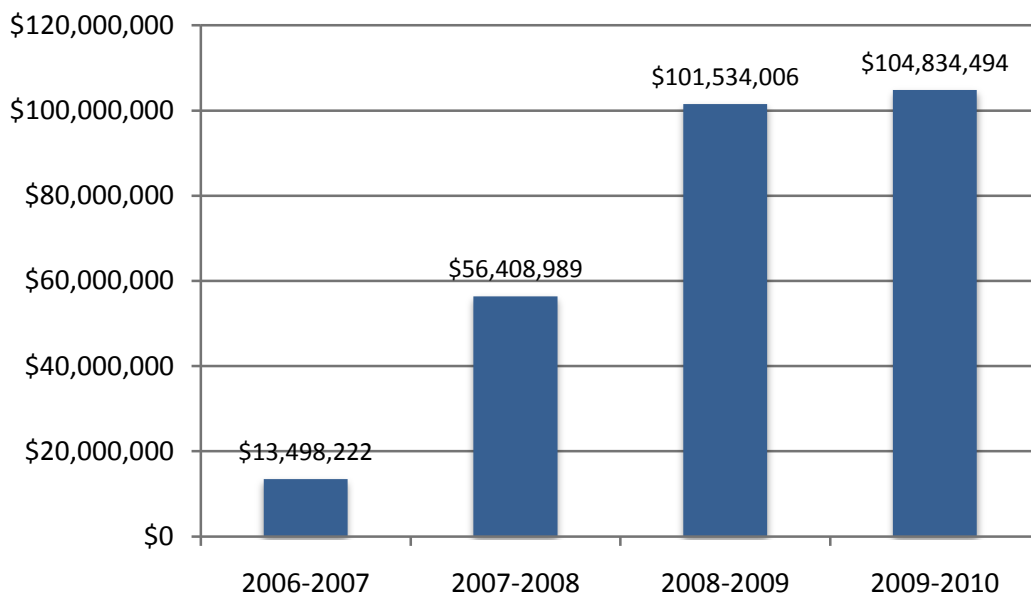
Casino Ownership Revenue

Revenue derived from casino ownership will be roughly equivalent to the revenue from charity hosting (although slightly higher due to retaining a somewhat greater portion of table game revenue). Unfortunately, nothing is known about how much of this money is actually retained by the First Nation versus the private commercial partner, or how either the First Nation community or the private partner uses this revenue. It is estimated that approximately \$103.5 million has been distributed to the 5 operators since 2006, 2 of which are First Nations (Stoney Nakoda Band and Cold Lake First Nations).

First Nations Development Fund

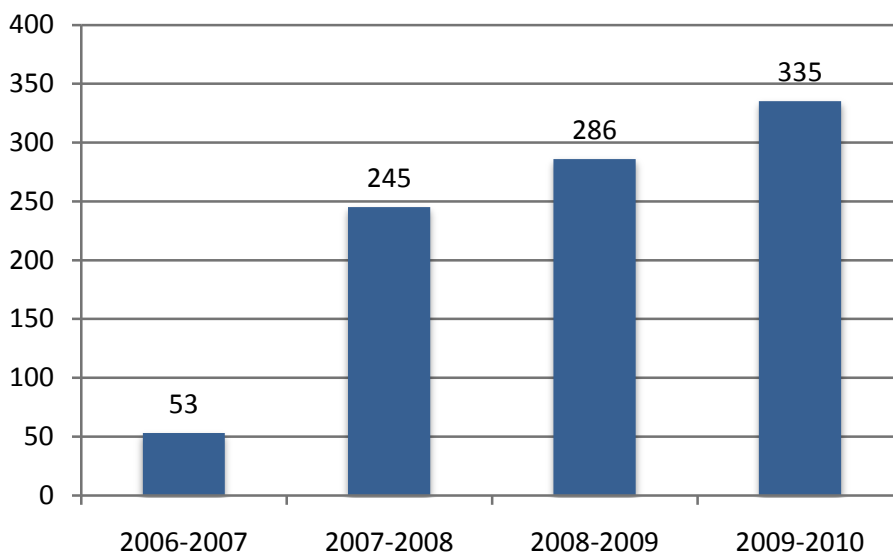
Gambling revenue began to be deposited into the FNDF in fiscal 2006/2007, with these amounts steadily increasing up to the present time (Figure 45). However, coincident with the general decrease and/or flattening of Alberta gambling revenue in 2009, the 2009/2010 deposit to the FNDF was only marginally larger than 2008/2009. Since 2006, the FNDF has been allocated a total of \$276,275,712 for distribution to FNDF projects. The host-First Nations are allocated 75% of FNDF funding, and thus have received \$207,206,784 of the roughly \$276 million generated. The remaining 39 provincial First Nations divided the remainder, which amounts to less than \$2 million per community (~.5 million yearly).

Figure 45: First Nations Development Fund Revenue.



As seen in Figure 46, 921 grants for community projects have been allocated by the FNDF as of April 2010.

Figure 46: Number of Grants Funded from the FNDF.



The specific number of distributions and their value to each Alberta First Nations community is detailed in Table 60.

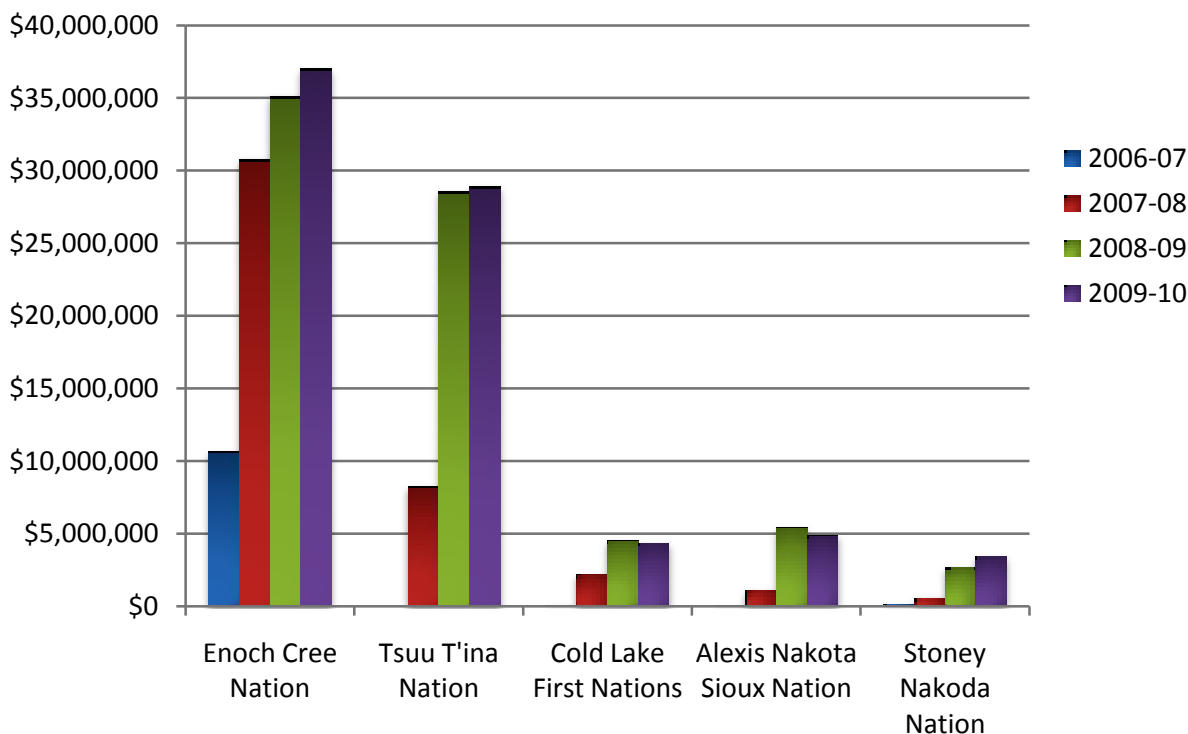
Table 60: Distributions to Different First Nations Communities from the First Nations Development Fund.

First Nation	Treaty	2006-2007	2007-2008	2008-2009	2009-2010	FNDF-TOTAL \$ 2006-10	Grants 2006-10	2008 Population
Alexander First Nation	6	\$70,000	\$334,156	\$586,154	\$606,472	\$1,596,782	21	1740
Alexis Nakota Sioux Nation	6	75,080	\$1,068,945	\$5,404,206	\$4,856,963	\$11,405,194	15	1560
Athabasca Chipewyan FN	8	\$60,966	\$255,922	\$454,108	\$466,654	\$1,237,650	24	824
Beaver First Nation	8	\$60,377	\$163,663	\$449,958	\$459,819	\$1,133,817	13	791
Beaver Lake Cree Nation	6	\$62,247	261,880	\$465,518	\$473,043	\$1,262,688	11	893
Bigstone Cree Nation	8	\$177,916	\$766,079	\$1,361,834	\$1,394,262	\$3,700,091	20	6732
Blood Tribe	7	\$246,976	\$903,024	\$1,855,785	\$1,899,150	\$4,904,935	28	10071
Chipewyan Prairie FN	8	\$58,025	\$243,315	\$431,730	\$439,315	\$1,172,385	13	678
Cold Lake First Nations	6	\$80,073	\$2,187,136	\$4,527,365	\$4,339,907	\$11,134,481	44	2286
Dene Tha' First Nation	8	\$0	\$495,428	\$404,572	\$728,458	\$1,628,458	7	2498
Driftpile First Nation	8	\$85,000	\$377,589	\$669,294	\$683,586	\$1,815,469	15	2233
Duncan's First Nation	8	\$48,860	\$203,421	\$362,520	\$369,778	\$984,579	11	216
Enoch Cree First Nation	6	\$10,665,047	\$30,808,226	\$35,147,872	\$37,073,841	\$113,694,985	14	2007
Ermineskin Tribe	6	\$115,867	\$374,133	\$789,200	\$902,153	\$2,181,353	19	3593
Fort McKay First Nation	8	\$56,909	\$237,875	\$339,636	\$432,480	\$1,066,900	9	615
Fort McMurray FN	8	\$56,254	\$154,746	\$418,391	\$425,942	\$1,055,333	15	591
Frog Lake First Nation	6	\$92,719	\$393,564	\$701,306	\$716,126	\$1,903,715	14	2418
Heart Lake First Nation	6	\$30,000	\$209,898	\$373,487	\$380,178	\$993,562	19	291
Horse Lake First Nation	8	\$0	\$319,413	\$364,087	\$470,369	\$1,153,869	13	849
Kapawe'no First Nation	8	\$50,263	\$199,737	\$374,079	\$383,002	\$1,007,081	11	296
Kehewin Cree Nation	6	\$57,450	\$164,576	\$592,379	\$603,946	\$1,418,351	14	1720

Little Red River Cree Nation	8	\$125,415	\$259,585	\$954,580	\$980,902	\$2,320,482	11	4103
Loon River Cree Nation	8	\$53,373	\$223,195	\$398,384	\$407,963	\$1,082,915	18	445
Louis Bull Tribe	6	\$0	\$250,000	\$606,458	\$619,993	\$1,476,451	10	1799
Mikisew Cree First Nation	8	\$0	\$486,000	\$699,972	\$713,154	\$1,899,126	18	2412
Montana Band	6	\$0	\$243,555	\$460,924	\$468,586	\$1,173,065	24	873
O'Chiese Band	6	\$0	\$250,000	\$470,706	\$484,633	\$1,205,339	9	921
Paul First Nation	6	\$78,997	\$332,687	\$587,192	\$606,769	\$1,605,645	18	1713
Piikani Nation	7	\$86,130	\$341,181	\$842,837	\$853,120	\$2,123,268	16	3424
Saddle Lake First Nation	6	\$130,510	\$583,589	\$1,268,468	\$1,309,421	\$3,291,988	74	8577
Samson Cree Nation	6	\$176,761	\$627,971	\$1,306,069	\$1,380,741	\$3,491,542	42	6677
Sawridge First Nation	8	\$51,685	\$215,079	\$381,785	\$392,511	\$1,041,060	55	367
Siksika Nation	7	\$0	\$882,814	\$1,265,800	\$1,284,905	\$3,433,519	17	6141
Smith's Landing FN	8	\$50,643	\$210,847	\$375,413	\$382,556	\$1,019,459	16	302
Stoney Nakoda Band	7	\$133,210	\$569,978	\$2,674,244	\$3,434,944	\$6,812,376	15	4416
Sturgeon Lake Band	8	\$80,000	\$374,311	\$714,050	\$733,212	\$1,901,573	24	2534
Sucker Creek First Nation	8	\$90,470	\$381,648	\$677,149	\$689,827	\$1,839,094	27	2280
Sunchild First Nation	6	\$67,097	\$284,763	\$507,311	\$516,876	\$1,376,048	10	1158
Swan River First Nation	8	\$65,649	\$275,524	\$489,231	\$499,640	\$1,330,044	25	1051
Tallcree First Nation	8	\$0	\$340,727	\$400,273	\$226,996	\$967,996	9	1044
Tsuu Tina Nation	7	\$0	\$8,246,214	\$28,572,460	\$28,920,214	\$65,738,888	97	1581
Whitefish (Goodfish) FN	6	\$72,601	\$392,182	\$694,785	\$689,381	\$1,848,949	12	2378
WhiteFish Lake FN	8	\$85,653	\$184,347	\$639,950	\$652,384	\$1,562,334	11	2060
Woodland Cree FN	8	\$0	\$330,067	\$472,485	\$480,324	\$1,282,876	13	689

Table 60 illustrates that the largest beneficiaries of the FNDF have been the 5 First Nations that host casinos. However, there is considerable variability within this group of 5, with the Enoch Cree First Nation (River Cree Casino and Resort) and the Tsuu T'ina First Nation (Grey Eagle Casino) being the main beneficiaries (Figure 47). This is almost certainly due to the fact that the River Cree Casino is just outside of Edmonton and the Grey Eagle Casino is just outside of Calgary, whereas the other 3 casinos are located in rural areas.

Figure 47: FNDF Allocations for the 5 First Nations that Host Casinos.



FNDF Revenue as a Proportion of Total Revenue

The primary source of First Nations revenue has traditionally been federal government payments through Indian and Northern Affairs Canada (INAC). The funding formula calculates individual First Nations funding levels based on populations.⁹⁴

In the case of the 5 communities that host casinos, these gambling monies represent a significant portion of their overall revenue. For example, Enoch's FNDF disbursement of \$35 million in 2008/2009 was 303% more than its INAC's budgetary allocation (Table 61). Similarly Tsuu T'ina received more than \$28 million, which was 142% more than its INAC budget. Despite lower than expected returns, gambling revenues also contribute noticeably to the Alexis Nakota Sioux Nation's and the Cold Lake First Nations' overall budget. The Stoney

⁹⁴ Because there is no stipulation about what percentage of INAC funding bands should provide to off-reserve residents, in most cases these monies are spent exclusively on reserves to the detriment of off-reserve members.

Nakoda Resort was not operational long enough for inclusion in this list. In total, FNDF funding represented 83.3% of the 4 communities' collective INAC allocation.

Table 61: FNDF Contributions to Host First Nations as a Percentage of their Federal Payments.

	Federal Contribution	FNDF	FNDF as % of Federal Contribution
Alexis Nakota Sioux Nation			
2006-07	\$13,478,803	\$75,080	0.6%
2007-08	\$13,478,803	\$1,068,945	7.9%
2008-09	\$11,663,635	\$5,404,206	46.3%
<i>Totals</i>	<i>\$38,621,241</i>	<i>\$6,548,231</i>	<i>16.9%</i>
<i>Yearly Average</i>	<i>\$12,873,747</i>	<i>\$2,182,744</i>	
Cold Lake First Nations			
2006-07	\$6,958,787	\$80,073	1.2%
2007-08	\$5,888,471	\$2,187,136	37.1%
2008-09	\$6,625,634	\$4,527,365	68.3%
<i>Totals</i>	<i>\$19,472,892</i>	<i>\$6,794,574</i>	<i>34.9%</i>
<i>Yearly Average</i>	<i>\$6,490,964</i>	<i>\$2,264,858</i>	
Enoch Cree First Nation #440			
2006-07	\$8,930,213	\$10,665,047	119.4%
2007-08	\$10,404,587	\$30,808,226	296.1%
2008-09	\$11,593,508	\$35,147,872	303.2%
<i>Totals</i>	<i>\$30,928,308</i>	<i>\$76,621,145</i>	<i>247.7%</i>
<i>Yearly Average</i>	<i>\$10,309,436</i>	<i>\$25,540,382</i>	
Tsuu Tina Nation			
2006-07	\$20,698,584	0	0%
2007-08	\$22,401,884	\$8,246,214	36.8%
2008-09	\$20,067,719	\$28,572,460	142.5%
<i>Totals</i>	<i>\$63,168,187</i>	<i>\$36,818,674</i>	<i>58.3%</i>
<i>Yearly Average</i>	<i>\$21,056,062</i>	<i>\$12,279,558</i>	
Total (4 Host First Nations)	\$152,190,628	\$126,782,624	83.3%
<i>Yearly Average</i>	<i>\$12,682,552</i>	<i>\$10,565,219</i>	
Total (21 Non-Host FNs)	\$1,056,942,912	\$24,235,068	2.3%
<i>Yearly Average</i>	<i>\$16,776,872</i>	<i>\$384,684</i>	

Not surprisingly, the percentage of revenue accounted for by the FNDF is much less for non-host communities. During the same time period, 21 First Nations that we had complete data for received over \$24 million in FNDF revenues, which averaged out to approximately \$384,684 per community per year. Some smaller communities such as Smith's Landing First Nation supplemented their INAC budgets by 26% and 43% in 2007-08 and 2008-09 respectively. Fort

McKay, Heart Lake and the Athabasca Chipewyan First Nation also experienced double-digit gains. On average, the FNDF supplemented non-host First Nations INAC budget by only 2.29%.

First Nations Development Fund Disbursements

First Nations Development Fund project allocations fall into 17 categories. As seen in Table 62, non-gaming related Debt Retirement (42%) has constituted the largest portion of FNDF project disbursements since 2006. Almost all of this debt reduction (98.8%) has gone to reduce non-gaming related First Nation debt incurred to build the casinos. Where First Nations have to pay debt first, that is by the design or choice of the First Nation. The Cold Lake First Nations and the Stoney Nation used their own money and/or borrowed funds, whereas the other 3 First Nations had outside investors. The Alexis Nakota Sioux Nation owes \$21.4 million as its 40% portion of the project debt. Including the 2009-2010 disbursement of \$4,856,963, the total amount available to reduce its non-gaming related debt to date amounts to \$11,405,194, according to FNDF guidelines. The Enoch Cree Nation must repay an undisclosed debt to Paragon Gaming, and has accumulated roughly \$114 million toward this end.

Facility Costs at 17% and Housing and Infrastructure Costs at 15% represent the next largest categories. Facility costs are for repairs or new construction on band owned buildings and facilities. Housing and infrastructure costs are the costs associated with constructing new band housing and improving infrastructure such as water sanitation upgrades and road paving. Combined these complementary categories amounted to \$88,676,099, or roughly one-third of FNDF disbursements since 2006. Infrastructure and housing are priority issues on most First Nation communities. Earlier it was documented that housing projects was the number one allocation from charitable gambling proceeds, representing 28% of disbursements since 2006.

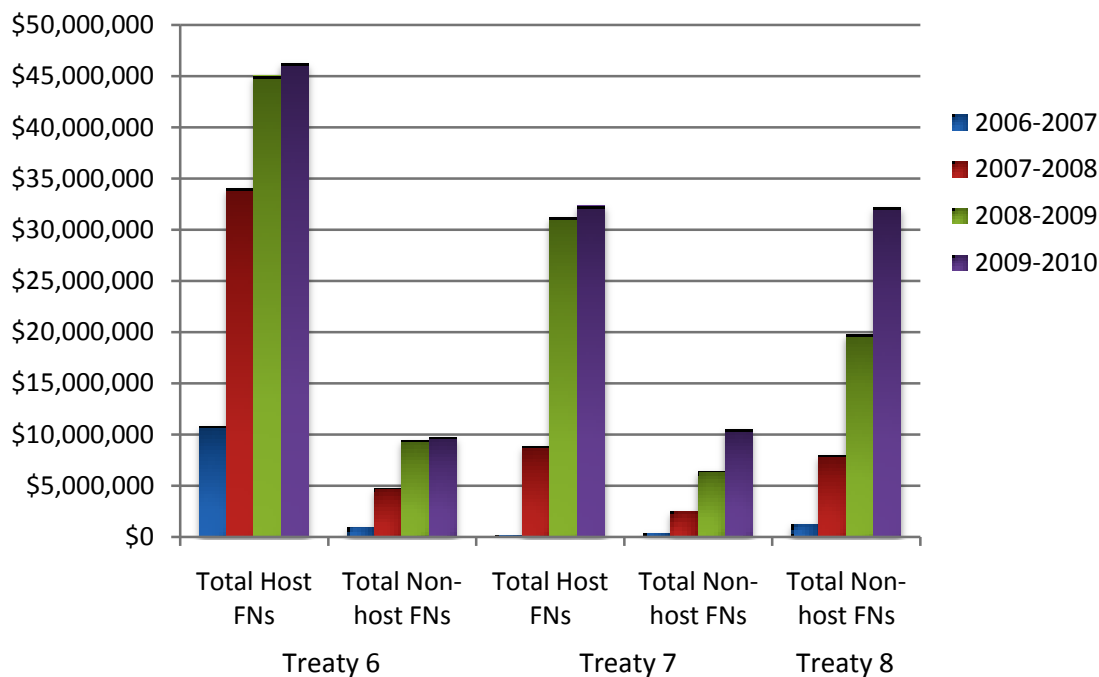
	Percentage Allocated
Debt Retirement (non-gaming related)	42%
Facility Costs	17%
Housing and Infrastructure	15%
Administrative Costs	7%
Community Development	4%
Community Safety Programs	3%
Education	4%
Equipment	2%
Cultural Events/Historical Resources/Religion	2%
Wages, Salaries, Honoraria	2%
Other⁹⁵	2%

⁹⁵ Like Skills Training, Addictions Treatment, Sports, Elders, Emergency Funds, Donations within Alberta, Aid of Distressed/Children/Youth/Adults in Care

Host versus Non-Host Revenue

The host First Nations have drawn \$207 million of the total \$276 million in FNDF revenue since 2006 with the remaining \$69 million being divided amongst the remaining 39 non-host First Nations. Arguably the host First Nations led the lobby for casino placement on reserves, and their investment partners are taking the biggest financial risk. The FNDF was established to benefit the non host First Nations while acknowledging that the communities taking the biggest risk should benefit accordingly. The distribution of revenue as a function of Host versus Non-Host status and Treaty Zone is displayed in Figure 48 (see Figure 49 for Treaty Zones).

Figure 48: FNDF Revenue as a Function of Host vs. Non-Host Status and Treaty Group



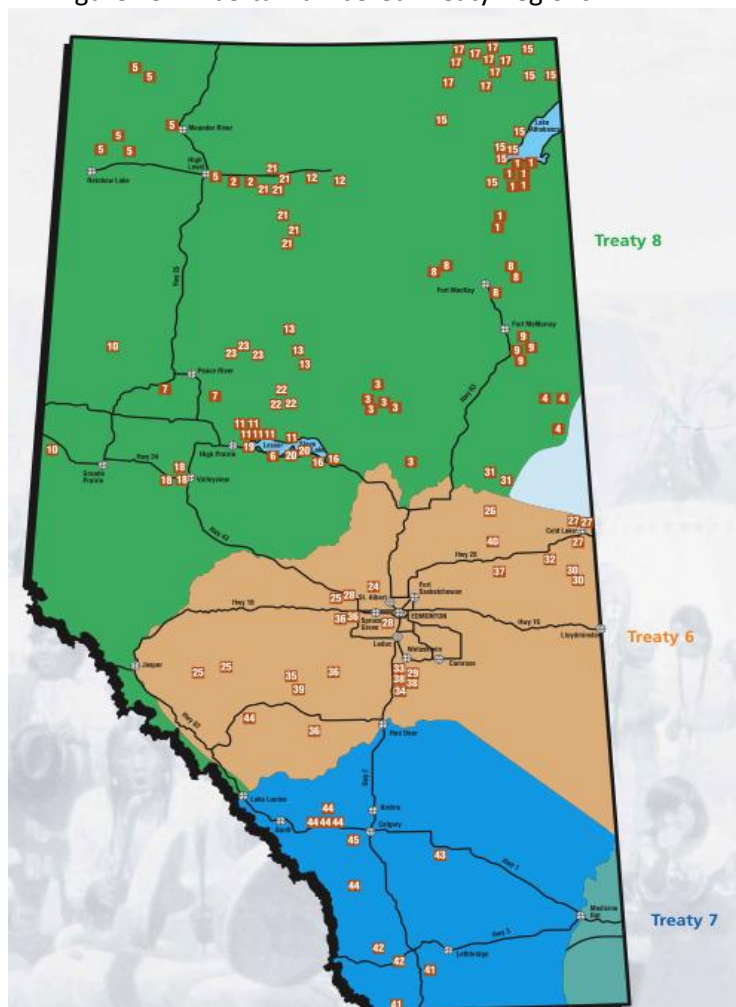
Being a host does not necessarily result in success. In 2009-2010, the non-host communities in Treaty 6 and Treaty 7 experienced minimal gains when compared to the previous year despite the FNDF's improved performance. Two of the most expensive casinos have brought in minimal returns or experienced revenue drops last year (Figure 47). Stoney may appear to be doing better in comparison, but we must factor in the original investment of \$27 million, the less than \$4 million in annual FNDF allocations and less than \$2 million in annual charity revenues. Alexis lost money in 2009-2010 based on its reduced FNDF disbursement and its drop in charity revenues. The latter is a better metric since charity revenues are a reflection of EGM revenues and gambler spending. Cold Lake also lost money from 2008-2009.

Tsuu T'ina management maintains that the casino has met anticipated projections, and that hotel expansion plans have been approved.

Geographical Distribution

As seen in Figure 49, 3 treaty zones divide the province of Alberta: Treaty 6 signed in 1876, Treaty 7 signed in 1877, and Treaty 8 signed in 1899. A portion of Treaty 4 overlaps the province's south-eastern corner. This effectively splits the province into three geographic zones (south, central, north) allowing for comparative analyses of FNDF revenue distribution.

Figure 49: Alberta Numbered Treaty Regions.



Note: the numbers represent individual tribes.

The number of First Nations accessing FNDF revenues from each zone is as follows: 5 from the south; 17 from the central; and 22 from the north. The 5 host First Nations (2 south, 3 central) have been left out of this analysis as the amplified revenues skew overall results.

Viewing aggregate values, the northern Treaty 8 communities appear to be outstripping their Treaty partners in terms of FNDF disbursements. In 2009-2010, during which the FNDF increased by 3.1% to \$104 million, both Treaty 6 and Treaty 8 communities' FNDF

disbursements levelled off from the previous year (Figure 50). Only the Treaty 7 allocation increased substantially during this time period. This is in part attributable to the disproportionate number of non-host First Nations sited in Treaty 8 (22) compared with Treaty 6 (14) and Treaty 7 (3). The FNDF funding distribution model also plays an important role: half of the 12.5% FNDF non-host allocation is divided equally amongst the 39 communities.

Figure 50: FNDF Treaty Disbursements by Treaty, 2006-2010.

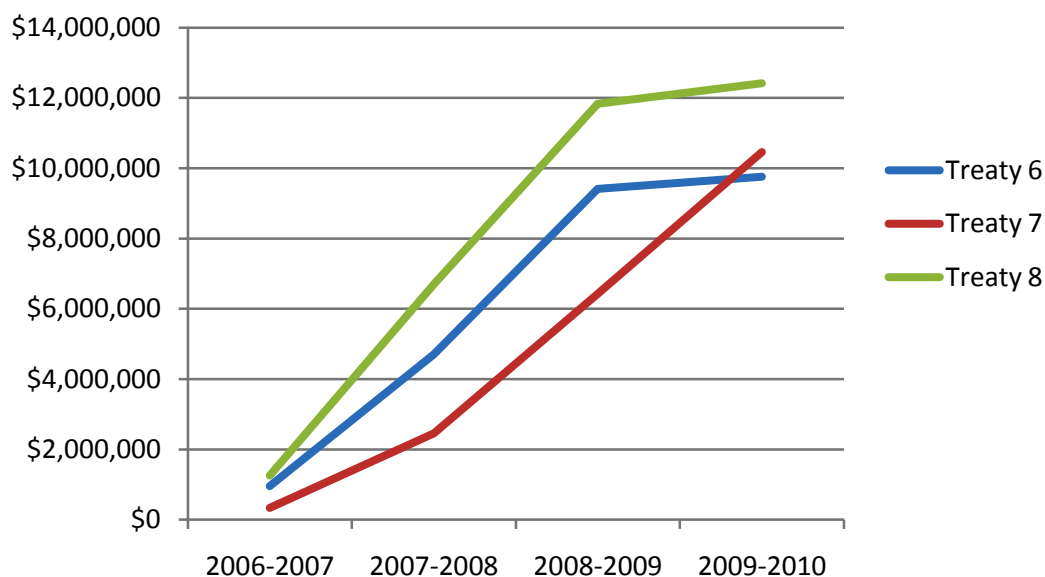
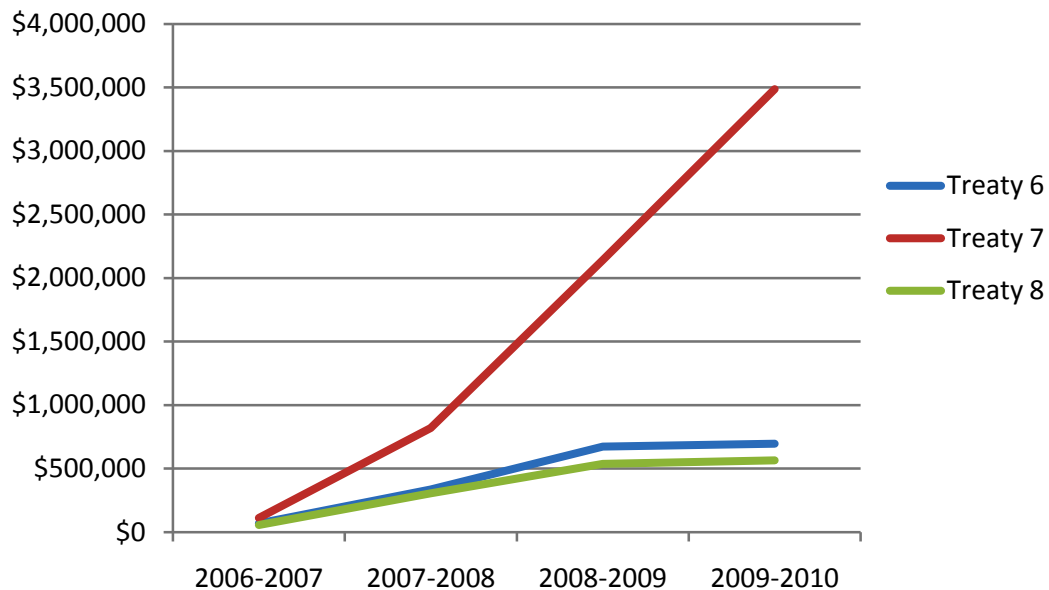


Figure 51 illustrates that the per community distributions are substantially less in the Treaty 6 and Treaty 8 regions compared to that of Treaty 7. The southern Treaty 7 First Nations take in the highest per community FNDF disbursement. The FNDF revenue model once again partially accounts for the variances: half of the 12.5% non host First Nations FNDF allocations are distributed according to community size, with the largest First Nations by population receiving the highest percentage of FNDF disbursements.

As previously noted, the lack of host First Nations in the Treaty 8 region means also that charity revenues are not fuelling local development, unlike Treaty 6 and 7 regions, whose 5 casinos have generated \$103.5 million since 2006.⁹⁶

⁹⁶ Note that an estimated 13% of charity revenues remain undistributed.

Figure 51: Average Per Community FNDF Disbursements by Treaty, 2006-2010.



Northern First Nations communities experience unique challenges. Treaty 8 contains 9 very isolated communities (i.e., fly-in, non-paved logging roads, require winter roads). This invariably increases the local cost of living as all materials have to be either flown or trucked in over long distances. Community infrastructure often pales in comparison to southern First Nations. As well, health care expenditures are higher due to the cost of housing health professionals in these isolated communities, and for traveling to obtain health care in the south. The diversified nature of the central and southern economies enables smaller First Nations the opportunity to engage in a wider variety of business opportunities unavailable in the north.

Although northern living is more expensive, the FNDF is not adjusted to offset community differences in cost of living and travel, meaning that Treaty 8 populations are getting less value for their dollar.

In addition to a north-south variance, there is an urban-rural variance. The 2 casinos located nearby urban centres (River Cree and Tsuu T'ina) are doing quite well compared with the 3 located in rural areas. Of the latter, only the Stoney Casino and Resort has shown increased FNDF disbursements and charity revenues. Its debt load however is troublesome, restricting the Stoney Nation from pursuing alternate economic development projects. The Alexis Nakota Sioux Nation and the Cold Lake First Nations have seen diminishing FNDF returns and charity revenues, indicating a drop in patronage.

Community Size Distribution

First Nations traditionally have small populations. Alberta is a case in point: 30 of the 39 non host First Nations have populations of less than 3,000, with 16 of those having less than 1,000 residents. The 30 communities were allotted 485 grants for community projects, or 65.9% of total non-host grants. Disbursements amounted to \$40,462,055, or 58.6% of non-host amounts. Table 63 shows FNDF disbursements as a function of First Nation community size.

Table 63: First Nations Development Fund Disbursements by (non-host) Community Size.

Population (non-host)	#	2006-2007	2007-2008	2008-2009	2009-2010	FNDF Total	Grants	Average Grant
0-499	6	\$284,823	\$1,262,177	\$2,265,668	\$2,315,988	\$6,128,656	130	\$62,693
500-999	10	\$354,778	\$2,460,436	\$4,327,543	\$4,601,165	\$11,743,923	144	\$90,291
1,000-1,499	3	\$132,746	\$901,014	\$1,396,816	\$1,243,512	\$3,674,088	44	\$99,454
1,500-1,999	4	\$136,447	\$747,263	\$1,786,028	\$1,830,708	\$4,500,446	42	\$112,719
2,000-2,499	6	\$506,516	\$4,897,893	\$9,014,392	\$9,212,823	\$23,631,625	148	\$151,554
2,500-2,999	1	\$80,000	\$374,311	\$714,050	\$733,212	\$1,901,572	24	\$79,233
3,000-3,499	1	\$86,130	\$341,181	\$842,837	\$853,120	\$2,123,266	16	\$132,704
3,500-3,999	1	\$115,867	\$374,133	\$789,200	\$902,153	\$2,181,353	19	\$114,808
4,000-4,499	1	\$125,415	\$259,584	\$954,580	\$980,902	\$2,320,481	11	\$210,953
4,500-4,499	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
5,000-5,499	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
5,500-5,999	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
6,000-6,499	1	0	\$882,814	\$1,265,800	\$1,284,905	\$3,433,519	17	\$201,972
6,500-6,999	2	\$354,676	\$1,394,050	\$2,667,903	\$2,775,003	\$7,191,633	62	\$134,068
7,000-7,499	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
7,000-7,999	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
8,000-8,499	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
8,500-8,999	1	\$130,510	\$583,589	\$1,268,468	\$1,309,421	\$3,291,988	74	\$44,486
9,000-9,499	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
9,500-10,000	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
10,000-10,499	1	\$246,976	\$903,023	\$1,855,150	\$1,899,150	\$4,904,935	28	\$175,176
	39	\$2,544,813	\$13,431,775	\$26,921,173	\$26,208,626	\$69,106,388	759	\$93,895

Impacts of First Nations Casinos

Employment and Income

Original estimates suggested that the 5 First Nations casinos would employ 1,340 people with an annual payroll of \$37.8 million. Most First Nations indicated their preference to hire First Nations employees, while acknowledging that a shortage of casino professionals would require that non-Native employees also be hired. The Enoch Cree Nation was the exception: it indicated that 125 First Nations individuals would be employed, representing only 17% of the work force. Some Alberta First Nation leaders pointed to the Saskatchewan Indian Gaming Authority as a model, where in 2009/2010 63% of employees are Aboriginal (down from 73% in previous years).

A significant percentage of the 5 First Nation casino **charities** (Table 14, p. 82) employ First Nations people. Out of the approximately 170 employees, 90% (155) are believed to be First Nations. With the exception of the Northern Isga Foundation at the Alexis Nakota Sioux Nation, none of the First Nations charities provided the Research Team with information on full-time versus part-time employment, or the percentage of First Nations employees who were also residents of the local First Nation community. The Northern Isga Foundation currently employs 19 individuals with an annual payroll estimated at \$400,000 (NIF News, 2009). If we assume that the average wage of these 19 individuals is approximately \$20,000, it is projected that the total payroll for the First Nations charities is roughly \$3.4 million, with the First Nations themselves retaining \$3.1 million of these wages.

In fiscal 2009/2010 the 5 First Nations' **casinos** had a total 1,030 employees. Here again, it was difficult for the Research Team to obtain precise payroll information. It is known that the Grey Eagle Casino employ 500 for a payroll of \$15 million and the Stoney Nakoda Casino employ 35 individuals for a payroll of \$1.025 million. The average wage per individual in both cases was just under \$30,000. The Enoch Cree Nation, the Alexis Nakota Sioux Nation and the Cold Lake First Nations were contacted but did not respond to our queries. However, if we assume the average wage is similar, then it is possible to project total payroll, as seen in Table 64. Collectively, it is estimated that in fiscal 2009/2010 the 5 First Nations' casinos payroll was \$31,025,000.

The total number of employees and total payroll fell below initial expectations. In total, current employee numbers represents 78% of initial projections, whereas the \$31,025,000 payroll represents 82% of original projections. The River Cree Casino is the only facility that exceeded expectations, based on its conservative projections.

Table 64: Employment in Alberta First Nations Casinos.

First Nation	Casino	# First Nation FN Employees	Total Casino Employees	Known or Estimated Payroll
Enoch Cree	River Cree	75 (25%)	300*	\$9,000,000
Tsuu T'ina	Grey Eagle	80 (16%)	500	\$15,000,000
Alexis	Eagle River	21 (18%)	120	\$3,600,000
Cold Lake	Casino Dene	N/A	80	\$2,400,000
Stoney	Stoney Nakoda	30 (100%)	30	\$1,025,000
TOTAL		206	1030	\$31,025,000

*Does not include an additional 500 employees in the hotel resort

The percentage of employees who are Aboriginal is also largely below expectations (Table 64). The River Cree Casino and Resort employs a total of 800 people, 300 at the casino and 500 at the accompanying resort/hotel complex. News reports indicate that 25% of resort employees are First Nations, a total of 200 people, of which an estimated 100 reside at the Enoch Cree Nation. Extrapolating for casino employment, 50 employees (25%) would be First Nations descent. Only 16% of the 500 Grey Eagle Casino workers are First Nations individuals. The majority of these are from the Tsuu T'ina Nation, residing both on reserve and in Calgary. Similar to most casinos, 70% of the staff is full-time and 30% part-time. Only 18% of the Eagle River Casino employees are Aboriginal. This may be due to the 100 km distance between the reserve community and the reserve casino site located adjacent to Whitecourt. However, the Alexis Nakota Sioux Nation does have an employee bus shuttling employees twice daily to the casino. The percentage of First Nations employees in the Casino Dene is unknown. Only the Stoney Nakoda casino has a preponderance of First Nations employees, which is purported to be 100%. If true, it counters the claim that it is necessary to hire non-First Nations individuals for the majority of casino positions.

Another important issue is that because most of the employees are non-Aboriginal, most of the casino wages leave the First Nations community. Acknowledging the lack of Cold Lake First Nations data, the 4 host-First Nations identified draw approximately \$5,321,000 in earnings out of a total payroll of \$31,025,000, which is 17.2% of the aggregate annual payrolls. Although 84.4% of First Nations employee wages is estimated to return to the host-First Nations (i.e. a percentage of First Nation employees live off-reserve), annually an estimated \$25,704,000 in wages leaves host-First Nation communities, the majority into the municipal Edmonton and Calgary economies.

In total, in recent years it is believed that 155 charity casino employees plus 206 casino employees plus 200 resort employees, are of Aboriginal heritage, for a total of 561 employees. To be clear, these 561 jobs represent jobs that did not exist prior to the casino openings. Although prior employment status of these 561 individuals is not known, it can be expected that a portion of these individuals were unemployed or underemployed prior to their casino-related employment (although, anecdotally, many of these people were said to represent the

better skilled individuals in the communities and had had employment prior to the casino). Consistent with this is the fact that there is no evidence that these jobs significantly impacted overall employment levels within Alberta First Nations. According to the recently published Statistics Canada Aboriginal labour force analysis for 2008/2009, Alberta's Aboriginal population experienced a 5.6% *decline* in employment rate, now listed at 69.5%. This represents the lowest rate for Aboriginal people in all the provinces. Likewise, the Aboriginal unemployment rate rose by 5.8% to 12.9%. This period of time represented the end part of a recession. However, even so, Statistics Canada shows that the employment rate among the general population of Albertans fell by only 2.5%.

Employment figures for each First Nations community are not available, making it impossible to determine how casino openings affected local employment trends. Statistics Canada and Indian and Northern Affairs Canada (INAC) utilize Canadian census data, the latest year being 2006. Accordingly, since all of the First Nations casinos opened after 2006, we are unable to provide trends analyses. First Nations have also cited an inherent right to self-government to restrict Canadian surveyors from reserves. Furthermore, the Tsuu T'ina and the Enoch Cree Nations refused to participate in the 2006 federal census, and thus their community profiles lack vital data for employment, annual earnings, work force characteristics, or even gender and age. Considering these two communities host the largest casinos, and benefit significantly from the projects, the lack of complete (or any) data sets hinders our analysis.

Economic Spin-Offs

First Nations viewed casinos as catalysts for general economic development. The Research Team was able to establish that there have been 31 new businesses opened on 12 First Nations, directly attributable to *FNDF funding*. Despite the small number of business start-ups, there is significant economic development planning currently underway. The Siksika and Bigstone Cree First Nations have plans to construct industrial parks to attract new businesses from FNDF. Others are using FNDF revenues to improve accounting systems, purchase buildings and real estate, build new and rehabilitate old business structures. Several have utilized the FNDF to conduct needs assessments and for corporate restructuring. With the exception of the Alexander First Nation tourist destination project (temporarily deferred), the poor state of reserve infrastructure means that most economic development plans were for the purpose of creating sufficient infrastructure, rather than to attract tourism. Tourism is believed to be something that may be 'further down the road'.

Infrastructure

Casino Dene cost \$11 million to build in 2007; Eagle River cost \$54 million in 2008; Grey Eagle cost \$40 million in 2007; River Cree cost \$178 million in 2006; and Stoney Nakoda Entertainment Resort cost \$27 million in 2008. This represents a total of \$310 million in capital investment for these First Nations communities. Much of this money originally derived from the First Nations communities themselves, and thus, does not represent added 'wealth' to the

community. However, the FNDF is being used to pay off the bulk of the non-gaming debt incurred. Because the bulk of the FNDF does not derive from First Nations residents, these structures, when debt free, do represent significant added wealth to each of these communities.

Each of these 5 casinos required some infrastructure upgrades. These costs were built into the above-reported cost of each casino project. Some of these details are as follows. It was reported that the Enoch Cree Nation spent \$11 million in upgrades that ranged from improving road access to augmenting local water delivery systems. The Cold Lake First Nations renovated its proposed casino location, a former oil field complex. The expansion of a section of Highway 28 is currently being completed that the FNDF funded for \$848,551. The Alexis Nakota Sioux Nation spends \$500/day to truck water to its casino site after an internal study determined this to be more feasible than constructing the required physical infrastructure to tap into the municipal system. Wells were dug for tasks such as laundry, and sewage is handled on site. At Whitecourt a passenger bus was purchased to shuttle reserve residents the 100 km back and forth to work daily. For the most part, many of these 'infrastructure costs' also represent infrastructure investment, in that they are things that add to the basic infrastructure assets of the community.

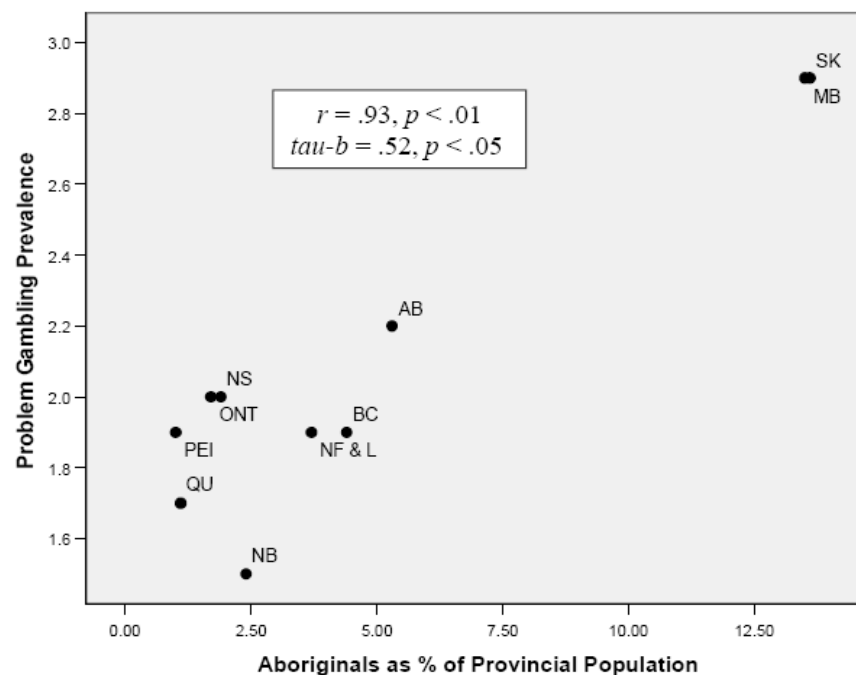
Each First Nation must cover the costs for essential services such as emergency medical services or fire protection, by negotiating a municipal service agreement with the neighbouring municipality. Alexis Nakota Sioux Nation's partner, Paragon Gaming, pays \$90,000 annually for fire and ambulance services for the casino site. As of 2006 Enoch Cree Nation has been paying the city of Edmonton \$1 million a year for fire and emergency services.

Communities neighbouring the host-First Nations expressed fears that the casinos would lead to increased crime. A 2007 Criminal Intelligence Service of Alberta report entitled *Report on Organized and Serious Crime* confirmed "all 5 of the foregoing policing districts cite the construction of casino facilities on First Nation reserves", adding that "experience has shown that the presence of casinos contributes to the need for policing" (Alberta, 2007, p.12). The AGLC responded by including as a condition for casino licensing that the Solicitor General's office produce an enhanced policy analysis to determine if enhanced policing in each community was required, and that the host-First Nations adhere to the attendant recommendations. In each case the Solicitor General recommended each community obtain a minimum of 2 additional officers to assist in enforcement initiatives such as impaired driving, public disorder, drug enforcement, and gathering organized crime intelligence (Alberta, 2007). The Alexis Nakota Sioux Nation, the Stoney Nation, and the Cold Lake First Nations each purchased the services of 2 police officers, the Enoch First Nation purchased the services of 6 officers, and the Tsuu T'ina hired 4 additional officers, who are assigned to the Tsuu T'ina Nation Police Service. Each officer costs approximately \$130,000. In total, assuming all officers would cost \$130,000, the additional policing adds up to \$2,080,000 annually. The Tsuu T'ina Nation also purchased two additional police cruisers for a total of \$60,000.

Problem Gambling

A recent review of the literature on gambling and problem gambling among North American First Nations people suggests that the prevalence of problem gambling among Aboriginal people is roughly 4 times higher than found in non-Aboriginal populations (Williams, Stevens, & Nixon, 2011). This is largely consistent with an earlier review of this evidence where the problem gambling prevalence rate was estimated at between 6.6% to 22% (Wardman, el-Guebaly & Hodgins, 2001). Indeed, the last large scale national study of gambling in Canada in 2002 showed that the Canadian provincial problem gambling prevalence rate was *best* predicted by proportion of the population with Aboriginal ancestry (Williams, West & Simpson 2007, 2008) (see Figure 52) .

Figure 52: Aboriginal Ancestry as it Relates to Canadian Provincial Problem Gambling Prevalence in 2002 (from Williams et al., 2008).



AB=Alberta; BC=British Columbia; MB=Manitoba; NF&L=Newfoundland & Labrador; NB=New Brunswick; NS=Nova Scotia; ONT=Ontario; PEI=Prince Edward Island; QU=Quebec; SK=Saskatchewan

It is important to note that this high rate of problem gambling does not appear to be primarily due to being 'Aboriginal', but rather the fact that Aboriginal people have many more risk factors for problem gambling, which include greater overall participation, different beliefs about the forces and factors influencing the outcome of gambling, younger average age, and a host of unfavourable social conditions (e.g., poverty, unemployment, poor education, cultural stress, etc.) that encourage the development of addictive behaviours (Williams, Stevens, & Nixon, 2011). As an earlier multivariate analysis indicated (Table 45, p. 174), although being Aboriginal was an independent risk factor in being a problem gambler in 2008/2009, it was less important than lower income, less education, high levels of stress, and having mental health problems.

With such a high base rate of problem gambling, it has always been a concern that placing casinos in close proximity to First Nation reserves might exacerbate existing problems. Gambling availability is a well known risk factor for problem gambling (Williams, West, & Simpson, 2007; 2008). Furthermore, the present report has documented that casino proximity is related to both casino patronage and expenditure, with casino gamblers who live within 5 km contributing 1.54 times more revenue than their population prevalence (Table 26). In addition, Table 44 and the associated analyses have documented that there is a weak but statistically significant relationship between casino distance category and problem gambling status as measured by the Problem and Pathological Gambling Measure (PPGM). The fact that casino employees have significantly higher rates of problem gambling is also of concern (Dangerfield, 2004; Shaffer et al., 2009).

Table 65 sheds some light on the relationship between increased gambling availability and problem gambling rates among Aboriginal people as found in Alberta population surveys from 1993 to the present time. It should be noted that the First Nation sample sizes in some of the survey years is very low, creating large confidence intervals around their prevalence rates. Also, to increase the First Nation sample size in 2008 and 2009 all three surveys have been combined (General Population, Targeted, Online).⁹⁷ A couple of things are apparent from this table.

First, consistent with prior research, First Nation prevalence rates are significantly and consistently higher than the general population prevalence rates across all time periods. The First Nation figures are actually an underestimate of the true rates, as all of these surveys are telephone surveys, and a significant portion of First Nations people do not have a telephone landline (found to be 18% for Alberta reserves and 3% non-reserve FN people in the 2001 Statistics Canada *Aboriginal Peoples Survey*). It is well established that households without residential telephone service historically have had significantly higher rates of poverty, unemployment, health problems, and substance use (Ford, 1998; Pearson et al., 1994) (almost certainly problem gambling as well, e.g., Rönnerberg et al., 1999).

Second, there is some evidence of increased rates of problem gambling from 1993 to 2000, coincident with the increased gambling availability that occurred from 1993 to 2000.

Third, there is some evidence of decreased rates of problem gambling since 2000, coincident with the same trend that may be occurring in the general population (see earlier section on Problem Gambling). This is despite further significant increases in gambling availability and general population per capita expenditures during this time period.

⁹⁷ While this provides an adequate First Nation sample for comparison with the aggregate sample, the obtained rates are slightly higher than 'true rates', because the Targeted and Online samples are not perfectly representative. Using just the 2008 and 2009 combined General Population sample, the estimated First Nations prevalence rate of problem gambling in 2008/2009 is 8.7% compared to 2.4% for the General Population sample.

Table 65: Prevalence of Problem Gambling in Alberta among Adults (18+) as a Function of Year and Assessment Instrument.

SURVEY YEAR	1993	1998	2000	2001	2008	2009
<i>Total Sample Size</i>	1804	1821	500	1804	9292	5634
<i>First Nation Sample Size</i>	34	40	500	62	366	216
General Population CPGI 5+	(3.7%)	(3.3%)	--	2.7%	2.5%	2.6%
First Nation CPGI 5+	(6.9%)	(11.7%)	(17.3%)	10.5%	7.1%	9.7%
General Population PPGM	(3.9%)	(3.4%)	--	(2.8%)	2.6%	2.9%
First Nation PPGM	(7.2%)	(12.2%)	(17.9%)	(10.9%)	7.7%	10.6%

Note: Small First Nation sample size precluded using the 2007 survey. The 2002 survey was not included as its sampling did not include reserves. Bracketed numbers represent projected rates using the conversion factors between problem gambling instruments mentioned earlier in this paper.

Note: Bracketed figures are estimated based on the conversion factors developed by Williams & Volberg (2010) to convert rates obtained by one assessment instrument into rates for another assessment instrument.

An important caveat to this last statement concerns the fact that these rates are for Aboriginal populations across Alberta, rather than Aboriginal populations in the immediate proximity of the 5 new First Nations casinos, which could potentially be higher. The only information that bears on this latter question are the Aboriginal samples within the Targeted Population surveys of 2008 and 2009 (and Focus Group results described later in this section).

In 2008 only 40 people in the Cold Lake Targeted sample were Aboriginal or Métis, only 21 in the Whitecourt sample, and only 13 in the Morley sample (the Enoch Cree and the Tsuu T'ina were not part of the Targeted survey due to their close proximity to Edmonton and Calgary respectively). The PPGM problem gambling prevalence rate among these individuals was $6/40 + 1/21 + 1/13 = 8/74$ (10.8%). In 2009 there were 23 people in the Cold Lake Targeted sample that were Aboriginal or Métis, 19 in the Whitecourt sample, and 7 in the Morley sample. The PPGM problem gambling prevalence rate among these individuals was $3/23 + 1/19 + 3/7 = 7/49$ (14.3%). The difference in the rates between 2008 and 2009 is not statistically significant, although there was low power due to the very small sample sizes (Chi Square (1df) = .33, $p = .56$).

There are some important differences in the actual casino proximity for these 3 First Nations. Most members of the Alexis Nakota Sioux Nation live just over 1 hour driving distance away. By contrast, most members of the Cold Lake First Nations live within minutes of the casino. Members of the Stoney Nakoda First Nation also live quite close, with the largest group of Stoney Nakoda Nation members living within Morley itself, with a 13 minute driving distance to the casino. It is interesting to note that the change in the Morley problem gambling prevalence rate (i.e., 1/13 to 3/7) was closest to statistical significance (Fisher's Exact Test, $p = .10$). The Stoney Nakoda casino is also the only First Nations casino where key informant interviews

(conducted for this research project) suggested a disproportionate patronization by First Nations individuals.

Crime

With the exception of the Enoch First Nation, none of the host First Nations or community representatives interviewed stated that there has been an increase in crime following the casinos' opening.

First Nation Host Communities

The highest profile criminal activity occurred following the River Cree Casino and Resort's opening. Native gangs as well as Jamaican and Asian gangs from Edmonton were vying for both on- and off-reserve territorial control. The River Cree Casino Club that served alcohol drew younger patrons, and the RCMP responded frequently to service calls that were assault and alcohol related. Plans were already in place to alter the Club's format to mitigate mounting gang activity, but not before a March 2007 execution-like shooting.

The casino's close proximity to Edmonton also resulted in urban criminals targeting casino patrons carrying large sums of cash, and who leave their cars unattended for long periods, as they become easy targets for robberies or car thefts. Money laundering is deemed the most problematic issue confronting all provincial casino operators. According to RCMP officials participating in this project, the various gangs purchase chips with high denominations bills. After gambling minimally for a half-an-hour, they cash the chips effectively laundering the money. The 8-member RCMP squad responsible for providing casino and reserve policing has worked closely with the Enoch Cree Nation to mitigate local criminal activity. Crime rates are now down due to an enhanced RCMP presence on reserve.

An RCMP official responsible for patrolling the Stoney casino reported that the minimal casino calls (accounting for only 25% of each officer's time), enables officers to devote additional resources to combating the local drug trade, domestic abuse, assaults, and mischief. Enhanced policing at Stoney has also led to greater police-community relations.

Neighbouring Communities

Interviews with officials in the community of Whitecourt indicate that the casino's impact on local crime has been fairly minimal (perhaps a 10% increase) and actually causes fewer problems than local nightclubs and bars. This is attributed to two factors. First, the casinos draw an older clientele, usually over 30 years of age whereas the local bars attract a younger male blue-collar clientele. Second, casino security aids local police with their duties.

The community of Cold Lake reported minimal requests for police assistance. One of the main incidents was a 2009 call to arrest an individual trying to pass off a hand painted \$5 chip as a

\$500 chip. One municipal official concluded, “I think the city of Cold Lake in general is probably benefiting ... the casino has some fantastic security there.”

The Calgary and Edmonton Police Services do not track whether individual calls are casino or gambling related, making it difficult to determine the impact of their neighbouring First Nations casino. Each police service, however, anticipated some impact on local crime, specifically petty crimes, domestic assaults and fraud related to gambling addiction.

Attitudes

Aboriginal people presented a revealing cross-section of attitudes about gambling. When asked about the benefits versus harm associated with gambling in the 2008 and 2009 population surveys (Aboriginal subsample only), 62% of Aboriginal respondents stated that the harm outweighs the benefits and only 8.6% believed that the benefits outweigh the harm. Opinion was less negative about their local casino. When asked about beneficial or harmful impacts of their local casino an average of 34% stated that it was either somewhat or very beneficial compared with 40% indicating that the effects were very or somewhat harmful. Similar to non-First Nations respondents (reported earlier) many more people indicated that gambling was too widely available compared to those who did not believe it was available enough. Also similar to the non-First Nations results, EGMs were identified as the type of gambling people would most like to see made illegal, followed by animal fighting, casino table games and Internet gambling.

Focus Group Assessment of Impacts

Focus groups were held at the Alexis Nakota Sioux Nation and the Cold Lake First Nations. Each of their casinos is a rural casino, operating in a 50-km catchment area with less than 45,000 local residents.

Both First Nations feature distinctive cultural backgrounds with unique gambling and economic development traditions. The people at Alexis are Nakota, linguistically related to the Lakota and Dakota of the larger Sioux Nation of Great Plains. The people at Cold Lake are Denesuline who have long occupied the vast northern B.C., Alberta, Saskatchewan and southern Northwest and Yukon Territories region. For the purposes of this section, a comparative framework is utilized to tease out community perceptions of casino-related positive and negative impacts, and to show how the two communities compare and differ from one another.

Positive Impact of Casinos

When asked how the casino has positively impacted their community, participants from both focus groups trumpeted gambling revenues’ importance for funding local projects and improving community infrastructure. At Cold Lake, revenues have been used to hire a Dene Language Coordinator to develop activities that encourage community involvement. A

children's recreation program was established at Alexis using charity funding. All participants cited housing as important. On a national level, the First Nations housing crisis is well known, and these trends are reflected in Alberta. Studies show, for instance, that density rates, which indicate crowding, are nearly twice as high on reserves (4.75) as they are for the rest of Canada (2.5)(Assembly of First Nations, 2005).

Gambling revenues enabled the Alexis Nakota Sioux Nation to construct 10 new homes as of April 2009, at an estimate cost of \$2 million. Similarly, Cold Lake has also announced a housing initiative seeking to build 100 houses. Both focus groups indicated the importance of casino employment, and that the learned skills will translate to securing post-casino work. The participants reported a pride of casino ownership. Every participant acknowledged that the casinos did not reflect traditional forms of gambling, and that traditional gambling and modern commercial gambling should be considered different.

Focus group participants were disappointed with low local employment rates at both casinos, although they acknowledged that as a business the best employees must be hired. Of the 120 Eagle River employees, only 21 are First Nations from Alexis. Twenty of 21 charity employees are Aboriginal, however. The numbers are not known for Cold Lake, but participants' highlighted elevated local employee turnover rates and that casino management chose not to hire regional Aboriginal employees.

Negative Impact of Casinos

Members of both communities expressed concern about how parents' excessive time patronizing a casino is negatively impacting their children. At Alexis, participants indicated that several families' food and other daily needs went unmet. Similar concerns exist at Cold Lake, but the casino's close proximity to the community had people worried that young people may be enticed to become gamblers. Others were worried that the casino provided easy access to alcohol. Finally, diminished parental presence resulted in unsupervised children wandering the community getting into trouble.

Access to gambling was considered problematic, especially for those with gambling problems. One story spoke of a man who after working a month in the bush took his earnings and lost it in 1½ hours at the casino. One Christian discussant indicated that traditional Alexis Nakota teachings consider it immoral to make a living from gambling. The Cold Lake participants were unhappy about the proximity of gambling to vulnerable populations. A fear persists that the introduction of casinos will exacerbate existing problem gambling behaviours while enticing those who don't gamble into a dangerous realm. At the same time, at the Alexis focus group, one participant was annoyed that citizens of his community travelled to Edmonton to gamble at the River Cree Casino and Resort, bypassing the Eagle River Casino and thus supporting another First Nation.

Both the increased affluence and the perception of increased affluence have drawn outsiders to each community. Consequently, focus group participants indicated that drug dealers were entering their respective communities.

Both groups were also frustrated at their perception of limited AGLC involvement in terms of regulatory oversight and distribution of gambling revenue. They were also not happy with the money that their casino was depositing in the Alberta Lottery Fund that would not be used exclusively for First Nations.

Many at Cold Lake complained about the size of their casino in comparison to the River Cree Casino and Resort, and the Dakota Dunes Casino at the Whitecap First Nation east of Saskatoon (SK). According to the participants they anticipated a larger complex that would house a hotel, service station, convenience store, and bingo hall, in effect simultaneously generating more employment and less reliance on gambling revenues.

Participants in both communities expressed dismay at the casino procedure's poor communication. At Alexis, for example, Paragon Gaming officials were presented as distant and non-communicative, but so too was the band council. All indicated that the casino was planned from Las Vegas with little community input. Also, rather than holding an AGLC-required referendum to determine community support for the casino, a public meeting was held that was attended by approximately 100 people, and a show of hands process was used to determine support. All of the focus group participants indicated that if they could vote again, they would turn down the proposal in return for a more equitable financial arrangement with Paragon Gaming.

At Cold Lake a more formal referendum process was held where two separate votes were needed to secure support. In this case, the band financed the casino and owns it outright, and community members were concerned with what they described as minimal information being made publicly available prior to the vote. According to focus group participants, voting turnout was low because in each case community members believed that their vote was ineffective as the casino was a foregone conclusion.

Unique Concerns

Local casino access at Cold Lake led to concerns that the casino would become a gateway to teen gambling problems. Alexis residents did not report this. Alexis residents were more worried about low casino employment, which did not concern Cold Lake participants as much, because they considered the casino a site of employment despite significant employee turnover. Cold Lake participants were concerned that the jobs in question were low education, medium pay with limited potential for upward mobility.

Living in a small community like Cold Lake led to some interesting concerns. For example, one participant reported that her son, who previously worked at the casino, considered his job dangerous due to the fact that reserve residents knew where he worked and lived. He at times

was blamed for another's gambling losses, which resulted in physical threats. Three men in the Town of Cold Lake accosted a security guard after suffering losses and being ejected from the casino.

Enoch: River Cree Resort

Anticipated Impacts

By 2004 Enoch Cree leaders were promoting a \$178 million destination-style resort-casino projected to employ upwards of 1,000 people, or the equivalent of 725 full-time jobs with an annual payroll of approximately \$16 million (Purdy, 2004). Of the 800 jobs anticipated 400 were expected to be in the hotel, 350 in the casino, and 30 in the ice arena (Chalmers, 2006).

Projected to gross \$110 million yearly, \$34.4 million would enter the Edmonton market through labour, lottery fund revenues, and vendors and services, and \$11.6 million would leave the greater Edmonton area (Severs, 2004). The First Nation would retain \$29 million in economic benefits annually (Purdy, 2004, D6). Upwards of 90% of the construction costs would remain in the Edmonton area, generating 865 jobs with a combined payroll of \$35 million. The goal was to hire upwards of 125 First Nations employees (CBC News, 2006). This was needed to offset the 75% unemployment rate experienced among the 1,000 adult members within the community (Chalmers, 2006).

One year prior to opening, 4,000 job applications had been submitted, including 400 from the Enoch community and 1,000 from other First Nations (Chalmers, 2006). The First Nation spent \$600,000 over a 16-month period on life skills and job readiness programs. Another \$11 million was spent improving local infrastructure. The band invested \$30 million; roughly 90% of it was on land for the casino site. It was expected that \$50 million in housing, infrastructure, children and youth programs and programs for drug users, in particular alcohol and methamphetamine abusers, was needed. The casino was expected to generate \$22 million annually for the Alberta Lottery Fund, \$9 million of which would be directed to the FNDF.

Actual Impacts

A large proportion of FNDF revenues have been directed to non-gaming debt repayment. However, the size of the River Cree Casino & Resort means that in its first year, \$15 million was generated through its charity (this does not include table games and keno revenue). According to the AGLC revenue distribution flowchart, this number represents 15% of slot revenues generated at the casino, and suggests that roughly \$120 million was spent on slots and table games at the casino. This figure corresponds to the \$30,835,225 FNDF allocation, which should be double what the charity brings in annually. Since a majority of FNDF revenues are directed to paying off the non-gaming investor debt, limited revenues have been directed to alternative economic development initiatives. No information was available concerning charity spending.

The Enoch Cree Nation has to pay back a portion of the \$178 million debt to Paragon Gaming. Until then, the community is unable to access the FNDF according to their debt-repayment agreement.

Tsuu T'ina: Grey Eagle Casino

Anticipated Impacts

The Tsuu T'ina originally anticipated the \$30 million (total cost was \$40 million) 75,000-square-foot casino would bring in upwards of \$100,000 daily. The Tsuu T'ina band council did not present the casino as the chief source of revenue. Rather, the money would fund a 30-year, \$700 million economic plan to further diversify a growing reserve economy. This plan entailed developing a 940-acre parcel of land to build a seven-storey, 190-room hotel with a water park and convention facilities, big-box retail stores, a mall and heritage centre, a number of restaurants, beverage rooms, and a neighbourhood pub, plus an entertainment centre featuring a 225-seat theatre for live acts (Belanger, 2006). Two million square feet of new office and light-industrial space would be developed with the intention of attracting 15,000-20,000 new jobs to the area (Parker, 2004).

The immediate construction of 300 houses at Tsuu T'ina was needed to help offset endemic overcrowding and to draw 120 member families back to the community to work at the casino and in local businesses (Ferguson, 2007). An additional 250 homes would be needed over the next five years to meet local demand. As of the casino opening, the Tsuu T'ina operated 21 reserve businesses. Local unemployment rates nevertheless hovered around 80%, rising an additional 10% in winter. The anticipated 500 new casino jobs would provide a large number of reserve residents with access to regular, full-time employment that did not necessitate driving to Calgary and nearby communities. Training programs were also to be established to ensure that reserve residents had the skills necessary to work in the casino.

Actual Impacts

Despite the recent economic downturn Grey Eagle officials reported meeting their budgets for 2010. After several years of operations, the management team has a better understanding of the regional market, resulting in increasingly accurate budget projections. Layoffs have not occurred, and patron counts are unflinching. The casino "certainly exceeded our projections, by a considerable amount," according to band spokesperson Peter Manywounds (APTN, 2008). In August 2008, the Aboriginal Peoples Television Network (APTN) reported that the casino was generating \$58,000 daily for the band's charitable fund.

These revenues are used for various purposes. For instance, at the time of the casino's opening 350 band members were on the housing wait list. In the first 7 months following the casino's

opening the band built 26 new homes with 10 more foundations in place, and it was expected that the wait list would dissolve within 5 years. Costs per 1,200-square-foot unit were between \$250,000-\$300,000, with Indian and Northern Affairs Canada providing \$50,000 per unit under a federal housing grant program, capped at \$7.5 million. Prior to the casino opening, there were 1,500 members in fewer than 250 homes (Komarnicki, 2007). Contractors on the project are hiring almost exclusively band members as trades people.

Gambling revenues fund reserve road paving programs, to enhance Tsuu T'ina language programs, and to finance university educations. In April 2009, Tsuu T'ina officials announced that impressive returns would lead to casino floor expansion and a hotel and entertainment complex within two years (CBC News, 2009). The Tsuu T'ina council has approved construction of a new 16,000 square foot building to house the tribal police force. According to Manywounds, "We'll help you start a business, we'll give you career options, we'll have a job for every person on reserve but if you're expecting to sit on your couch and collect thousands of dollars a month it's not gonna happen." The Grey Eagle Casino's success did however impact local non-Native charities. APTN reported one case in which two-day charity casino in the first quarter of 2007 raised just over \$94,000. During the same quarter for 2008 that same 2-day casino brought in just over \$77,000.

Tsuu T'ina has arguably benefitted the most from the FNDF and its associated charity. Since opening the casino, 84 grants have been made to fund local projects, a total of \$65,738,888, ranging from providing band housing to improving the community recreation centre to repairing elevators in various buildings. Additional police officers have been hired, school trips paid for, various administrative departments funded outright, and roadways upgraded.

According to community spokesperson Peter Manywounds, "Every single Tsuu T'ina person who's qualified to go to post-secondary education at whatever institution is gonna go because of the amount of revenue. Last year we had 85 qualified applicants who couldn't go because there was no money. What a change in one year." In early 2009, the band spent nearly \$2 million in casino-derived cash on post-secondary and reserve education. For the latter, several hundred thousand was used to purchase weight lifting equipment, pay teachers' assistants, build a computer lab and offer expanded trades and extra-curricular programs (CBC News, 2009). In January 2010, the Tsuu T'ina Nation unveiled a new \$4 million community fire department, funded largely from Grey Eagle Casino gambling revenues.

Established after the City of Calgary indicated that it could not guarantee fire protection services for the new casino, 20 firefighters (10 are from Tsuu T'ina) boasting new equipment including an aerial apparatus, a pumper truck, water tanker and a grass fire truck were expected to drastically reduce local response times, in certain cases by as much as 75%. Anticipating one day that all the firefighters would be from Tsuu T'ina, Chief Sandford Big Plume added, "Tsuu T'ina is one of the few First Nations in Canada to have stand-alone police and fire service—something the nation should be proud of" (Komarnicki, 2010).

The fire department also represents the political freedom associated with a successful casino project. City of Calgary officials in 2007 informed band officials that they did not have the manpower and equipment to guarantee service to the casino, and that any such agreement with the Tsuu T'ina would be on a cost-recovery basis. City officials concluded that fire service for the casino would cost \$2.6 million a year (Calgary Herald, 2008). Rather than pay this fee, the Tsuu T'ina applied FNDF funding to develop their own fire service.

Gambling revenue may have also allowed the Tsuu T'ina to resist pressure to sell some reserve land to Calgary for \$275 million to allow Calgary to complete a ring road around the city. The Tsuu T'ina indicated a willingness to negotiate access, on the condition that they controlled the road and its parallel development, a demand Calgary officials refused. The negotiations reached their nadir in July 2009, when 60% of Tsuu T'ina voters cast ballots opposing land sale for ring road expansion. Financial freedom in this instance led to political agency, and the ability to self-govern notwithstanding outside political pressure.

The First Nation added 4 additional police officers, and the Tsuu T'ina Police Service has established good working relationships with neighbouring police services. There has been a limited volume of casino calls thus enabling the police to spend greater time servicing the community. There is local pride in a police service that in 2009 became only one of five provincial police services to achieve 100% compliance with the Alberta Provincial Policing Standards. Officials reported few criminal incidences related to the casino. The main concerns are related to the potential for drinking and driving. Also, few band members patronize the casino: most customers are from Calgary and return to the city after leaving the casino.

Although it has yet to impact the community, casino managers and the Tsuu T'ina police are aware of street level gang activity that is anticipated to eventually penetrate the reserve through the casino. They have also encountered outlaw motorcycle gangs on the reserve. There is no housing nearby the casino for reserve residents, who make up a minor portion of the patrons and a significant employee complement.

Stoney: Stoney Nakoda Resort

Anticipated Impacts

The patronage for the Stoney Nakoda Resort was anticipated to come from the roughly 18,000 cars that pass by the casino on a daily basis travelling on the Trans-Canada Highway. The \$27 million casino and hotel resort was expected to employ 200, of which 40% were to be First Nations (CBC News, 2008). At the time of the casino opening, the reserve had an 80% unemployment rate (Remington, 2008). The bulk of gambling revenues were slated for housing, social services, and education programs. The casino was expected to draw upwards of 400,000 visitors while generating approximately \$23.8 million in net revenues the first year to the small community of 4,000 living on the Morley, Rabbit Lake, Eden Valley, and Big Horn

reserves (Fekete, 2005).

A second phase was planned that included building a second hotel, additional convention space, expanded food and beverage outlets and a retail outlet mall. The casino aimed to house 15 tables and 300 slot machines, with room to expand to 600. The proposal also included a 92-room hotel, a 320-seat restaurant, lounge, and entertainment complex, a 150-person conference centre, and a water park. The project design anticipated expanding to fill the entire 240-acre site with more hotel rooms, casino, and retail space. In a referendum all three bands voted 73% in favour of the casino project.

Actual Impacts

Similar to the Enoch Cree and the Alexis Nakota, the Stoney Nakota spent the majority of their first year's gambling revenue on repaying their non-gaming related construction debts. Almost all of the 2008-2009 FNDF disbursement, totalling \$2,577,432.03, went to repaying non-gaming debt as did the 2009-2010 allotment of \$2,308,589.01. A large portion (\$2 million) was spent on creating an economic development plan of [Horseshoe Lands](#), a proposed residential development. This was followed by more than \$1.1 million spending on band housing construction, major renovations to housing and CMHC mortgage payments; and a newly developed band housing program.

The Stoney is in perhaps the most dubious position of the 5 host casinos. In debt after financing the casino-resort for \$27 million, the casino is attracting fewer customers than anticipated. Originally expected to employ 200, the staff complement on opening day was approximately 100, of which 48 were First Nations. Today the casino-resort employs 35 for a payroll of just over \$1.1 million, far less than original projections. The issue is significant. A considerable portion of Stoney capital is tied up in the casino, making it difficult to diversify the community's portfolio. New projects have been turned down in recent years due to lack of available funding. Private land holdings were put up for collateral, meaning that this project must work or else the community could be in dire straits. The recent economic slump has also hit the community, and the community's oil and gas revenues have plummeted sharply. An official indicated cryptically when asked about the casino's benefits that community patrons are spending more money on average than non-First Nations customers. This suggests that the casino is not acting as the conduit drawing anticipated extra community cash into the First Nations.

The augmented police presence has led to an improved First Nation-RCMP relationship that community member's welcome. Due to limited call volume at the casino, the RCMP spends more time servicing the community located more than 30 kilometres away. The community was able to recently hire two community mental health workers to combat domestic violence issues. RCMP officials indicate that drinking and driving has subsided since the casino opening due to the amplified police presence on the main roadways, leading people to take fewer

chances. One official stated that the casino has led neighbouring communities and their business owners to view the Stoney more positively, as progressive business owners.

The Stoney First Nation was embroiled in controversy prior to breaking ground on its new casino. In October 2005, months of agitation culminated in a seven-hour standoff when Eliza Holloway, Alice Twoyoungmen, and Winnie Francis, known as the three sisters, and about two-dozen supporters blocked construction vehicles from accessing the casino construction site. Protesting the site selection since July, the protestors denied surveyor and construction worker access (Ovsey, 2005). The protest reflected elder concerns with what they portrayed as band council deception: one claimed that he and others were falsely led to believe they were signing off on oil and gas royalties, when in fact they were voting in favour of the project. Additional informants came forward claiming that their concerns were ignored, and that others were bribed for their support.

As predicted, the once dry community's band council passed a bylaw allowing the casino's sale of alcohol, thus permitting reserve resident more convenient access to alcohol (that had previously been obtained in nearby Canmore or the more distant Calgary). Casino staff has identified drug peddlers from Calgary, and residential gambling has reportedly become an issue.

The RCMP reported that early on some employees were arrested and charged with theft. The casino promised economic rejuvenation in the wake of sagging oil and gas prices, something it has yet to deliver. It is a physical reminder of what is at stake for the community. The Stoney First Nation to date has invested more than \$30 million for casino and resort construction and put up private land holdings as collateral. As one participant clearly stated, "from a financial point of view, what you've done is you've put the nation in a position that has no choice but to make this thing profitable." Or, more specifically, closing the gap between investment and actualization has been difficult.

Alexis: Eagle River Casino

Anticipated Impacts

The patronage for the Eagle River Casino was anticipated to come from the roughly 16,000 cars that pass by the casino on a daily basis travelling on Highway 43. Slated to be a \$63.5 million destination resort with a 150-room hotel run by Marriot, a \$54 million casino was constructed to help offset the 70-95% unemployment rate. After Marriott backed out Paragon Gaming financed construction after purchasing the proposal, to which the Alexis Nakota Sioux Nation owes \$21.4 million. Initially, revenues were to be used for social programs to counter crack cocaine and methamphetamine use and gang activity, to build homes (the First Nation had an estimated 150-houses shortfall) and advance commercial development in Whitecourt (Ohler, 2006).

A four-pillar approach to community development had been adopted: (1) housing and infrastructure; (2) the elders; (3) health and education; and, (4) all other projects. Originally believed to need more than 175 employees, this number rose to more than 200 with a total payroll of \$7.4 million (Whitecourt Star, 2008). The hope was that 70% of employees would be Aboriginal. Local employees and subcontractors were utilized where possible and the casino's annual economic impact was projected at \$34.2 million (Whitecourt Star, 2006).

The Alexis Nakota Sioux Nation casino was expected to generate more than \$4 million in employment; \$5 million in charitable funding; and \$17 million annually paid directly to the First Nation (Ohler 2007). Whitecourt officials were anticipating a \$4.2 million annual windfall from casino operations. The Alberta Lottery Fund was expected to receive \$9 million annually with \$3 million going to the FNDF. The full-service truck stop and a 106-room Marriott Fairfield Inn were set for construction within a year of the casino opening, which has not occurred. Noting that most casino projects need a population base of 45,000 to succeed, and that the regional populations barely meet that number, the viability of the project was based on the fact that a daily average of roughly 16,000 motorists drove past the proposed casino site.

Actual Impacts

Like the Enoch Cree, the Alexis Nakota Sioux Nation is required to pay back investor debt that is non-gaming related. Since the FNDF is lost to community programs until the project development debt is paid off, the Northern Isga Foundation provided the bulk of local project funding. To date 10 houses have been built, reducing by a small proportion the need for approximately 400. Since January 2008, the Charity (the community's only sources of gambling-related income) has funded \$1.5 million worth of community activities and projects.

During casino construction an estimated \$1-million infrastructure was established anticipating hotel construction, which is depreciating and deteriorating daily. The difficulty in attracting an hotelier arose from a proviso in the original agreement with Marriott indicating that after 20 years operations, the hotel reverts to Alexis Nakota Sioux Nation's ownership. Three years into casino operations, few hoteliers have expressed an interest in investing knowing that they will lose controlling interest in 17 years. The lost hotel and employment revenues are at this point incalculable.

The enhanced policing agreement assigning two officers to the Whitecourt RCMP costs the Alexis Nakota Sioux Nation approximately \$130,000 each/annually. Local officials indicate that these additional officers are utilizing only a portion of their time dealing with casino-related issues, a time commitment pegged at 25% including patrol time to the casino and administration. The Town of Whitecourt is benefitting from the enhanced policing by 1½ police officers cost-free. The First Nation has no say over the police purchased for the casino, where they are considered municipal members under the control of the staff sergeant. Paragon Gaming pays in perpetuity \$90,000 annually for fire and ambulance services for the casino site.

With the exception of 2006-2007, the Alexis Nakota Sioux Nation has not received FNDF revenues, other than what has been withdrawn to pay off its existing debt to Paragon. The recent economic downturn has also been problematic. Initially more than 200 employees were on the casino payroll; original estimates indicated upwards of 240 employees were required. Layoffs have recently occurred: the casino employs 120 people, 21 from the Alexis Nakota Sioux Nation. Following a strong performance after the casino opening, layoffs and its poor recent economic performance has many community members questioning the casino's value to the community. Participants were upset at the lack of FNDF-funded local projects whereas others criticized community leaders for their lack of input in casino management, specifically hiring practices, which hurts local employment opportunities.

Several focus group participants stated they were concerned with the length of the community's contract with Paragon. There are clauses in the agreement permitting the First Nation to buy out Paragon, but the return on initial investment is slowing this process. A 4 to 6 year timeline to acquiring controlling interest is currently in place, and appears doable if the regional economy bounces back.

The purchase of 10 new houses is a positive sign, and the political relationship with the community of Whitecourt has improved in recent years after townsfolk sponsored two Native fastball community championships. In return, the Alexis Nakota Sioux Nation sponsored the annual party in the park, subsidizing the entertainment costs.

Cold Lake: Casino Dene

Anticipated Impacts

Located across the main grounds from the Cold Lake First Nation, the \$11 million stand-alone casino was expected to employ between 80-100 people. Although community officials would not speculate, original estimates suggested the casino would help to reduce the upwards of 90% unemployment rate. Expected to generate an estimated \$12 million annually, of which \$2.8 million would be directed to the FNDF, community representatives indicated that the casino would add to the already substantial \$16 million spent in town by reserve residents (Cold Lake Sun, 2008). The casino was considered complementary to existing reserve businesses it would assist.

Actual Impacts

The Cold Lake First Nations (CLFN) band council has long focused on economic development to ensure self-sufficiency. The Cold Lake First Nations has 52 companies: 9 joint-venture companies where the band owns 51%; 10 wholly owned companies; and 33 private enterprises (CBC News, 2009). Casino Dene is part of a larger 25-year economic diversification plan. Performing better than originally projected following its September 2007 opening, 80 jobs have

been added to the local economy that has in the process become both a local tourist attraction and a source of local accomplishment and pride.

The goal is to improve the CLFN economy so that there are more opportunities for members to be active in the local economy. With more money available for housing, band members are moving back to the CLFN from the City of Cold Lake. This has technically freed up housing for other First Nations individuals choosing to remain in the city. Three years ago, however, the City of Cold Lake was in the midst of an affordable housing crisis. The CLFN partnered with the Samson Cree Nation, establishing a joint venture that looked to bring benefits to both First Nations through a proposed initiative of 50 lots for sale to the open market. Additional benefits realized include the current paving of Mission Road, reducing dust and improving the road surface for pedestrians and bicyclists. A regular meeting of all CLFN business entities and private entrepreneurs occurs to discuss and plan future community developments and to evaluate investment opportunities.

A review of the FNDF for the past four years indicates several economic development projects initiated by the Cold Lake First Nations. The FNDF provided \$200,000 for the Primco Dene Project, which supplies catering and emergency services for remote work camps; a lumber company purchased prior to casino operations is being used to produce lumber needed for home construction aided by casino dollars. In anticipation of casino-related local economic development, the band also purchased 960 acres of freehold land around Cold Lake for commercial and economic development (Ohler, 2007).

Kinuso Communications was established to develop community based wireless Internet communications followed by an upgrade of local wireless and Internet access. The band council established a log home manufacturing operation and training program to develop local capacity needed to improve reserve housing. A number of new housing developments and home renovations occurred. The FNDF has provided more than \$2.5 million to aid these efforts. A day care was built, a gift and souvenir shop constructed, and more than \$250,000 was directed to improving community infrastructure. In total, \$480,000 was provided to develop a 12-lot residential housing subdivision in the Town of Cold Lake, portable camp housing for emergency housing was also purchased, and money was directed to assist the Cold Lake Oil and Gas Company with project funding. Finally, CLFN purchased three new water trucks.

New housing initiatives are helping the community meet its housing needs. The English Bay Community Centre opened in 2008 and serves as a community meeting site and for holding conferences, forums, and meetings. The FNDF revenues are being utilized to drive a five-year master plan leading to opportunities enabling members to lead more active and healthier lifestyles. So are charitable revenues, which have been used to purchase six canoes for the program. Also, a Dene language coordinator was recently hired, as was an Education Director to oversee local education development in response to the chief and council's prioritization on experimental learning (Cold Lake Sun, 2008).

Post-Script: Barriers to Participation

The present research project was provincially mandated, and the Alberta Gaming and Liquor Commission instructed all casino operators, by a letter, to participate with researchers to assist in determining the cost/benefit of gambling in Alberta. Several barriers to successful First Nations participation in the project obstructed researcher's data collection abilities. Reasons for not participating range from fears that the project, once completed, could lead to casino closures; and that First Nations' possess a self-governing right to keep researchers from entering their communities. The following three categories were thematically derived after reviewing the collected data compiled from personal researcher experiences, focus groups, informal interviews, and newspaper contents analysis.

Navigating First Nations Government Bureaucracy

The data collection process was significantly hampered by an inability to gain band council approval to contact community members as study participants. The purpose of approaching the band councils was to show proper respect for their governing authority. We spent significant time navigating the various band council bureaucracies in search of the individual who could grant researchers community access; or who was assigned the task of bringing our concerns before the chief and council. While difficulties were experienced generally, our experience with the Stoney Nakoda First Nation is instructive.

Starting in May 2008, a project researcher contacted the band council secretary and asked to be put through the appropriate individual to review our requests. Over a period of several months, dozens of telephone messages were left with various council members. None were returned. When we finally secured a contact that individual quit within weeks, and the new contact showed little interest in the project. To those who raised concerns that participatory action research or similar methodologies were not being utilized, we informed them that we had made allowance for hiring community individuals to facilitate data collection.

All of this produced limited returns. We expanded our limited contact list, and thus began to make progress with hopes of producing a face-to-face meeting. However, a band council election was called resulting in a number of our contacts being voted out of office. The new chief and council did not want to hear from us immediately, and despite promises to eventually do so our requests to present to band council were all denied. When an invitation was extended to appear before chief and council, it was often delivered with little more than an hour's notice. Finally, several untimely deaths and serious accidents occurred within the community resulting in postponed or cancelled meetings.

One year into the project no progress had occurred at Stoney. It was the last First Nations casino to open, meaning that there was little to no data to draw from to determine the casino's socio-economic impacts to the First Nation itself or nearby communities such as Canmore and Banff.

Restricting Research Access is a Self-Government Right

Expanding the previous section's discussion, an email from Stoney Nakoda First Nation representatives indicated that our research was of limited interest to the community. Implicit to these remarks and the above discussion is the First Nation belief in the existence of a self-government right to restrict researcher access to First Nations communities. The relationship between academic researcher and Aboriginal community is well documented and very dynamic. Many of the same issues that have appeared in the press underlie Alberta First Nation gaming communities reasons for refusing to participate:

The Saskatchewan Indian Gaming Authority (SIGA) and the Mississaugas of Scugog Island First Nation, which operates the Blue Heron Charity Casino (in Ontario), for instance, have cited their self-governing authority to (unsuccessfully) implement localized labour codes in contravention of provincial legislation (Belanger 2011b, 2011c). Denying researcher access to First Nations communities reflects the American Indian experience, whereby sovereign tribes are empowered to restrict non-Indian access to reservations. Similarly, several First Nations in Canada have banned non-Native researcher access. Still others attempt to establish working relations, acknowledging that important and otherwise unaffordable local research can be accomplished as additions to larger academic research agendas. In doing so communities demand control over budgeting; others over research design. In Nunavut, researchers are required to first obtain a Scientific Research Licence prior to being granted access to work in the territory (see Nickels, Shirley & Laidler, 2006).

Denying researcher access took on two dimensions in this project. First, as a self-governing entity empowered to establish its own by-laws concerning the access of non-band members the First Nation has the right to ban researcher access to the community. Second, First Nations and their American operators regularly make the claim that the data being sought is proprietary.

In the first instance, Aboriginal self-government has evolved from a concept of local municipal government models rooted in the Indian Act to a constitutionally protected inherent right, finding its most recent expression in the idea of 'Aboriginal national government' as a distinct order of government within the Canadian federation. Self-government's scope, authority and jurisdiction have expanded beyond municipalities, to include federal, provincial, and municipal jurisdictions and some unique Aboriginal authorities (Belanger & Newhouse, 2008).

As the community government, band council operations are guided by the Indian Act, which provides a legal framework for governing reserve lands, dictating election procedures, and setting the terms of office for chiefs and councillors. The Act also empowers the chief and council under S. 81 to establish local by-laws over reserve lands for a host of issues. First Nations communities in certain cases have openly considered using various Indian Act sections to restrict researcher access to reserve communities including s. 81(p), which provides for "the removal and punishment of persons trespassing on the reserve" (non-band members without permission to be in the community); or those "frequentering the reserve for prohibited purposes"

(Indian Act, 1985). The latter could be the result of a band council resolution becoming a by-law restricting researcher community access; or at the very least compelling them to obtain a license before entering the community.

The second effective strategy has been for First Nations and their partnered casino operators to cite proprietary interest as a shield to immunize them against forced disclosure of certain data. If these data are released, it is argued, casino operations could be severely undermined thereby jeopardizing the operator's ability to effectively maintain casino profitability, thus hurting the host First Nation community's economic growth and socio-economic stability. All of the First Nations contacted for this project have either formally or informally informed us that we would not be privy to any information other than public records indicating slot machine revenues. Accordingly, table games data is unavailable at this point. First Nations managing casinos with hotels have also refused to disclose important data such as number of employees, for example, which would help with our analyses of the overall regional and provincial impact of the casino.

Fears of Funding Cuts

This topic is to date the most cited reason for denying research access to Alberta First Nations communities. Specifically, community leaders and the general membership are concerned that their success as casino managers and revenue generators will be held against them through federal funding cuts. Ironically, First Nations leaders looked to gambling to offset devastating economic trends by establishing local control over economic development.

As discussed earlier, First Nations receive annual federal allotments from Indian and Northern Affairs Canada (INAC). A formula-based model structured to provide more equitable support between communities, consideration is given to a range of components including: support for First Nation Council costs (based on the registered membership); basic overhead; unit costs for major services; location costs; audit and professional fees; and service employee office costs. It further takes into account the population, geographic location and the programming responsibilities of individual First Nation governments. All funds must flow to the First Nation Council, which in turn determines and manages community specific arrangements.

This program is intended to provide a reasonable contribution to the costs of governance, with a specific focus on the costs associated with the administration of departmentally funded programs and services. As Indian and Northern Affairs Canada (INAC) officials will state, however, "This support does not accommodate all circumstances and there is an assumption that citizens will also contribute to their costs of community governance" (Canada, 2009; also Prince & Abele, 2005). Additional funding is found in the form of various federal programs with assigned responsibilities for Aboriginal peoples. Contributions to band financial operations is provided by but not restricted to Health Canada, the Canadian Mortgage and Housing Corporation (CMHC), Canadian Heritage, the Privy Council Office.

Gambling revenues are considered supplemental funding needed for First Nations to compete socially, politically and economically. Many project participants identified a fear among

community members that suggested the more successful a casino becomes the more likely federal transfer payments to the community are apt to alteration or outright termination. Late 1980s budget slashing is not forgotten. Nor are federal attempts to devolve responsibility for funding Indian Affairs to the provinces and First Nations, in essence relieving the federal government of what critics often portray to be a burden to federal taxpayers. Respondents at Cold Lake First Nations and from the Alexis Nakota Sioux Nation clearly articulated their concerns. The bulk of respondents also understood the importance of casinos, in particular how the allocation of net slot sales appreciably expanded a limited revenue base.

SUMMARY

Research Approach

The present analysis focuses on **1970 to the present time**. This is partly because of limited data availability prior to 1970; partly because 1969 was coincident with the beginning of Alberta's ability to independently provide, regulate, and license most forms of gambling; and partly because the most *rapid* introduction and expansion of gambling in Alberta has occurred in this period. More specifically, the main changes in gambling availability in Alberta since 1970 involve:

- An increased availability of raffles.
- The 1973 introduction of lotteries.
- An increased availability of instant win 'pull tickets' up to 1993, and a decline since 1993.
- The 1980 introduction of casinos offering table games, expanding to 19 casinos by 2007.
- An expanded availability of bingo up to the mid 1990s (including the introduction of satellite bingo in 1996), and decline after that time.
- The 1986 introduction of instant win scratch tickets.
- A declining availability of horse race tracks and live race days, offset to some extent by the 1990 introduction of teletheatre horse race betting.
- The 1990 introduction of sports betting.
- The 1992 introduction of video lottery terminals to bars/lounges.
- The 1996 introduction of slot machines to casinos, with the number of slot machines continuing to increase to the present time (12,873 in 2010).
- The 1996 introduction of slot machines to horse race tracks, expanding to 3 race tracks by 2002.
- The 2006 introduction of First Nations casinos, expanding to 5 First Nations casinos by 2008.

An essential aspect of our research approach to studying socioeconomic impacts was to '**follow the money**'. Although there are many areas of the economy and society where socioeconomic impacts of gambling might be found, they are much more likely to be observed in the groups/individuals/geographic areas that are responsible for contributing the money and in the groups/economic sectors/geographic areas that are the recipients of the money. This approach also allowed us to establish how much money is involved, which helped quantify the potential magnitude of these impacts.

The sectors primarily involved in the transfer and receipt of gambling revenue are the: Provincial Government; Charitable Organizations; the general Alberta Populace (Society); Private Industry; and Alberta First Nations. We then conducted a **detailed examination of the impacts within each of these groups/sectors**. These impacts were examined by means of a) secondary analysis of changes in general economic and social indices, b) direct investigation of the known impacts, c) population surveys, and d) key informant interviews and focus groups.

Theoretical Approach

Cost-benefit analysis has been the traditional theoretical approach used to assess to assessing the socioeconomic impacts of gambling. However, it has practical problems due to the fact that estimating the monetary costs of several social impacts (e.g., suicides, divorces) is very difficult and fairly unreliable. It has theoretical problems in that it is inappropriate to apply an arbitrary monetary amount to something that is clearly nonmonetary in its value or consequences to the participant. Furthermore, doing so reinforces the erroneous notion that money is the appropriate metric upon which socioeconomic impacts should be evaluated.

Dissatisfaction with reliance on financial indices has led to the development of alternative measures to assess progress/impacts in a more comprehensive fashion (e.g., Quality of Life Index, Full Cost Accounting, Genuine Progress Indicator). Unfortunately, while these approaches are more theoretically satisfying, they have practical problems of their own. First, although they all have similar goals, their specifics are markedly different from each other, illustrating the fact that determining which indicators contribute to societal well-being is a very value-laden task not well agreed upon. Second, these approaches have the same problem as cost-benefit analysis in that they aspire to combine impacts into a single index. This is problematic because it either arbitrarily requires all impacts to be equivalent in value and/or requires a subjective judgement about the relative value/weight of one impact against the others.

Unfortunately, the reality is that there is no reliable way of combining social impacts with monetary impacts to produce a single summative measure of the overall impacts. Rather, the only theoretically neutral and scientifically rigorous approach is to a) create a comprehensive *profile* of the social impacts and the economic impacts, and to b) evaluate these profiles against basic principles of economic gain/loss and basic principles of societal value/benefit. This is the theoretical approach used in the present study.

How Much Money is Involved?

Gambling revenue in Alberta has increased dramatically in the past 35 years, from approximately \$300 million a year in the late 1970s/early 1980s (in current dollars) to over \$2.5 billion a year since 2006. Much of this increase has occurred since the 1990s. However, the percentage increase in revenue from year to year has flattened somewhat since about 2002, with 2009 being particularly notable, as this is the first year where revenue was actually lower than the previous year. This downward trend continued in 2010. Similarly, per adult expenditures increased from about \$200 per adult in the 1970s (in current dollars) to a peak of \$1001 in 2008 and a decline in the subsequent 2 years.

However, despite these increases, gambling represents a relatively small activity both in global economic terms and at the individual level. Total gambling revenue has constituted only about

1% (or less) of Alberta GDP since the mid 1990s. Similarly, the percentage of after tax income spent on gambling by Albertans has been in the range of 2.5% to 3.0% in this same time period, and has not really changed since the mid 1990s.

Where is the Money Coming From?

The **game origin** of gambling revenue has changed dramatically over time. The largest component of Alberta gambling revenue from 1970 to 1984 was horse race betting, changing to ticket lotteries from 1985 to 1993, changing to VLTs from 1994 to 2004, and changing to slot machines from 2005 to the present time. Horse racing revenue per adult Albertan peaked in 1979, whereas it peaked for pull-tickets in 1987, bingo in 1992, ticket lotteries in 1995, VLTs in 1998, raffles in 2004, and table games and slot machines in 2009. Much of the growth in EGM revenue over the years is due to the increasing number of machines, since participation rates have been stable, as has the revenue per machine ratio (averaging \$138,000 per VLT and \$110,000 per slot machine in the past 10 years (adjusted for inflation)).

In terms of the **demographic origin** of gambling revenue, although more than 70% of the Alberta adult population have participated in gambling on an annual basis for the past 20 years, the frequency and extensiveness of gambling (and therefore, gambling expenditure) is not evenly distributed in the population. Rather, there are large numbers of 'light gamblers' who occasionally engage in just one or two formats, most typically, lottery tickets, raffles, instant win tickets, and social gambling. At the other end, there are a small number of 'heavily involved' gamblers who more frequently engage in many different formats.

A small percentage of people currently account for the bulk of reported Alberta gambling expenditure. Roughly 6% account for 75%, 10% account for 81%, and 20% account for 89%. An analysis of the top 6% of 'big spenders' shows these individuals to be more likely living in northern Alberta and to have higher incomes. To a lesser extent, they are also more likely to be a non-immigrant, of Aboriginal ancestry, older than 35, male, and being married or living common law. However, the feature that most clearly distinguishes them concerns their prevalence of problem gambling, where their rate of 40.6% is many times higher than the 2 or 3% in the general population. In 2008/2009 it is estimated that problem gamblers in Alberta accounted for 50% of all reported gambling expenditure, with this ratio being even higher for VLTs, slot machines, and casino table games.

In terms of the **geographic origin** of gambling revenue, almost all Alberta gambling revenue comes from Albertans. Although 5% of visitors to Alberta go to a casino while they are here, very few of these people have come here to gamble and most of their travel-related expenditures would still have occurred even without gambling being available.

Within Alberta, there are higher per capita reported gambling expenditures in northern Alberta compared to southern Alberta, with the major cities having intermediate expenditure levels.

This finding is also reflected in actual revenues, with lottery ticket revenue, VLT revenue, and charitable gambling revenue tending to be higher in northern Alberta compared to southern Alberta.

There is also an important urban-rural difference, with higher VLT revenue per capita in rural areas and higher casino/charitable revenue per capita in urban areas. This is presumably due to the greater availability of VLTs in rural areas and a greater availability of casinos (and slot machines) in urban areas. Further to this point, about 73% of casino revenue appears to derive from people who live within a 20 km driving distance of the casino, with especially disproportionate contributions from people who live within 5 km.

Where is the Money Going?

Charity groups were the primary direct recipients of gambling revenue until 1987, at which point provincial government revenue started to match charity revenue due to the introduction of provincial instant win tickets and the increased popularity of provincial lottery tickets. This parity continued until 1993. In 1994 provincial government revenue began to rapidly outpace charity revenue due to the introduction of provincially owned VLTs, and then slot machines. The provincial government is now the direct recipient of approximately 85% of all gambling revenue.

A significant portion of gambling revenue is immediately redirected because of pre-existing agreements regarding commissions, levies, and revenue disbursement. Thus, the more important question concerns the proportion of gambling revenue received after these agreements. Since 1994 the provincial government's percentage of total gambling revenue has ranged from 41% to 58% (42% in 2009). Charity/community groups have been the second largest recipient since 1994, with their portion of the total ranging from 22% to 38% (32% in 2009). Private operators (casino owners, lounges hosting VLTs, lottery ticket retailers) have been the third largest recipient, with their portion of the total ranging from 13% to 22% since 1994 (17% in 2009). In the past couple of years First Nations revenue has grown significantly and they now receive approximately 6% of Alberta gambling revenue. The proportion of gambling revenue derived from horse racing has declined significantly since the 1980s when it was as high as 21%, and now only constitutes about 2% of the total. Finally, the federal government has always received the smallest proportion of net Alberta gambling revenue, which has typically been in the range of 1% of the total. In general, the stability observed in the relative proportion of revenue garnered by different sectors is partly related to the fact that they all tend to share in the revenue from the biggest 'money maker' (i.e., EGMs), and they have tended to receive a fixed percentage of gambling revenue, as opposed to a flat amount.

The 'ultimate' recipients of almost all Alberta gambling revenue are the citizens of Alberta. This is certainly the case for provincial government revenue where virtually all of this money is spent on government services to benefit Albertans (e.g., health, education, infrastructure). The same

can be said of charitable gambling revenue, as since the 1980s a wide range of local organizations that support sports, education, arts, ethno/cultural societies, etc. have come under the umbrella of 'charity group'. The citizens of Alberta are also recipients of a significant portion of the horse racing revenue disbursements and private operator disbursements, because a sizeable portion of horse racing and private operator profits are spent on local wages and local supplies. Only a very small percentage of gambling revenue actually leaves the province and does not benefit Albertans (i.e., federal government payments, and private casino operator profits that are spent in out-of-province ventures or to out-of-province shareholders).

The geographic origin of provincial gambling revenue relative to its geographic distribution is difficult to calculate, but appears to be reasonably equitable. The only geographic region that probably has a case that they receive an unequal 'return on their money' is the Fort McMurray Census Division. This region contributes more gambling revenue by virtue of its higher than average per capita expenditures on charity gambling, lotteries, and VLTs, and the fact that it has had a casino since 1994. In return, its Alberta Lottery Fund grant size is the lowest of all Census Divisions, and because it is a rural area it is unlikely to be receiving higher than average government services.

Impacts of Legal Gambling on the Provincial Government

Gambling revenue constitutes a very small portion of total provincial government revenue. Prior to 1994 it constituted approximately 1%. It has been approximately 5% for the past several years.

There is no doubt that Alberta, like other provinces, has come to expect this additional small revenue stream each year to help support its delivery of government services for Albertans, and would miss it if it were gone. However, the reality is that if gambling revenue ended it would only require the provincial government to effect a relatively small decrease in annual expenditures and/or a relatively small increase in other sources of revenue to compensate (i.e., an increase in personal taxes, corporate taxes, or royalty payments on petroleum products). (Although there is no doubt there would be reticence to do this because of the potential political repercussions).

The Alberta government's proportion of revenue derived from gambling has tended to be higher than other provinces. However, this is largely due to the higher expenditures of Alberta gamblers. This higher expenditure, in turn, appears to be due to the relatively high availability of casinos and EGMs in Alberta plus the higher than average after-tax income of Albertans.

A conflict of interest exists when the regulator (i.e., government) and the operator are part of the same organization and the regulator is the primary financial beneficiary of gambling (as is the case in Alberta). This conflict of interest potentially compromises the regulator's ability to implement truly effective problem gambling prevention policies and to effectively regulate the

operator, as these things have the potential to negatively impact revenue. The extent to which this conflict has occurred in Alberta is unclear. Certainly, the prevention measures that have been implemented have tended to be the less effective ones (similar to other provinces) (Williams, West, & Simpson, 2007, 2008). On the other hand, the sensitivity of provincial governments to this conflict of interest criticism has arguably spurred them to prioritize 'responsible gambling' in a much greater way compared to jurisdictions that do not have this conflict (e.g., U.S.). In general, evidence from other fields (i.e., alcohol provision) indicates that government provision of 'problematic products' tends to be associated with safer provision. This would also appear to be the pattern observed cross-jurisdictionally with the provision of gambling. As will be discussed in the Economic Impacts summary section (later in this report), in addition to somewhat greater social protection, there may also be economic advantages of this government model of delivery.

Impacts of Legal Gambling on Charitable/Community Organizations

The main impact of legal gambling on charitable/community organizations is that it facilitates the ongoing ability of these organizations to provide the local activities and services engaged in by these community groups. This, involvement, in turn, directly or indirectly benefits the citizens of Alberta.

In many jurisdictions the emergence of EGM and casino gambling run by governments or the private sector has negatively impacted charitable gambling revenue. This is not the case in Alberta due to the fact that a) the provincial government has dedicated a significant and relatively stable percentage of its own revenue to charity grants (an average of 21%), and b) charity groups have been given the ability to directly operate and/or benefit from casino gambling.

One of the potential concerns with charitable access to gambling revenue is that this might decrease Albertan's willingness to contribute to charities in other ways. However, there is no evidence of this, as the size of Albertan donations to charitable groups has represented a fairly stable percentage of their after-tax income since 1997.

Another issue concerns whether community/charity groups have developed an overreliance on gambling revenue. The evidence would tend to indicate that many charity/community groups have indeed come to rely on gambling revenue, with the degree of this reliance often being higher for groups associated with sports, recreation, health, and somewhat lower for religious groups. There are also considerably more community groups in Alberta now seeking gambling revenue to support their activities. In the early 1990s it was typical for 2,000 to 3,000 community groups to receive Alberta Lottery Fund grants, whereas it has averaged 6,000 Alberta Lottery Fund grant recipients per year in the past 10 years. Similarly, in 2000 there were under 4,000 charities registered to hold a casino event. This number has increased to over 7,000 in 2010.

Because revenue from charity casino events has been so lucrative, another consequence is that charity/community groups have had less need for ongoing fundraising efforts. While this may be a good thing for fundraising, it may not be a good thing in terms of maintaining a community presence. The popularity of charity casino event fundraising has now resulted in an average wait time of 30 months to hold an event.

Legalized gambling has also caused significant division and debate within the charitable community concerning the appropriateness of directly participating in and/or receiving funding from an activity that causes harm to some people. This is the main reason cited for not using this revenue source for charity/community groups who do not access charitable gambling. This continues to be a significant concern even among charity/community groups who do access this revenue source.

Impacts of Legal Gambling on Society

Government and Charitable Services

Albertans are the direct recipients and primary beneficiaries of the roughly \$2 billion dollars annually that the provincial government and charity/community organizations have collected in net gambling revenue in the past few years. These collective benefits are primarily manifest in terms of maintained and/or perhaps enhanced public services, and/or a decreased need to raise *involuntary* taxes. These represent some of the most important and unambiguously positive benefits of legalized gambling in Alberta.

Employment

Gambling employees only represent about 0.4% of the Alberta workforce, with an estimated 1/3 of these people working in the horse racing industry. This percentage has not changed appreciably in the past 20 years despite significant increases in gambling revenue, and appears to be due to the fact that the major generator of this increased revenue (EGMs) is not a labour-intensive form of gambling.

A significant percentage of people newly employed in the gambling industry were previously unemployed (ranging from 12% to 56% depending on the year), thus, representing 'new' jobs (~2,000) created by gambling rather than jobs that have been cannibalized from other industries. Newly hired gambling employees tend to come from relatively low skilled employment categories in a wide variety of different industries. There is also a high degree of turnover among these employees, with these individuals moving into a similar wide variety of relatively low skilled industry sectors.

The wages and working conditions of most Alberta gambling employees do not tend to be as favourable as employees in other sectors of the Alberta workforce. The lower wages are reflective of the fact that many gambling employees are not highly skilled and they have tended to be somewhat younger than the Canadian workforce.

Leisure Activity

More than 70% of the Alberta adult population has participated in gambling on an annual basis for the past 20 years. However, participation in certain forms of gambling is considerably higher than in other forms. While about 3/5 people purchase lottery tickets and 2/5 participate in raffles; only about 1/3 of people purchase instant win tickets; 1/5 engage in social gambling; 1/7 gamble at out-of-province casinos or play slot machines; 1/8 play VLTs; 1/11 bet on sports, purchase high risk stocks, or play casino table games; 1/20 play bingo; 1/25 bet on horse racing; and about 1/35 engage in Internet gambling.

There have been major declines in bingo and horse racing participation in the past 20 years and more minor declines in participation in lotteries, raffles, and VLTs. Participation rates have been fairly stable for instant win tickets and slot machines. Internet gambling, out-of-province casinos, and possibly casino table games are the only formats that have shown an increase.

The fact that most Albertans have participated in some form of gambling in the past year provides evidence that certain forms of gambling (primarily lotteries and raffles) are valued leisure activities. A minority of Albertans participate in multiple forms of gambling on a frequent basis. These are also the individuals most likely to report that gambling is actually an important recreational activity to them (something that only 4.6% of Albertans report).

Quality of Life

From a theoretical perspective it is unrealistic to anticipate gambling to have population wide impacts on quality of life, when regular gambling involvement occurs in just a small percentage of the population and remembering that about 25% of people do not gamble at all. The possible exceptions to this are reserve communities hosting an economically successful casino, where widespread economic and social benefits typically occur.

At an individual level, the evidence from population surveys indicates that nongamblers are somewhat more likely to be 'very happy' compared to gamblers and that over-involvement in gambling (i.e., problem gambling) is associated with less happiness and more stress. However, there are several other things that are more predictive of happiness compared to gambling. Also, when excluding nongamblers and problem gamblers from the analysis, there is no significant association between level of gambling involvement and level of happiness and essentially no meaningful association between level of stress and level of gambling involvement.

Socioeconomic Inequality

Alberta gambling revenue is regressive, with lower income groups spending proportionally more of their income on gambling relative to higher income groups. That being said, lower income groups spend proportionally more of their income on most consumer products. Furthermore, higher income groups contribute proportionally more to overall Alberta gambling revenue compared to lower income groups.

Attitudes

Legalized gambling has created more negative attitudes toward gambling. Most people (~70%) are satisfied with how the provincial government manages gambling and how the government's gambling revenues are used. Furthermore, only a minority of people (~30%) believe that gambling is morally wrong. However, most people believe that the harm of gambling outweighs the benefits (~70%); that gambling is too widely available (~53% compared to 2% who believe it is not available enough); that certain forms should be illegal (~60%; with EGMs, animal fighting, casino table games, and Internet gambling being the forms most commonly identified); and that their local casino has been more harmful (~43%) rather than beneficial (~33%). The somewhat less negative attitude toward one's local casino is likely reflective of the fact that a large number of local charity/community groups receive their funding from this casino(s). There is also significant regional variability in attitudes toward the local casino, with the ratio of harmful beliefs relative to beneficial beliefs being twice as high in some communities relative to others. The Medicine Hat region is unique in being the only region where more people believe the local casino is more beneficial than harmful.

A final analysis established there were no changes in attitudes toward the local casinos from 2008 to 2009 in areas that had recently received casinos (Camrose, Cold Lake, Whitecourt, Morley) compared to areas that had had casinos for many years (Lethbridge, Fort McMurray, Red Deer, Medicine Hat, Grande Prairie).

Problem Gambling

The widespread introduction of legalized gambling has probably had a modest impact on problem gambling, with these impacts primarily occurring in the years after initial legal introduction. It is important to recognize that significant rates of problem gambling likely existed in Alberta even prior to legal availability. However, it is also true that legalization of a product tends to increase the legitimacy and availability of the product. This, in turn, a) increases overall participation, resulting in additional cases of problem gambling, and b) tends to exacerbate the harms of problem gambling because of the greater availability of the product (particularly the availability of EGMs).

Despite dramatic increases in the availability of gambling from 1993 to 2009, there is no evidence that problem gambling rates have increased in this time period. If anything, past year problem gambling prevalence was higher in the early to mid 1990s compared to the present time (coincident with the rapid introduction of VLTs from 1992 to 1996, a doubling of the number of casinos/RECs from 7 to 14, and the period with the most dramatic rise in per capita gambling expenditure). Further evidence of this decrease is a) the decrease in the number of people receiving treatment through the main gambling treatment agency (AADAC) from 2003 to 2009 (problem gambling also decreasing as a percentage of AADAC clientele), b) decreasing call volumes to the problem gambling helpline since 2005, c) a decrease in unambiguous gambling-related suicides from 2000 to present, and d) declines in gambling-related crime incidents in Lethbridge and Medicine Hat in recent years.

Other analyses confirm that there is currently a fairly weak relationship between gambling availability and problem gambling in Alberta. First, only 1 out of 4 regions that received a new casino between October 2006 and June 2008 experienced a significant increase in their problem gambling prevalence rate between June-August 2008 and June-August 2009 (i.e., Morley region). Second, on an individual basis, the correlation between casino distance category and PPGM problem gambling status is statistically significant, but very weak ($\sim .04$). Third, multivariate analysis found that while gambling proximity was a statistically significant risk factor for problem gambling, it was much less important compared to other factors. The variables that better predicted that someone was a problem gambler in Alberta in 2008/2009 were: motivation for gambling (to escape or to win money); playing certain games (EGMs, table games, Internet gambling, and high risk stocks), male gender; having mental health problems; higher stress; less education; less income; Aboriginal race/ethnicity; and tobacco use.

This decrease and/or stabilization of problem gambling rates is consistent with the general stabilization (and/or decrease) of problem gambling prevalence rates that have occurred in many western jurisdictions since about 2001 or 2002 (AGRI, 2011). It is also consistent with the 'adaptation' hypothesis (LaPlante & Shaffer, 2007; Shaffer et al., 2004) that states that most harms associated with gambling occur after it is first introduced because the population has little experience/knowledge about the product, and its novelty encourages high rates of participation. However, with time, participation rates go down because the novelty has worn off, and the population's familiarity with the product (and potentially adverse experience) helps inoculate them from further harm.

Problem gambling is still the most significant negative consequence deriving from gambling. Thus, it is still important to understand the magnitude of this problem and its associated consequences. The current prevalence is in the range of 2 – 3%, which would project to between 57,000 and 87,000 problem gamblers in the Alberta population. To put these numbers in context, these rates tend to be higher than the rates found in many European jurisdictions (AGRI, 2011). Compared to alcohol and illicit drugs in Alberta, the rate of problem gambling is lower than the rate of alcohol-related problems ($\sim 8\%$), and about equivalent to the rate of problems associated with illicit drugs ($\sim 3\%$).

Despite the relatively low rates of problem gambling, it is important to remember that the percentage of people impacted by problem gambling is actually 3 or 4 times the general prevalence rate. It is also important to remember that problem gambling is not a stable entity, with research indicating that perhaps only 50% of problem gamblers continue to be problem gamblers in the subsequent year. Thus, a relatively stable prevalence rate of problem gambling over an extended number of years (as seen in Alberta) disguises the fact that a significant number of new problem gamblers have been created each year to replace an equivalent number of problem gamblers who have remitted (steadily increasing *lifetime* rates of problem gambling within Alberta).

There are several important impacts associated with problem gambling. The following provide very rough estimates of these *annual* impacts (mostly drawn from the population surveys), bearing in mind that the associated mental health and substance use comorbidities of problem gamblers contribute to their propensity for developing gambling-related problems:

- It is estimated that the total cost of providing problem gambling treatment in Alberta is currently in the range of \$10 to \$12 million dollars a year.
- ~4,900 Albertans (6.7% of problem gamblers; 0.3% of the Alberta workforce) miss work or school days because of gambling, with an average loss of 20 days per person per year.
- ~3,000 cases of domestic violence are related to gambling (occurring in 4.2% of problem gamblers).
- ~3,000 cases of separation or divorce are related to gambling (occurring in 4.2% of problem gamblers).
- ~2,000 cases of bankruptcy are related to gambling (occurring in 2.7% of problem gamblers), with an estimated 10% to 20% of all consumer insolvencies in Alberta being attributable to gambling.
- ~1,000 cases of attempted suicide appear to be related to gambling (occurring in 1.5% of problem gamblers), which accounts for ~10% of all suicide attempts in Alberta.
- ~900 cases of lost employment may be attributable to gambling (occurring in 1.2% of problem gamblers).
- ~900 arrests may be related to gambling-related crime (occurring in 1.2% of problem gamblers).
- ~700 cases of child welfare involvement are likely related to gambling (occurring in 1.0% of problem gamblers).
- ~360 convictions may be a result of gambling-related crime (0.5% of problem gamblers).
- ~180 incarcerations may be a result of gambling-related crime (0.2% of problem gamblers).
- The actual number of suicides attributable to gambling is particularly difficult to establish. The best estimate is that gambling may have been a factor in perhaps 46 to 55 suicides per year in Alberta, which would represent about 10% of all annual suicides in Alberta.

Crime

Legalized gambling has likely produced a very small increase in crime. Theoretically, it should produce an increase as a) Legalized gambling causes some increase in problem gambling, and

7% of problem gamblers (in Alberta in 2008/2009) report committing crimes because of gambling (primarily domestic violence, fraud, theft); b) Gambling venues offer increased opportunities for illegal activity to occur (e.g., passing counterfeit money, money laundering, cheating-at-play, loan sharking); c) Casinos serve alcohol and thus contribute to alcohol-related offences (e.g., driving while intoxicated); d) Casinos are believed to attract a clientele with somewhat greater criminal tendencies; e) Destination casinos attract more visitors to the area, and this added population is not typically taken into account when determining a jurisdiction's crime rate per capita.

However, offsetting this is the fact that a) Problem gamblers only represent 2 – 3% of the population (i.e., 7% of 2 – 3% represents only 0.2% of the population); b) Legalized gambling is only partly responsible for problem gambling; c) The mental health and substance use comorbidities of problem gamblers also contribute to their propensity for criminal activity; d) It is possible that alcohol-related offences would have still occurred in other alcohol-providing establishments; and e) Legalized gambling has unambiguously decreased the rates of illegal gambling in Alberta.

The limited empirical data available suggests that only a very small percentage of crime is gambling related.

Impacts of Legal Gambling on Private Industry

The private sector has benefited financially from their partnership with the provincial government and community groups in the provision of legal gambling. However, although central to the provision of gambling in Alberta, private sector gambling providers receive a comparatively small percentage of the net revenue (~16% - 17% in past 10 years with horse racing industry receiving an additional 2% in the past few years).

Alberta citizens are directly and indirectly the beneficiaries of much of the roughly \$450 - \$500 million that the private sector receives annually. This is because a sizeable portion of these profits are spent on wages to staff the casinos, VLT venues, lottery outlets, and the various employees involved in the horse racing industry. Another significant portion of these profits is spent on local supplies.

The private sector is also responsible for adding to the wealth of Alberta via the capital investment it has made in casino properties, estimated to be worth well over 1 billion dollars. These new casinos have had no obvious impact on property values, although a thorough investigation of this issue was not conducted.

In jurisdictions where private operators are the primary beneficiaries of gambling revenue it is important to establish exactly how much of this revenue is spent on wages and local supplies, and how much leaves the jurisdiction to shareholders and to purchase out-of-jurisdiction

supplies/equipment or to reinvest in out-of-province ventures. However, the amounts involved in Alberta are too small relative to overall gambling revenue to be consequential.

From a theoretical perspective it seems unlikely that there would be significant impacts on other private sector industries that do not directly provide gambling. This is because a) gambling constitutes less than 1% of GDP, b) only a very small percentage of people either report redirecting their activities/expenditures to gambling and/or have large enough gambling expenditures that would require a redirection of expenditures, and c) impacts to other industries most often occur with destination casinos that draw their patronage from outside the immediate area, require overnight stays involving food and accommodation, and are located in tourist areas that offer other entertainment and sightseeing opportunities (which is not the case with Alberta casinos).

Furthermore, from an empirical perspective, no significant differences were found. There are slightly greater increases in regional employment levels subsequent to casino introduction compared to control periods, as well as in total number of businesses. Commercial insolvency rates tended to decrease subsequent to casino introduction, but the decrease was actually larger in control periods. While some of these trends are suggestive, none of these differences were statistically significant, and even if these trends were 'real', it is quite possible that casino introduction is timed to coincide with periods of better economic growth (something the comparison periods are unable to control for).

There is a popular belief that new forms of gambling (EGMs, sports betting, casinos, etc.) are responsible for the decline of certain older forms of gambling (horse racing, bingo). However, in all likelihood there is only some truth to this belief (i.e., the forms that have declined would most likely have declined even without the introduction of the newer forms).

Qualitative Assessment of Impacts

Interviews were held with key representatives of the 20 different communities in Alberta that host casinos (mayors, police officials, city planners, municipal administrators, directors of addiction treatment centres, provincial members of the legislature, federal members of parliament).

The more general findings were that:

- Almost all the main potential benefits and costs associated with gambling were spontaneously identified, indicating a good awareness of the issues.
- Almost everyone had an opinion about the impacts of gambling, but there was very little evidence to support many of these opinions other than anecdotes.
- In general, although there was a wide diversity of opinion, the overall sentiments of these community representatives toward gambling tended to be more positive than general population attitudes (discussed in an earlier section).

The primary positive sentiments expressed by most, but not all individuals, were as follows:

- Gambling is seen by society as an acceptable form of entertainment.
- No significant public resistance to the introduction of casinos in their local community.
- Casinos are important economic generators that attract new businesses, although more so for casinos located on the outskirts of the community.
- Casinos do not appear to negatively impact other businesses (other than bingo).
- Casinos attract visitors to their communities.
- Casinos provide a good source of additional employment.
- Casino events are an important source of charity funding.
- Local police have positive views of casino security staff and there is good communication between the two. AGLC's funding of local police was a very positive initiative.
- AGLC's administration of gambling is satisfactory.
- There have been minimal physical infrastructure concerns with the exception of Edmonton and Calgary. Even in cases where infrastructure upgrades were required, this was seen as a beneficial thing for the community that had the potential of attracting other businesses.

The primary negative sentiments were as follows:

- Casinos cause an increase in the rate of 'petty' crime, mostly theft, break and enter, cheating-at-play, and occasionally fraud. However, this belief in an association between gambling and increased crime was not shared by Camrose or Medicine Hat officials.
- Increased gambling leads to increased problem gambling. Problem gambling in turn, increases family violence, divorce, child neglect, and bankruptcy.
- There is inadequate provincial funding of addiction treatment programs and these programs are being stretched. More generally, funding of municipal services has not kept pace with the increase in provincial gambling revenue.
- There is insufficient municipal involvement in the casino approval process. AGLC and the provincial government are sometimes not sensitive or open enough to municipal issues.
- There is a lack of transparency about how the province distributes gambling revenue.
- The economic promise of casinos in some cases has not lived up to expectations.
- There is some negative impact on city infrastructure in Edmonton and Calgary (traffic and public transportation issues being of particular concern) and there has been no additional provincial funding to deal with this.
- There is some leakage of revenue to First Nation casinos from major urban centres.
- What is being gambled locally may not be fully returned in local charitable allocations.
- Charities raising revenue through casino events is a mixed blessing as it results in less of a community presence due to less need for ongoing fundraising.
- Gambling is a form of regressive taxation (mentioned by a couple of people).
- The provincial government is 'addicted to gambling revenue'.
- VLTs are more problematic than casinos. (Note: This may be shaped by the fact that casinos support local charities. If we had surveyed lounges, then bar owners might have suggested the casinos were more problematic than VLTs).
- Casino employment is low skilled.

Some of these sentiments tend to support fairly well established facts (e.g., gambling's benefit to charity, issues with problem gambling, potential for economic leakage, regressivity of gambling, low-skilled nature of casino employment). However other opinions are reflective of more 'popular' or 'stereotypic' notions of gambling that tend to lack an evidentiary base (e.g., VLTs much worse than slot machines, government 'addicted to gambling', gambling as an economic catalyst, strong association of gambling with crime). Yet other opinions were simply incorrect (e.g., lack of transparency concerning how government gambling revenue is distributed).

Even though these sentiments do not perfectly align with the evidence, they are very valuable for 3 reasons. First, they illustrate the main beliefs of the primary community representatives. Second, they provide clearer support of some impacts that were not clearly established in the aggregate statistical data (e.g., more visitors are stopping in Whitecourt, Camrose, Red Deer; the casino is the cornerstone of economic expansion in Camrose). Third, they identify issues that would not have been otherwise identified (e.g., casino fundraising negatively impacting the community presence of charities; good relations and communication between police and casino security; the minimal impact on infrastructure in most cases).

Impacts of Legal Gambling on First Nations

First Nations casinos have generated significant revenue for First Nations communities beginning in 2006. Aggregate revenue from 'charity hosting' and First Nation Development Fund grants has been over \$20 million in 2006/2007, \$85 million in 2007/2008, \$153 million in 2008/2009, and \$158 million in 2009/2010. These are necessarily low estimates - the exact figures are unknown due to the unidentified amounts retained in the casino ownership partnerships First Nations have with private companies. The largest single source of gambling revenue derives from the First Nation Development Fund.

The vast majority of this revenue comes from non-Aboriginal people, primarily residents of Calgary and Edmonton. This represents a reversal of a historic trend whereby a disproportionate amount of money from Aboriginal communities was being spent in the neighbouring non-Aboriginal municipalities.

Gambling revenue represents a significant influx of new money for Alberta First Nations. However, it is not equally distributed. The 5 First Nations that host a casino have received the large majority of this revenue. Within these 5 communities the Enoch Cree and Tsuu T'ina First Nations have benefited considerably more than the Alexis Nakota Sioux Nation, Cold Lake First Nations, and the Stoney Nakota First Nations due to the fact that their casinos are proximate to Edmonton and Calgary respectively. Non-host First Nations have received relatively little benefits, with gambling revenue from the FNDF only adding 2.3% above average First Nation band budgets. Urban Aboriginals have a limited share in these benefits.

The main impact of legal gambling on First Nation's charities is that it facilitates the ongoing ability of these charities to provide the local services that the five host First Nations are engaged in. This, in turn, directly or indirectly benefits First Nations' members. The 5 First Nations charities have amassed \$103.5 million in revenues that have been directed to proscribed community development initiatives. A significant percentage of the First Nation casino charities employ First Nations people. Out of the approximately 170 employees, 90% (155) are believed to be First Nations with a total payroll roughly \$3.4 million.

These collective benefits are primarily manifest in terms of enhanced First Nations infrastructure and community programming, and represent the most important and positive benefits of legalized gambling in Alberta.

Approximately 350 First Nations individuals are employed at First Nations casinos and casino charities out of a total of 1,200 employees at an annual estimated payroll of \$34.5 million, from which First Nations employees make ~\$10.9 million. These 361 jobs represent jobs that did not exist prior to the casino openings, although it can be expected that a significant percentage of these individuals were employed or underemployed prior to their casino employment.

First Nations present lower socio-economic indicators compared to mainstream communities. This in part led to the decision to alter the provincial gaming model to enable placing casinos in select reserve communities for the benefit of Alberta's First Nations. The model is imperfect and could potentially exacerbate existing regional inequalities. An identified regional variance exists resulting in First Nations north of Edmonton making per community substantially less in FNDF disbursements than the southern First Nations. An urban-rural variance is further evident in that two of the casinos located nearby urban centres are doing quite well compared with three located away from large urban centres which continue to struggle. Smaller communities are spending FNDF dollars that southern First Nations may spend on economic development and business start ups to first improve local conditions. Finally, a host-non-host variance exists whereby hosts are allocated 81.8% of all gambling revenues assigned for First Nations' use (45% of the 55% available).

First Nation problem gambling prevalence rates are significantly and consistently higher than the general population prevalence rates. There is some evidence of increased rates of problem gambling from 1993 to 2000 coincident with the significantly increased gambling availability that occurred in this time period. However, there is some evidence of decreased rates of problem gambling since 2000, coincident with the same trend that may be occurring in the general population (despite further significant increases in gambling availability and general population per capita expenditures during this time period).

With the exception of Enoch, which experienced a quick but brief rise in casino-related crime, all First Nations reported that crime is not an issue. Fears persist that gambling-related crime will eventually infiltrate First Nations, although evidence does not suggest this is occurring. All

communities highlight the casinos as catalyzing dormant or weak First Nation-RCMP relationships.

There have been 31 new businesses opened on 12 First Nations directly attributable to FNDF funding. Despite the small number of business start-ups, there is significant economic development planning currently underway. The Siksika and Bigstone Cree First Nations have plans to construct industrial parks to attract new businesses from FNDF. Others are using FNDF revenues to improve accounting systems, purchase buildings and real estate, build new and rehabilitate old business structures. Several have utilized the FNDF to conduct needs assessments and for corporate restructuring.

Aboriginal people in Alberta have mixed attitudes toward gambling that tend to parallel the attitudes in the general Alberta populace. The large majority of Aboriginal people (62%) consider the harms of gambling to outweigh the benefits, compared to only 9% who believe that the benefits outweigh the harm. On the other hand, only a slight majority (40%) consider that their local casino was more harmful than beneficial (34%). Most Aboriginal people also believe that gambling is too widely available and that EGMs would be the form of gambling they would most like to see illegal.

Qualitative Assessment of First Nation Impacts

Interviews were held with representatives of the 4 First Nations communities in Alberta that host casinos. Two focus groups were held in two northern host communities.

The more general findings were that:

- Almost all the main potential benefits and costs associated with gambling were spontaneously identified, indicating a good awareness of the issues.
- Almost everyone had an opinion about the impacts of gambling, but there was very little in the way of quantifiable evidence to support many of these opinions.
- In general, although there was a wide diversity of opinion, the overall sentiments of these community representatives tended to be more positive than mainstream population attitudes toward gambling (discussed in an earlier section).

The primary positive sentiments expressed by most, but not all individuals, were as follows:

- Gambling revenues are considered an important source of project funding needed to improve community infrastructure.
- Gambling revenues can improve housing conditions.
- Casino employment is considered vital in improving social conditions.
- Casino employment is also needed to provide the skills that can translate to securing post-casino employment.
- There was a demonstrated sense of pride of casino ownership.

The primary negative sentiments were as follows:

- There were concerns about how parents' excessive time patronizing a casino may be negatively impacting the children.
- There are fears that close proximity of gambling to the community could entice young people to become gamblers.
- The casinos provide easy access to alcohol.
- Employment opportunities have been lower than expected. Tsuu T'ina and the Enoch operations are exceptions. Consequently, many non-Native employees are benefitting from an industry that was supposed to rectify low *First Nations* employment rates.
- Casino employment is low skilled.

ASSESSMENT OF THE OVERALL IMPACTS

OVERALL ECONOMIC IMPACTS

When assessing the economic/monetary impacts of gambling it is typical to identify money that has been gained as a result of gambling and contrast it to money that has been spent to deal with the negative consequences of gambling.

The primary monetary gains are as follows:

- Net gambling revenue of over \$2.5 billion in the past couple of years, up from \$300 million in the late 1970s (in current dollars). Because the provincial government has been the primary recipient, another gain has been less need to decrease provincial expenditures and/or raise taxes to continue providing government services.
- Decreased costs of policing and prosecuting illegal gambling.
- Infrastructure investment in building of new casinos (worth over \$1 billion).

The primary monetary costs are:

- Problem gambling and its associated impacts (bearing in mind that legalized gambling is only partly responsible for problem gambling):
 - An estimated \$10 to \$12 million dollars a year currently used to help prevent and treat problem gambling in Alberta.
 - ~4,900 Albertans annually who indicate that gambling has resulted in a loss of work or school days (average loss of 20 days per person).
 - ~900 Albertans annually who report being arrested for committing a gambling-related crime.
 - ~700 Albertans annually who report that gambling has resulted in them receiving unemployment benefits or welfare payments.
 - ~700 Albertans annually who indicate that gambling has resulted in the involvement of child welfare services.
 - ~180 Albertans annually who indicate they have been incarcerated for a gambling-related crime.
- Increased government costs in managing legalized gambling (i.e., the costs of running the Alberta Gaming and Liquor Commission's gambling operation sector. The costs for AGLC's gaming *and* liquor operations was \$190 million in 2008 and \$221 million in 2009).
- Slightly increased policing and prosecution costs due to slight increases in gambling-related crime.
- Some infrastructure costs in certain communities due to the introduction of new casinos.

Most of these monetary costs are difficult to quantify. However, in any case, comparing increased revenue relative to increased costs is not the best way of determining the overall economic value of gambling.

Rather, the impacts that are observed need to be evaluated against basic economic principles of economic utility/gain. True economic costs or benefits only occur when one of the following 5 elements is present:

1. The economic activity causes either an influx of money/assets from outside the jurisdiction or a loss of money/assets to an outside jurisdiction.

At a provincial level, there is no significant influx of money, as almost all gambling revenue in Alberta is derived from Albertans. There may have been some loss of money, however, as increased patronage to out-of-province casinos occurred subsequent to widespread introduction of domestic gambling (10% to 14% - 15%). This increase is partly due to increasing people's participation in gambling as a form of entertainment, which leads them to seek it out in additional ways. However, it is also clear that the magnitude of this loss is not that large in provincial economic terms (~ 0.2% of GDP).

At a community level, there is a significant influx of money for all 5 Nation communities that host casinos, as the patrons are largely from outside the community. Obviously, because gambling revenue comes from Albertans, the influx of money to First Nations casinos comes at the expense of an outflow of money from non-First Nation centres (primarily Calgary and Edmonton).

Increased capital investment has occurred in Alberta in the form of new casinos partly paid for by non-Albertan investors. However, the value of these new assets (~\$1 billion) is relatively small compared to the value of existing provincial assets. This small increase in capital investment is also offset by a small amount of money that leaves the province in the form of a) private operator purchase of out-of-province supplies/equipment, investment in out-of-province ventures, and distribution of profits to shareholders; b) provincial government purchase of out-of-province EGMs (an estimated \$120 million for VLTs and \$190 million for slot machines that are replaced every few years)⁹⁸; and c) a ~1% annual transfer of gambling revenue to the federal government.

At a community level, the money used to build the First Nation casinos is money that partly comes from the First Nations community itself. Thus, the casino does not represent an unambiguous net gain in community wealth/assets. However, considering the lack of community infrastructure that existed prior to these casinos, it is plausible that this investment may increase the potential for further business development/relocation and thereby may have increased the future value of land/assets.

⁹⁸ These are just speculative estimates based on the fact that Alberta has 6,000 VLTs that have an average market price of between \$20,000 - \$25,000 and 12,680 slot machines with an average market price of \$15,000. However, some of Alberta's slot machines are leased rather than purchased.

2. *The economic activity increases or decreases the value of existing assets.*

This generally does not apply to gambling, or to entertainment industries more generally, as gambling primarily involves a transfer of wealth rather than a creation of wealth. However, it can occur when the introduction of a new gambling venue either increases or decreases the market value of neighbouring property. However, there is no clear evidence of this in Alberta.

3. *The economic activity produces increased or decreased utilization of existing money.*

Money that sits dormant has very little economic utility. In general, money has increased economic value as a function of the number of people that use the money and the speed of the cash flow from one person/sector to the next.

Increased monetary flow is theoretically possible with Alberta gambling, as a) gambling has served to add a new and interesting service/good to the economy which stimulates monetary flow, and b) gambling revenue that is received by the provincial government and charity groups tends to be 'spent' within a short period of time on government and charity services.

There are only indirect ways of assessing whether increased monetary flow has occurred. One source of evidence would be if there are increased revenues and employment in the gambling industry (and potentially supporting/complementary industries) without there being offsetting declines in the revenues and employment in other industries. Increased utilization of existing money is more likely to occur if gambling patronage comes from individuals who are not financing their gambling by reducing their spending on other activities (i.e., the income class of the patronage potentially speaks to this).

In general, the increased gambling revenue that has occurred is not associated with any obvious declines in other industries (other than minor impacts on horse racing and bingo), nor any significant stimulation/benefit to other industries. On the other hand, most of the people contributing to Alberta gambling revenue are not people expected to have significant amounts of discretionary/unallocated income that would ensure they are not simply redirecting their expenditures away from other goods and services. Nonetheless, the weight of the evidence would tend to support a net increase in monetary circulation, and thereby an economic benefit to Alberta. However, it is a relatively small benefit to the Alberta economy. Even if none of this \$2.5 billion dollars was at the expense of other industries, it only represents 1% or less of Alberta GDP.

4. *The new economic activity strengthens or weakens sectors of the economy capable of influencing #1, #2, or #3.*

One of the potential concerns with gambling in Alberta (or government-controlled gambling more generally) is that it may redirect money from wealth-producing sectors (i.e., private business) to sectors not known for wealth creation (i.e., government, charity) (e.g., Gwartney et al., 1998). This may be a bit unfair, as a small portion of provincial government revenue is

allocated either directly or indirectly to economic stimulation (tourism, industry development, advanced education and technology) and another portion goes to paying the private sector to deliver service.

However, as already indicated, at a provincial regional level, there is no evidence that gambling has caused a significant redirection of business away from the private sector. Even if it had, and even if government and charity sectors are less efficient generators of wealth, the amount of gambling revenue involved (i.e., < 1% of GDP) is too small to have much of an effect on overall Alberta economic development. However, at a First Nations community level, there is unambiguous evidence that gambling revenue received by First Nations bands has been used to fund successful private ventures.

A final important consideration is the fact that provincial government provision and capture of almost all gambling revenue ensures that this revenue stays in Alberta and is used for the benefit of Albertans. This would not likely occur to the same extent with private sector delivery and capture as some of these profits would be used to fund ventures and shareholders in other jurisdictions.

5. *When the failure to implement the economic activity would have resulted in a change to #1, #2, or #3.*

Even if there is not a clear economic gain, an economic benefit still exists if the gambling activity prevented assets or money from leaving the jurisdiction, prevented a decrease in the value of existing assets, or prevented decreased utilization of existing money.

An important justification for introducing local forms of gambling in Alberta (and almost all other provinces and states) was to stem monetary flow to neighbouring jurisdictions. However, as indicated under point #1, it seems more likely that monetary outflow would have been lower if domestic forms had not been introduced. However, even if domestic gambling inadvertently increased monetary outflow, the economic value of this loss is not that significant.

OVERALL SOCIAL IMPACTS

Legalized gambling in Alberta has some important positive social impacts offset by some important negative social impacts.

One of the major social benefits concerns the fact that Albertans are the direct recipients and primary beneficiaries of maintained and/or enhanced government and charity/community services that are funded by the roughly \$2 billion dollars annually that the provincial government and charity/community organizations have collected in net gambling revenue in the past few years. This money represents about 5% of provincial government revenue and a significant source of funding for community groups.

Gambling also provides enhanced leisure options, with more than 70% of the Alberta adult population participating in this form of entertainment. For a small minority of people (4.6%) gambling has become a favourite form of entertainment.

Legal gambling has also significantly decreased illegal gambling. Widespread disregard for the rule of law is never a good thing for society, and illegal gambling was quite prevalent prior to legalization.

Although the gambling industry does not represent a large number of jobs in the Alberta workforce (~0.4%), it would seem that at least a few thousand new positions have been created without any obvious negative impact or cannibalization from other industries (other than perhaps bingo and horse racing to a limited extent).

The major negative social impact of legalized gambling is problem gambling, which currently occurs in 2% to 3% of the population, and which directly or indirectly impacts 8% to 10% of the population. The lifetime rates of problem gambling are also considerably higher than the past year rates.

Problem gamblers typically have high rates of mental health problems, financial problems, and relationship problems deriving from their addiction. A smaller minority will have more serious problems/consequences associated with their gambling. In any given year a small percentage of problem gamblers report serious negative consequences deriving from their gambling: committing an illegal act (7%); being the perpetrator or recipient of domestic violence (4%); separating or divorcing (4%); filing for bankruptcy (3%; representing ~10% to 20% of all consumer insolvencies); losing their jobs (1%); child welfare involvement (1%); incarceration (0.2%); attempted suicide (1.5%). It is estimated that roughly 46 to 55 problem gamblers a year actually commit suicide (~10% of all Alberta suicides).

However, the legal availability of gambling is only partly responsible for the increased rates of problem gambling. Problem gambling existed in Alberta long before legalized gambling. That being said, legalization of any product (including gambling) tends to lead to increased

availability and increased utilization, which leads to increased rates of problems in a minority. Most of these problems occur when the product is first introduced, and indeed, past year problem gambling rates appear to be highest in the 1990s coincident with the major period of gambling expansion. The current relationship between legal availability of gambling and increased prevalence of problem gambling is fairly weak (i.e., rates have stabilized and/or decreased despite increased availability). However, the pervasive availability of gambling is a contributing factor to the existing rates and to exacerbation of harms within problem gamblers.

Also, problem gambling is only partly responsible for some of the more serious sequelae (i.e., suicide, divorce, incarceration, domestic violence). Problem gamblers have high rates of mental health and substance abuse comorbidities which are important contributing factors to these events.

In addition to criminogenic problem gambling, there is a small amount of additional crime created by the fact that gambling venues provide additional opportunities for crime.

Gambling is also somewhat regressive, with lower income people contributing a greater portion of their incomes, on average, compared to higher income people. However, there is some tendency for higher income groups to spend more per person on average compared to low income groups. Consequently, higher income groups contribute proportionally more to overall Alberta gambling revenue compared to lower income groups.

A much more serious concern is that 75% of reported gambling expenditure comes from roughly 6% of the population. The most distinguishing feature of these individuals is the fact that 40.6% of them are problem gamblers. Overall, problem gamblers in 2008/2009 in Alberta appear to account for roughly 50% of all reported expenditure, a percentage that is even higher than previous Canadian estimates of between 23% – 36% (Williams & Wood, 2004; 2007). It is ethically problematic for governments and charity organizations to be drawing such a significant percentage of their revenue from a vulnerable segment of the population.

OVERALL IMPACTS

At a provincial level, there would appear to be **minor economic benefits to gambling in Alberta that are offset by minor economic costs**. The main economic benefits concern the fact that gambling appears to create additional economic activity without any obvious negative impacts on other business, and gambling is associated with a very small increase in the value of infrastructure. At a community level, however, there are significant and unambiguous economic benefits to *First Nation* communities that host casinos because of their ability to retain a large part of the revenue. Although this increased revenue is mostly derived from non-First Nations communities (primarily Edmonton and Calgary), it represents a relatively small cost to these large urban economies. The economic costs of gambling in Alberta concern the fact that the creation of domestic gambling opportunities has more likely increased monetary outflow to out-of-province jurisdictions rather than retained it. However, the amount of outflow is small relative to overall Alberta GDP. It is also worth noting that the model used in Alberta whereby the provincial government and community groups are the primary beneficiaries of gambling revenue is a system that best ensures that gambling revenue stays in the province and the economic benefits accrue to Albertans.

From a social/nonmonetary perspective, it can be said there are **important social benefits of gambling that are offset by some serious negative consequences**. The main social benefit of legal gambling is the enhanced community services that Albertans receive from charity/community groups and maintained and/or enhanced public services from the provincial government. Other important social benefits are the fact that it has significantly decreased illegal gambling, and it has provided an additional leisure option that is fairly well patronized. Minor employment benefits likely also exist. Gambling's negative social impacts concern the fact that it is slightly regressive, and it creates a small amount of additional crime. However, the main negative impact is problem gambling, which directly or indirectly affects 8% to 10% of the population and which involves particularly serious consequences for a small minority of these people (bankruptcy, divorce, unemployment, crime, suicide). For some of these things (bankruptcy, suicide) gambling appears to be an important contributor to their overall prevalence within Alberta. However, the *legal* availability of gambling is only partly responsible for the prevalence of problem gambling, and problem gambling is only partly responsible for the prevalence of these serious consequences. A more directly attributable and ethically problematic aspect of legal gambling is the fact that the large majority of government and charity gambling revenue is derived from a very small percentage of the population that includes a disproportionate percentage of problem gamblers.

RECOMMENDATIONS

There are some policy recommendations that directly derive from this research initiative and the accompanying findings:

1. The legal framework for conducting gambling in Alberta is very complicated, archaic, and ambiguous. A fundamental revamp/update of the Canadian Criminal Code provisions concerning gambling is needed.
2. Provincial government control and delivery of gambling in Alberta has advantages from both an economic and social perspective, and is probably best continued. This is because a) it ensures that most gambling revenue stays in Alberta and is used for the benefit of Albertans (something that would likely happen to a lesser extent with private ownership/delivery), and b) government provision of 'problematic products' tends to be associated with less harm than private delivery despite the inherent conflict of interest in being both a regulator and provider.
3. That being said, it is ethically problematic for charity groups and the provincial government to be directly involved in the delivery of a product where a substantial portion of the revenue derives from problem gamblers. There is an immediate need to reduce the financial draw from this vulnerable segment of the population (see #6).
4. Neither significant expansion or significant retraction of gambling is advisable. This is not an endorsement of the expansion of government provided/sanctioned gambling that has occurred in Alberta up to the present time, as it is not clear that this introduction/expansion was advantageous economically or socially. Rather, what this statement is meant to convey is that there are significant obstacles to either expansion or retraction.

The main problem with retraction is that it would likely create an 'underground' gambling industry much bigger than existed prior to legal availability (with an accompanying loss of the current benefits that Albertans receive from legal gambling). With regard to expansion, the Alberta public currently appears to have some degree of inoculation from the harms of gambling, and thus the expansion of existing forms of gambling could likely occur without significant exacerbation of existing problems. The main reasons against further expansion have more to do with the fact that a) the Alberta public is not supportive of further expansion and is developing increasingly negative attitudes toward gambling, and b) there appear to be very few economically viable locations left for casinos.

Surprisingly, one of the few potential locations that is left has always been the *best* location to place a casino in Alberta from the perspective of bringing in outside wealth: the community of Banff (and perhaps Jasper). Alberta receives 4 million tourists each year, with a significant portion going to these communities, yet neither one has a casino. (Note,

however, that the potential for bringing in outside wealth that these communities have does not guarantee economic viability of the casino, as evidenced by the weak performance of casinos in many tourist areas in other jurisdictions).

Internet gambling should not be introduced as a) it is inherently a more harmful form of gambling that the general public does not have inoculation to, and b) it would be economically disadvantageous. Currently, only about 3% of Albertans currently gamble on the Internet and the amount of revenue currently being lost to outside jurisdictions is likely less than 0.15% of Alberta GDP. Legalization of Internet gambling would (paradoxically) produce even *greater* monetary outflow. This is due to the fact that legalization would increase the number of Albertans gambling on the Internet (as legalization of a product reliably increases utilization), and because the experience of other Western jurisdictions shows that the ability of domestic Internet gambling sites to capture Internet gambling by its citizens is quite limited unless domestic Internet Service Providers (ISP) are legally required to block access to out-of-jurisdiction Internet gambling sites (something most North American jurisdictions will be unwilling to legislate).

5. Direct First Nations involvement in the provision of casino gambling has generally been beneficial for the First Nations in Alberta. However, the lessons learned about locating casinos close to major urban centres for best economic success needs to be applied to the business plans of any future First Nations casino application. The lessons learned about the potential negative social impacts of placing a casino in close physical proximity to a First Nations population (i.e., Stoney Nakoda casino) also needs to be taken into consideration.

Unfortunately, when these factors are taken into account it is unclear whether there are other 'good locations' for future First Nations casinos. In light of this, it may be advisable to re-examine the First Nations revenue distribution model. Although First Nations have received significant benefits from gambling, these benefits have not been evenly distributed. While a handful of communities have benefited significantly, most communities have received very limited benefits. There would seem to be very little prospect for this pattern to change without additional First Nations casinos.

The most uncontroversial adjustment would be to redirect the 30% of First Nations slot machine revenue that currently goes to the Alberta Lottery Fund back into the First Nations Development Fund *for the use of First Nations communities that do not currently host casinos*. It is unclear why this money is deposited into the ALF in the first place when the stated purpose of First Nations casinos is to "increase opportunities for [First Nations] participation in Alberta's economy" and provide "the means to support [First Nations] economic, social and community development projects as well as use charitable gambling proceeds for initiatives such as infrastructure and life skills training". In the last 4 years alone, First Nations casinos have channelled 89.3 times more money to the ALF than First Nations and Métis organizations drew from it in the past decade. For people uncomfortable with First Nations casino revenue going exclusively to First Nations people, it needs to be remembered that First Nations people have disproportionately contributed to Alberta

gambling revenue for the past 40 years (and Alberta revenue more generally) and have not received this back in terms of provincial services, as service provision for First Nations is a federal responsibility. Most other provinces with First Nations casinos allow the profits to go exclusively to First Nations.

6. Gambling is causing significant social harm in Alberta and its negative impacts need to be reduced. Considerable evidence exists on the various strategies that can help accomplish this (Williams et al., 2007; 2008). Rather than listing all of these strategies, we will simply identify the ones that are most important in the Alberta context:
 - There needs to be a movement away from the almost exclusive focus on educating the gambling consumer (which has limited effectiveness) and more emphasis given to changing the specific ways in which gambling is provided (which has more effectiveness) (Williams et al., 2007; 2008).
 - Reducing the negative impacts of EGMs should be a primary target, as this is the form of gambling most often identified by Albertans, and Western society more generally, as the most harmful. EGMs are also one of the main reasons why such a disproportionate amount of Alberta gambling revenue comes from such a small segment of the Alberta population and from problem gamblers. Reducing the availability of EGMs in terms of the numbers of machines, number of locations, and/or hours of availability is one approach. Another useful approach is imposing constraints on how much people spend. This could involve lowering maximum bet size and/or maximum win size. Automatic teller machines should not be as conveniently close to gambling areas as they currently are. Another promising strategy is requiring pre-commitment of gambling expenditure or time. Critical to the success of pre-commitment is that a) an option exists for imposed limits to be irrevocable and long-term, and b) biometric identification or some other system is used that effectively deters identity swapping (Williams, 2010).⁹⁹
 - Automated early intervention for at-risk gamblers. Early intervention is always more efficacious than treatment of existing problems.
 - Implementation of effective prevention curriculums in the high school system (Williams, Wood, & Currie, 2010). Our children have extensive education about the perils of drugs, alcohol, unsafe sex, and mental health issues, but currently receive almost no education about gambling (something not unique to Alberta).

⁹⁹ Short term and/or revocable spending limits may be useful for nonproblem gamblers but are not useful for problem gamblers (who routinely make commitments that they cannot keep). Identity swapping among problem gamblers also occurs with most card-based pre-commitment systems.

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APPENDICES

Appendix A: 2008 and 2009 Alberta Population Surveys

2008 Survey

[Consumer Contact](#), with corporate offices in Toronto, Ontario, conducted both the 2008 and 2009 surveys. The 2008 survey was conducted between June 11 and August 31, 2008.

The following procedures were used to ensure optimal random sampling and valid self-report for the telephone surveys (see Williams & Volberg, 2010):

- In June of each year, the Principal Investigator on this project, Dr. Robert Williams, conducted a 2 hour training session with the survey management team and all of their interviewers.
- The household interviewee was randomly selected by requesting the interview be conducted with the adult (18+) having the next birthday.
- Maximal effort was made to complete an interview with the randomly designated person.
 - There were 16 attempts to contact the person, with a maximum of 2 call attempts per evening. The average number of contact attempts for completed interviews was 7.25.
 - The majority of the phoning occurred in the evening and on weekends.
- The interviewer's work received periodic visual and audio monitoring for quality control by a supervisor.
- The interview was kept short to maximize response rates. The average interview length for completed interviews was 14.23 minutes.

Sample

There were 3 samples collected in 2008:

- General Population Telephone Sample ($N = 3,001$).
 - This sample was recruited by means of random digit dialling of Alberta telephone numbers. The telephone number databank from which numbers were randomly drawn included unlisted numbers, but excluded cell phones to reduce multiple sampling of the same household.
 - A minimum sample size of 3,000 was sought and a minimum quota of 40% male respondents was required.
- Targeted Telephone Sample ($N = 4,512$).
 - A minimum total sample size of 4,500 was sought with a minimum of 500 people sampled from each of the 9 following geographic areas: 4 areas that did not have casinos prior to their introduction in late 2007/early 2008 (Cold Lake area; Whitecourt area; Camrose area; Morley area), and 5 areas that have had casinos for many years (Fort McMurray area; Grande Prairie area; Red Deer area; Medicine Hat area; Lethbridge area).

- The geographic range for each area was 75 km (50 km for Morley and Camrose) and was not restricted to Alberta (mostly relevant for the Cold Lake and Medicine Hat areas).
- This sample was recruited by random sampling of *listed* telephone numbers from communities within the geographic range.
- A minimum quota of 40% male respondents was required.
- Online Sample ($N = 2,019$)
 - The purpose of collecting an online sample was to investigate whether prevalence rates obtained with this method would approximate the rates obtained with telephone surveys (in light of the steadily declining response rates of telephone surveys).
 - A minimum total sample size of 2,000 was sought.
 - These individuals were recruited via email solicitation by the online research division of Consumer Contact (ResearchByNet) to the Alberta online panelists who were members of their Canadian online panel ([NetPanel](#)). Because of insufficient numbers, the NetPanel was supplemented with Alberta online panellists from other survey companies (21% supplementation).

Response Rate

An overall response rate of 25.5% to the General Population telephone survey and 23.3% to the Targeted telephone survey was achieved using response rate calculations of the Council of American Survey Research Organizations (CASRO, 1982). Essentially, this is the number of completed interviews divided by the estimated number of eligible respondents.

	General Population	Targeted
INELIGIBLE NUMBERS	<i>n</i> = 19483	<i>n</i> = 13351
Not in Service	11689	7339
Fax/Modem/Cell	2881	1414
Business Number	1691	561
Dialler Returns	18	9
Bad Line/Inaudible/Disconnected	113	270
Language Difficulties	300	199
Illness, Incapable	13	31
No one in Household 18+	95	86
Selected/Eligible Respondent not Available	2683	3442
ELIGIBILITY NOT DETERMINED	<i>n</i> = 12846	<i>n</i> = 16354
Busy	251	187
Answering Machine	3079	4888
No Answer	6487	6874
Household Refusal	3029	4405
ELIGIBLE	<i>n</i> = 8012	<i>n</i> = 11689
Respondent Refusal	5010	7177
Completed Interviews	3002	4512
Eligibility rate: Eligibles ÷ (Eligibles + Ineligibles)	29.1%	46.7%
Estimated # of Eligibles: Eligibles + (Eligibility not Determined x Eligibility Rate)	11750	19326
Response rate: Completions ÷ Estimated # of Eligibles	25.5%	23.3%

Weighting

To ensure that the sample was a representative sample of Albertan adults, the data was weighted by: a) *household size* to correct for the undersampling of individuals from large households and the oversampling of people from small households; and b) *age by gender* to ensure that the sample approximated the prevalence of each age by gender grouping in the 2006 Canadian census (essentially correcting for the undersampling of males and younger people that typically occurs in telephone surveys).

Questionnaire

The Questionnaire in both years (presented below) had 3 sections:

1. *Gambling*. With subsections of: Gambling Attitudes; Past Year Gambling Behaviour (using questions with optimal wording to collect this information, Wood & Williams, 2007); Gambling Motivation; Gambling Recreation/Entertainment; and Problem Gambling. The Problem Gambling subsection included 2 scales, the Canadian Problem Gambling Index (CPGI) (Ferris & Wynne, 2001), and the Problem and Pathological Gambling Measure (PPGM) (Williams & Volberg, 2010).

2. *Comorbidities*. Nine questions that inquired about substance use, other addictive behaviour, stress, mental health, and physical health.
3. *Demographics*. Marital status, educational attainment, employment status, personal income, debt, immigrant status, ethnic/cultural origins, and community of residence.

SEIGA 2008 POPULATION SURVEY: CATI & ONLINE PANEL

GROUP

G1. Group

- General Population (1)
- Targeted (2)
- (Online (3)

RECRUITMENT (CATI)

R1. Hello. I'm _____ calling from Consumer Contact on behalf of the Universities of Lethbridge and Alberta. We have a short study about gambling in Alberta. We are interested in the opinions of both nongamblers and gamblers. I would like to speak with the adult 18 or older whose birthday comes next. Is that person available?

- No (0) (arrange for callback)
- Yes (1)

I'll start by giving you a little bit of information about this study. (Note: provided only if requested)

- It takes about 10-15 minutes to complete for most people.
- The purpose of this research is to help researchers understand the social and economic impact of gambling in this province.
- You do not have to answer questions you do not want to, and you can stop participation at any time.
- All information you provide is strictly confidential.
- We do not need to know your name, and your telephone number will be removed from the data set once all data collection is completed. Also, only group results will be reported when the study is published.
- This study has no known risks. However, some of the questions do ask about sensitive issues. Note: telephone numbers for appropriate local treatment resources will be provided to anyone in obvious distress at any point during the interview.
- The data will be stored on a computer in a secure location at the University of Lethbridge. The only people having access to this data are members of the Research Team, headed by Dr. Robert Williams of the University of Lethbridge.
- If you have any questions regarding this study, you can contact Dr. Robert Williams at 403-382-7128.
- This study has received ethics clearance through the University of Lethbridge Office of Research Ethics. Questions about your rights as a participant in this research may be addressed to the Office of Research Services, University of Lethbridge (403-329-2747).
- If you are interested in seeing the Final Report for this study, it will be available from the Alberta Gaming Research Institute website in July 2010.

RECRUITMENT (ONLINE)

Subject Line: New Survey From ResearchByNet

Intro of e-mail:

We currently have a short survey about gambling in Alberta being conducted by the University of Lethbridge. We

are interested in the opinions of both gamblers and nongamblers. This survey will take 10 TO 15 MINUTES to complete for most people.

The following is some information about this survey. Please review and hit the “Next Page” button when finished.

- It takes about 10-15 minutes to complete for most people.
- The purpose of this research is to help researchers understand the social and economic impact of gambling in this province.
- You do not have to answer questions you do not want to, and you can stop participation at any time.
- All information you provide is strictly confidential.
- We do not need to know your name, and your telephone number will be removed from the data set once all data collection is completed. Also, only group results will be reported when the study is published.
- This study has no known risks. However, some of the questions do ask about sensitive issues.
- The data will be stored on a computer in a secure location at the University of Lethbridge. The only people having access to this data are members of the Research Team, headed by Dr. Robert Williams of the University of Lethbridge.
- If you have any questions regarding this study, you can contact Dr. Robert Williams at 403-382-7128.
- This study has received ethics clearance through the University of Lethbridge Office of Research Ethics. Questions about your rights as a participant in this research may be addressed to the Office of Research Services, University of Lethbridge (403-329-2747).
- If you are interested in seeing the Final Report for this study, it will be available from the Alberta Gaming Research Institute website in July 2010.

ELIGIBILITY

D1. Gender (do not ask)

- Male (1)
- Female (2)

D2. In what year were you born? _____

- refused (9999) (still included even if don't provide age)

GAMBLING

Before we start, we would like to provide our definition of gambling: We define gambling as wagering money or material goods on something with an uncertain outcome in the hopes of winning additional money or material goods. It includes things such as lottery tickets, scratch 'n win tickets, bingo, betting against a friend on a game of skill or chance, investing in high risk stocks, etc. Provide definition of high risk stock if necessary (hyperlink available to online).

Note: for the CATI Questionnaire the 'unsure' and 'refused' options are never read. This is the same for the Online Questionnaire, except that 'prefer not to answer' is provided as an option for all demographic questions.

GAMBLING ATTITUDES

GA1. Which best describes your belief about the benefit or harm that gambling has for society? Would you say

- The harm far outweighs the benefits (-2)
- The harm somewhat outweighs the benefits (-1)
- The benefits are about equal to the harm (0)
- The benefits somewhat outweigh the harm, or (+1)
- The benefits far outweigh the harm (+2)
- unsure (8888)
- refused (9999)

GA2. Do you believe that gambling is morally wrong? (do not read options)

- No (+1)
- Yes (-1)
- Unsure (0)
- Refused (9999)

GA3a. Which of the following best describes your opinion about legalized gambling?

- all types of gambling should be legal (+1) (go to GA4)
- some types of gambling should be legal and some should be illegal. (0)
- all types of gambling should be illegal. (-1) (go to GA4)
- unsure (8888) (go to GA4)
- refused (9999) (go to GA4)

GA3b. Which types do you believe should be illegal _____ (read out if necessary)

- Lottery (1)
- Instant win ticket (2)
- Bingo (3)
- Electronic Gambling machines (slots, VLTs, etc.) (4)
- Casino table games (i.e., blackjack, baccarat, roulette, craps, etc.) (5)
- Games against other people (e.g., poker, pool, etc.) (6)
- Horse racing (7)
- Sports Betting (8)
- High risk stocks, options, futures, or day trading (9)
- Internet gambling (10)
- Other _____ (91)
- unsure (8888)
- refused (9999)

GA4. Which of the following best describes your opinion about gambling opportunities in Alberta?

- Gambling is too widely available (-1)
- Gambling is not available enough, or (1)
- The current availability of gambling is fine. (0)
- unsure (8888)
- refused (9999)

GA5. What sort of overall impact do you believe the casino or casinos in your local region have had for your community? Would you say

- very beneficial (+2)
- somewhat beneficial (+1)
- neither beneficial nor harmful (0)
- somewhat harmful, or (-1)
- very harmful (-2)
- unsure (8888)
- refused (9999)

PAST YEAR GAMBLING BEHAVIOUR

GY1a. In the past 12 months, how often have you purchased **lottery tickets** such as 6/49 and Super 7? Would you say about

- 4 or more times a week (6)
- 2-3 times a week (5)
- once a week (4)
- 2-3 times a month (3)
- once a month (2)
- less than once a month, or (1)
- not at all (0) (Go to GY2a)
- Unsure (8888)
- refused (9999)

GY1b. Roughly how much money do you spend on lottery tickets in a typical month? Spend means how much you are ahead (+\$) or behind (-\$), or your net win or loss in an average month in the past 12 months. -\$_____

Note: all gambling expenditure figures in the data file have to be preceded by a '+' or '-' or else have separate columns for losses versus wins. Note: for online, there is always a negative sign in the amount box to imply a loss, but people can remove it if they wish to denote a win. Would you say

- Unsure (8888)
- refused (9999)

GY2a. In the past 12 months, how often have you purchased **instant win tickets** such as scratch & win, pull tabs, breakopens, or Nevada tickets? Spend means how much you are ahead (+\$) or behind (-\$), or your net win or loss in an average month in the past 12 months. Note: this definition of 'spend' is not mentioned again for any of the other expenditure questions.

- 4 or more times a week (6)
- 2-3 times a week (5)
- once a week (4)
- 2-3 times a month (3)
- once a month (2)
- less than once a month, or (1)
- not at all (0) (Go to GY3a)
- Unsure (8888)
- refused (9999)

GY2b. Roughly how much money do you spend on instant win tickets in a typical month? -\$_____ Spend means how much you are ahead (+\$) or behind (-\$), or your net win or loss in an average month in the past 12 months.

- Unsure (8888)
- refused (9999)

GY3a. In the past 12 months, how often have you bet money on **sporting events** (this includes sports pools and Sports Select tickets)?

- 4 or more times a week (6)
- 2-3 times a week (5)
- once a week (4)
- 2-3 times a month (3)
- once a month (2)
- less than once a month, or (1)
- not at all (0) (Go to GY4a)
- Unsure (8888)
- refused (9999)

GY3b. Roughly how much money do you spend on sports betting in a typical month? - \$ _____

- Unsure (8888)
- refused (9999)

GY4a. In the past 12 months, how often have you gone to a **bingo hall** to gamble? Would you say

- 4 or more times a week (6)
- 2-3 times a week (5)
- once a week (4)
- 2-3 times a month (3)
- once a month (2)
- less than once a month, or (1)
- not at all (0) (Go to GY5a)
- Unsure (8888)
- refused (9999)

GY4b. Roughly how much money do you spend at bingo halls in a typical month? (includes bingo, keno, satellite bingo) - \$ _____

- Unsure (8888)
- refused (9999)

GY4c. Which bingo hall do you go to most often? _____

- Unsure (8888)
- refused (9999)

GY5a. In the past 12 months, how often have you played **video lottery terminals** at a local bar or lounge? Would you say

- 4 or more times a week (6)
- 2-3 times a week (5)
- once a week (4)
- 2-3 times a month (3)
- once a month (2)
- less than once a month, or (1)
- not at all (0) (Go to GY6a)
- Unsure (8888)
- refused (9999)

GY5b. Roughly how much money do you spend on video lottery terminals in a typical month? - \$ _____

- Unsure (8888)
- refused (9999)

GY5c. Do you normally play video lottery terminals in your home community or city, or outside your home community?

- Home community (go to GY6a)
- Outside home community
- Both (do not read)
- Unsure (8888)
- refused (9999) (go to GY6a)

GY5d. Which outside community would that be? _____

GY6a. In the past 12 months, how often have you played **slot machines** at an Alberta casino or racino? Would you say

Racing Entertainment Centres are racinos.

- 4 or more times a week (6)
- 2-3 times a week (5)
- once a week (4)
- 2-3 times a month (3)
- once a month (2)
- less than once a month, or (1)
- not at all (0) (Go to GY7a)
- Unsure (8888)
- refused (9999)

GY6b. Roughly how much money do you spend on slot machines in a typical month? - \$ _____

- Unsure (8888)
- refused (9999)

GY6c. Which Alberta casino or racino do you most often go to play slot machines?

- Boomtown Casino – Ft. McMurray (1)
- Great Northern Casino – Grande Prairie (2)
- Evergreen Park – Grande Prairie (3)
- **Casino Dene – Cold Lake (4)**
- **Eagle River Casino – Whitecourt area (5)**
- Baccarat Casino – Edmonton (6)
- Casino Edmonton – Edmonton (7)
- Casino Yellowhead – Edmonton (8)
- Century Casino & Hotel – Edmonton (9)
- Palace Casino – Edmonton (10)
- Northlands Park – Edmonton (11)
- Gold Dust Casino – St. Albert (12)
- **River Cree Resort & Casino – Enoch (13)**
- **Camrose Resort Casino – Camrose (14)**
- Cash Casino – Red Deer (15)
- Jackpot Casino – Red Deer (16)
- Cash Casino – Calgary (17)
- Casino Calgary – Calgary (18)
- Deerfoot Inn & Casino – Calgary (19)
- Elbow River Casino – Calgary (20)
- Frank Sisson's Silver Dollar Casino – Calgary (21)
- Stampede Casino – Calgary (22)
- **Grey Eagle Casino – Calgary (23)**
- **Stoney Nakoda Entertainment Resort – Morley (24)**
- Casino by Vanshaw – Medicine Hat (25)
- Casino Lethbridge – Lethbridge (26)
- Whoop Up Downs & Bully's Sport & Entertainment Centre – Lethbridge (27)
- Other _____ (91)
- Unsure (8888)
- refused (9999)

GY6d. Which casino or racino did you most often go to play slot machines before this casino opened?

- Boomtown Casino – Ft. McMurray (1)
- Great Northern Casino – Grande Prairie (2)
- Evergreen Park – Grande Prairie (3)
- **Casino Dene – Cold Lake (4)**
- **Eagle River Casino – Whitecourt area (5)**
- Baccarat Casino – Edmonton (6)
- Casino Edmonton – Edmonton (7)
- Casino Yellowhead – Edmonton (8)
- Century Casino & Hotel – Edmonton (9)

- Palace Casino – Edmonton (10)
- Northlands Park – Edmonton (11)
- Gold Dust Casino – St. Albert (12)
- **River Cree Resort & Casino – Enoch (13)**
- **Camrose Resort Casino – Camrose (14)**
- Cash Casino – Red Deer (15)
- Jackpot Casino – Red Deer (16)
- Cash Casino – Calgary (17)
- Casino Calgary – Calgary (18)
- Deerfoot Inn & Casino – Calgary (19)
- Elbow River Casino – Calgary (20)
- Frank Sisson's Silver Dollar Casino – Calgary (21)
- Stampede Casino – Calgary (22)
- **Grey Eagle Casino – Calgary (23)**
- **Stoney Nakoda Entertainment Resort – Morley (24)**
- Casino by Vanshaw – Medicine Hat (25)
- Casino Lethbridge – Lethbridge (26)
- Whoop Up Downs & Bully's Sport & Entertainment Centre – Lethbridge (27)
- Did not gamble prior to this (0)
- Did not go to casinos prior to this (28)
- Just played VLTs (29)
- Saskatchewan casinos (30)
- British Columbia casinos (31)
- U.S. casinos (32)
- Casinos in provinces other than BC & SK (33)
- Other _____ (91)
- Unsure (8888)
- refused (9999)

GY7a. In the past 12 months, how often have you played **table games** such as blackjack, roulette, baccarat, poker, or craps at an Alberta casino? Would you say

- 4 or more times a week (6)
- 2-3 times a week (5)
- once a week (4)
- 2-3 times a month (3)
- once a month (2)
- less than once a month, or (1)
- not at all (0) (Go to GY7e if person scored 1 or more on GY6a. Otherwise, go to GY8a)
- Unsure (8888)
- refused (9999)

GY7b. Roughly how much money do you spend on casino table games in a typical month? - \$ _____

- Unsure (8888)
- refused (9999)

GY7c. Which Alberta casino do you most often go to play casino table games?

- Boomtown Casino – Ft. McMurray (1)
- Great Northern Casino – Grande Prairie (2)
- Evergreen Park – Grande Prairie (3)
- **Casino Dene – Cold Lake (4)**
- **Eagle River Casino – Whitecourt area (5)**
- Baccarat Casino – Edmonton (6)
- Casino Edmonton – Edmonton (7)
- Casino Yellowhead – Edmonton (8)
- Century Casino & Hotel – Edmonton (9)
- Palace Casino – Edmonton (10)
- Northlands Park – Edmonton (11)
- Gold Dust Casino – St. Albert (12)
- **River Cree Resort & Casino – Enoch (13)**
- **Camrose Resort Casino – Camrose (14)**

- Cash Casino – Red Deer (15)
- Jackpot Casino – Red Deer (16)
- Cash Casino – Calgary (17)
- Casino Calgary – Calgary (18)
- Deerfoot Inn & Casino – Calgary (19)
- Elbow River Casino – Calgary (20)
- Frank Sisson’s Silver Dollar Casino – Calgary (21)
- Stampede Casino – Calgary (22)
- **Grey Eagle Casino – Calgary (23)**
- **Stoney Nakoda Entertainment Resort – Morley (24)**
- Casino by Vanshaw – Medicine Hat (25)
- Casino Lethbridge – Lethbridge (26)
- Whoop Up Downs & Bully’s Sport & Entertainment Centre – Lethbridge (27)
- Other _____ (91)
- Unsure (8888)
- refused (9999)

GY7d. Which casino did you most often go to play casino table games before this casino opened?

- Boomtown Casino – Ft. McMurray (1)
- Great Northern Casino – Grande Prairie (2)
- Evergreen Park – Grande Prairie (3)
- **Casino Dene – Cold Lake (4)**
- **Eagle River Casino – Whitecourt area (5)**
- Baccarat Casino – Edmonton (6)
- Casino Edmonton – Edmonton (7)
- Casino Yellowhead – Edmonton (8)
- Century Casino & Hotel – Edmonton (9)
- Palace Casino – Edmonton (10)
- Northlands Park – Edmonton (11)
- Gold Dust Casino – St. Albert (12)
- **River Cree Resort & Casino – Enoch (13)**
- **Camrose Resort Casino – Camrose (14)**
- Cash Casino – Red Deer (15)
- Jackpot Casino – Red Deer (16)
- Cash Casino – Calgary (17)
- Casino Calgary – Calgary (18)
- Deerfoot Inn & Casino – Calgary (19)
- Elbow River Casino – Calgary (20)
- Frank Sisson’s Silver Dollar Casino – Calgary (21)
- Stampede Casino – Calgary (22)
- **Grey Eagle Casino – Calgary (23)**
- **Stoney Nakoda Entertainment Resort – Morley (24)**
- Casino by Vanshaw – Medicine Hat (25)
- Casino Lethbridge – Lethbridge (26)
- Whoop Up Downs & Bully’s Sport & Entertainment Centre – Lethbridge (27)
- Did not gamble prior to this (0)
- Did not go to casinos prior to this (28)
- Just played VLTs (29)
- Saskatchewan casinos (30)
- British Columbia casinos (31)
- U.S. casinos (32)
- Casinos in provinces other than BC & SK (33)
- Other _____ (91)
- Unsure (8888)
- refused (9999)

GY7e only asked of people who score 1 or more on GY6a or GY7a.

GY7e. On average, how much would you estimate you spend on hotels, food, drinks, shopping or other attractions each time you visit your favourite casino? \$_____

- Unsure (8888)
- refused (9999)

GY8a. In the past 12 months, how many times have you gambled at a **casino outside of Alberta**? _____

- not at all (0) (go to GY9a)
- Unsure (8888)
- refused (9999)

GY8b. Roughly how much money do you spend per visit, this would include both your gambling and travel costs. \$_____

- Unsure (8888)
- refused (9999)

GY8c. Which province or state did you most often go to?

- Saskatchewan (1)
- British Columbia (2)
- Las Vegas/Nevada (3)
- Other _____ (91)
- Unsure (8888)
- refused (9999)

GY9a. In the past 12 months, how often have you bet on a **horse race** at either a horse race track or an off-track site? Would you say

- 4 or more times a week (6)
- 2-3 times a week (5)
- once a week (4)
- 2-3 times a month (3)
- once a month (2)
- less than once a month, or (1)
- not at all (0) (Go to GY10a)
- Unsure (8888)
- refused (9999)

GY9b. Roughly how much money do you spend on horse racing in a typical month? -\$_____

- Unsure (8888)
- refused (9999)

GY9c. Where do you most often go to bet on horse racing? (Do not read options)

- Evergreen Park – Grande Prairie (1)
- Northlands Park – Edmonton (2)
- Stampede Casino – Calgary (3)
- Whoop Up Downs & Bully's Sport & Entertainment Centre – Lethbridge (4)
- Teletheatre/Horses off Track Betting (5)
- Other _____ (91)
- Unsure (8888)
- refused (9999)

GY10a. In the past 12 months, how often did you purchase **high risk stocks, options or futures or day trade** on the stock market? Would you say

Note: A high risk stock is “a stock from a company that has a real risk of going out of business OR having their stock price double or triple in value in the next year”. A blue chip stock is “a stock from a well established company with good earning potential like Walmart or Microsoft that is also very unlikely to go out of business”. If person is unfamiliar with options or futures it is best to assume they do not purchase them rather than explaining what they are.

- 4 or more times a week (6)
- 2-3 times a week (5)
- once a week (4)
- 2-3 times a month (3)
- once a month (2)
- less than once a month, or (1)
- not at all (0) (Go to GY11a)
- Other _____ (91)
- Unsure (8888)
- refused (9999)

GY10b. What do you estimate is your net loss or gain in a typical month from high risk stocks, options, futures, or day trading? -\$_____ or +\$_____

- Unsure (8888)
- refused (9999)

GY11a. In the past 12 months, how often have you gambled or **bet money against other people** on things such as card games; golf, pool, darts, bowling; video games; board games, or poker outside of a casino? Would you say

Note: Poker played in a casino should be recorded under G7. Also, if asked, this question is not asking about games played on the Internet, which should be recorded under G12.

- 4 or more times a week (6)
- 2-3 times a week (5)
- once a week (4)
- 2-3 times a month (3)
- once a month (2)
- less than once a month, or (1)
- not at all (0) (Go to GY12a)
- Unsure (8888)
- refused (9999)

GY11b. Roughly how much money do you spend gambling or **betting money against other people** in a typical month? -\$_____

- Unsure (8888)
- refused (9999)

T1 and T2 not asked in the Online Questionnaire

T1. Do you personally use the Internet?

- yes (1)
- no (0) (go to GY13a)
- Unsure (8888)
- refused (9999)

T2. How often do you participate in Internet-based surveys?

- Never (0)
- Sometimes (1)
- Often (2)
- Unsure (8888)
- refused (9999)

GY12a. In the past 12 months have you used the **Internet for gambling**? This would include things such as playing poker, buying lottery tickets, betting on sports, bingo, slots or casino table games for money or playing interactive games for money?

- yes (1)
- no (0) (go to GY13a)
- Unsure (8888)
- refused (9999)

GY12b. Roughly how much money do you spend gambling on the Internet in a typical month? -\$_____

- Unsure (8888)
- refused (9999)

GY12c. What is the main type of Internet gambling you engage in? (read out if necessary)

- Lottery (1)
- Instant win ticket (2)
- Bingo (3)
- Slot machines or other electronic gambling machines (4)
- Casino table games (i.e., blackjack, baccarat, roulette, craps, etc.) (5)
- Games against other people (e.g., poker, pool, etc.) (6)
- Horse race betting (7)
- Sports Betting (8)
- High risk stocks, options, futures, or day trading (9)
- Other_____ (91)
- Unsure (8888)
- refused (9999)

GY13a. In the past 12 months, what is the largest amount of money you have ever lost to gambling in a single day? -\$_____ (skip if no gambling in past 12 months; if 0 go to GY14a)

- Unsure (8888)
- refused (9999)

GY13b. What did you lose the money on? (read out if necessary)

- Lottery (1)
- Instant win ticket (2)
- Bingo (3)
- Slot machines or other electronic gambling machines (4)
- Casino table games (i.e., blackjack, baccarat, roulette, craps, etc.) (5)
- Games against other people (e.g., poker, pool, etc.) (6)
- Horse racing (7)
- Sports Betting (8)
- High risk stocks, options, futures, or day trading (9)
- Internet gambling (10)
- Other_____ (11)
- Unsure (8888)
- refused (9999)

GY14a. In the past 12 months, what do you recall your largest gambling winning on a single day to be?
+\$_____

(skip if no gambling in past 12 months; if 0 go to GAMBLING MOTIVATION SECTION)

- Unsure (8888)
- refused (9999)

GY14b. What did you win the money on? (read out if necessary)

- Lottery (1)
- Instant win ticket (2)
- Bingo (3)
- Slot machines or other electronic gambling machines (4)
- Casino table games (i.e., blackjack, baccarat, roulette, craps, etc.) (5)
- Games against other people (e.g., poker, pool, etc.) (6)
- Horse racing (7)
- Sports Betting (8)
- High risk stocks, options, futures, or day trading (9)
- Internet gambling (10)
- Other_____ (91)
- Unsure (8888)
- refused (9999)

Go to COMORBIDITIES SECTION if person has not gambled in past 12 months (i.e., answers 'not at all' to GY1a, GY2a, GY3a, GY4a, GY5a, GY6a, GY7a, GY8a, GY9a, GY10a, GY11a, & GY12a) and score GR1 and GR2 as '0'.

GAMBLING MOTIVATION

GM1. What would you say is the main reason that you gamble? Would you say...

- For excitement/entertainment/fun (1)
- to win money (2)
- to escape or distract yourself (3)
- to socialize with family or friends (4)
- to support worthy causes, or (5)
- because it makes you feel good about yourself (6)
- Other_____ (91)
- Unsure (8888)
- refused (9999)

GAMBLING RECREATION/ENTERTAINMENT

GR1. How important is gambling to you as a recreational activity?

- very important (3)
- somewhat important (2)
- not very important (1)
- not at all important (0)
- Unsure (8888)
- refused (9999)

GR2a. Has gambling replaced other recreational activities for you in the past 5 years?

- No (0) (go to PROBLEM GAMBLING SECTION)
- Yes (1)
- Unsure (8888) (go to PROBLEM GAMBLING SECTION)
- refused (9999) (go to PROBLEM GAMBLING SECTION)

GR2b. Which recreational activities has it replaced? _____

PROBLEM GAMBLING

Go directly to the COMORBIDITIES SECTION if person's total monthly spending on gambling is less than \$10 a month (i.e., total of losses from GY1b + GY2b + GY3b + GY4b + GY5b + GY6b + GY7b + GY8b + GY9b + GY10b + GY11b + GY12b). (Note: any 'wins' are not added to this total. This procedure excluded 52.6% of the sample).

Note: If people clearly indicate that they don't have problems with gambling, say "I need to ask the rest of these questions in any case". However, if a person conveys this in a very insistent way or repeats this comment at any point, then they are not asked the rest of the questions and receive a score of 0 on each of the questions they would have normally been asked in this section (up to GP19). If a person refuses to answer these questions and it is unclear whether they actually have gambling problems, then the rest of the questions are not asked and no values are imputed.

When answering the questions throughout the remainder of the survey, please think about the past 12 months. (CATI)

Please answer each of the following questions in this section , even in none apply to you (Online)

GP1. **CPG11**. Thinking about the past 12 months, have you bet more than you could really afford to lose? Would you say:

- never (0)
- sometimes (1)
- most of the time, or (2)
- almost always (3)
- Unsure (8888)
- refused (9999)

GP2. **CPG12**. Thinking about the past 12 months, have you felt guilty about the way you gamble or what happens when you gamble? Would you say:

- never (0)
- sometimes (1)
- most of the time, or (2)
- almost always (3)
- Unsure (8888)
- refused (9999)

GP3. **CPG13/PPGM11**. In the past 12 months, have you needed to gamble with larger amounts of money to get the same feeling of excitement? Would you say:

- never (0)
- sometimes (1)
- most of the time, or (2)
- almost always (3)
- Unsure (8888)
- refused (9999)

GP4. **CPGI4/PPGM8b**. In the past 12 months, when you gambled, did you go back another day to try to win back the money you lost? Would you say

- never (0)
- sometimes (1)
- most of the time, or (2)
- almost always (3)
- Unsure (8888)
- refused (9999)

GP5a. **CPGI5/PPGM1a**. In the past 12 months, have you borrowed money or sold anything to get money to gamble? Would you say

- never (0) (go to GP6a)
- sometimes (1)
- most of the time, or (2)
- almost always (3)
- Unsure (8888)
- refused (9999)

GP5b. In the past 12 months, about how much money have you borrowed or obtained from selling possessions in order to gamble? \$_____

- Unsure (8888)
- refused (9999)

GP6a. **CPGI6/PPGM1b**. In the past 12 months, has your gambling caused any financial problems for you or your household? Would you say:

- never (0) (go to GP7a)
- sometimes (1)
- most of the time, or (2)
- almost always (3)
- Unsure (8888)
- refused (9999)

GP6b. In the past 12 months, have you filed for bankruptcy because of gambling?

- no (0)
- yes (1)
- Unsure (8888)
- refused (9999)

GP7a. **CPGI7/PPGM4**. In the past 12 months, has your gambling caused you any health problems, including stress or anxiety? Would you say:

- never (0) (go to GP8)
- sometimes (1)
- most of the time, or (2)
- almost always (3)
- Unsure (8888)
- refused (9999)

GP7b. In the past 12 months have these health problems caused you to seek medical or psychological help?

- no (0)
- yes (1)
- Unsure (8888)
- refused (9999)

GP8. **CPGI8/PPGM7**. In the past 12 months, have people criticized your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true? Would you say:

- never (0)
- sometimes (1)
- most of the time, or (2)
- almost always (3)
- Unsure (8888)
- refused (9999)

GP9. **CPGI9**. In the past 12 months, have you felt that you might have a problem with gambling? Would you say

- never (0)
- sometimes (1)
- most of the time, or (2)
- almost always (3)
- Unsure (8888)
- refused (9999)

GP10a. **PPGM2**. Has your involvement in gambling caused significant mental stress in the form of guilt, anxiety, or depression for you or someone close to you in the past 12 months?

- no (0) (go to GP11a)
- yes (1)
- Unsure (8888)
- refused (9999)

GP10b. In the past 12 months have you thought of committing suicide because of gambling?

- no (0) (go to GP11a)
- yes (1)
- Unsure (8888)
- refused (9999)

GP10c. In the past 12 months have you attempted suicide because of gambling?

- no (0)
- yes (1)
- Unsure (8888)
- refused (9999)

GP10d. Would you like to know about the free gambling and mental health treatment services in your local area?

- no (0) (go to GP11a)
- yes (1) -> 1-866-332-2322 is AADAC's toll-free problem gambling help line.
- Unsure (8888)
- refused (9999)

GP11a. **PPGM3a**. Has your involvement in gambling caused significant problems in your relationship with your spouse/partner or important friends or family in the past 12 months?

- no (0) (go to GP12a)
- yes (1)
- Unsure (8888)
- refused (9999)

GP11b. In the past 12 months has gambling ever caused an instance of domestic violence in your household?

- no (0)
- yes (1)
- Unsure (8888)
- refused (9999)

GP11c. Has your involvement in gambling resulted in separation or divorce in the past 12 months?

- no (0)
- yes (1)
- Unsure (8888)
- refused (9999)

GP12a. **PPGM3b**. Has your involvement in gambling caused you to repeatedly neglect your children or family in the past 12 months?

- no (0) (go to GP13a)
- yes (1)
- Unsure (8888)
- refused (9999)

GP12b. In the past 12 months, has child welfare services become involved because of your gambling?

- no (0)
- yes (1)
- Unsure (8888)
- refused (9999)

GP13a. **PPGM5**. Has your involvement in gambling caused significant work or school problems for you or someone close to you in the past 12 months or caused you to miss a significant amount of time off work or school?

- no (0) (go to GP14a)
- yes (1)
- Unsure (8888)
- refused (9999)

GP13b. In the past 12 months, about how many work or school days have you lost due to gambling? _____

- Unsure (8888)
- refused (9999)

GP13c. In the past 12 months, have you lost your job or had to quit school due to gambling?

- no (0) (go to GP14a)
- yes (1)
- Unsure (8888)
- refused (9999)

GP13d. In the past 12 months, have you received unemployment benefits or welfare payments as a result of losing your job because of gambling?

- no (0)
- yes (1)
- Unsure (8888)
- refused (9999)

GP14a. **PPGM6**. Has your involvement in gambling caused you or someone close to you to write bad cheques, take money that didn't belong to you or commit other illegal acts to support your gambling in the past 12 months?

- no (0) (go to GP15)
- yes (1)
- Unsure (8888)
- refused (9999)

GP14b. In the past 12 months, about how much money have you illegally obtained in order to gamble? \$ _____

- Unsure (8888)
- refused (9999)

GP14c. In the past 12 months, have you been sued to get back money you spent gambling?

- no (0)
- yes (1)
- Unsure (8888)
- refused (9999)

GP14d. In the past 12 months, has your gambling been a factor in your committing a crime for which you have been arrested?

- no (0) (go to GP15)
- yes (1)
- Unsure (8888)
- refused (9999)

GP14e. Were you convicted for this crime?

- no (0) (go to GP15)
- yes (1)
- Unsure (8888)
- refused (9999)

GP14f. What was the offence? _____

- Unsure (8888)
- refused (9999)

GP14g. Were you incarcerated for this crime?

- no (0) (go to GP15)
- yes (1)
- Unsure (8888)
- refused (9999)

GP14h. How many days were you incarcerated for? _____

- Unsure (8888)
- refused (9999)

GP15. **PPGM8a**. Have you often gambled longer, with more money or more frequently than you intended to in the past 12 months?

- no (0)
- yes (1)
- Unsure (8888)
- refused (9999)

GP16a. **PPGM8c**. In the past 12 months, have you made attempts to either cut down, control or stop gambling?

- no (0) (go to GP17b)
- yes (1)
- Unsure (8888)
- refused (9999)

GP16b. **PPGM8d**. Were you successful in these attempts?

- no (1)
- yes (0)
- Unsure (8888)
- refused (9999)

GP17a. **PPGM9a**. In the past 12 months, when you did try cutting down or stopping did you find you were very restless or irritable or that you had strong cravings for it?

- no (0)
- yes (1)
- Unsure (8888)
- refused (9999)

GP17b. **PPGM9b**. In the past 12 months, have you had strong cravings for gambling?

- no (0)
- yes (1)
- Unsure (8888)
- refused (9999)

GP18. **PPGM10**. In the past 12 months, would you say you have been preoccupied with gambling?

- no (0)
- yes (1)
- Unsure (8888)
- refused (9999)

GP19. **PPGM12** In the past 12 months, is there anyone else who would say that you were either preoccupied with gambling; or had a loss of control; or had withdrawal symptoms; or that you needed to gamble with larger amounts of money to achieve the same excitement?

- no (0)
- yes (1)
- Unsure (8888)
- refused (9999)

Go to the instructions prior to GP25 unless person scores 3 or more on the CPGI.

GP20. Are there particular types of gambling that have contributed to your problems more than others?

- no (0) (go to GP22a)
- yes (1)
- Unsure (8888) (go to GP22a)
- refused (9999) (go to GP22a)

GP21. Which ones? (do not read options)

- Lotteries (1)
- Instant win tickets (2)
- Bingo (3)
- Slot machines or other electronic gambling machines (i.e., VLTs) (4)
- Casino table games (i.e., blackjack, baccarat, roulette, craps, etc.) (5)
- Games of skill against other people (e.g., poker, pool, etc.) (6)
- Horse or dog racing (7)
- Sports Betting (8)
- High risk stocks, options, futures, or day trading (9)
- Other _____ (91)

GP22a. Have you ever *wanted* help for gambling problems in the past 12 months?

- yes (1)
- no (0) (go to GP22d)
- Unsure (8888)
- refused (9999)

GP22b. Have you *sought* help for gambling problems in the past 12 months?

- yes (1)
- no (0) (go to GP22d)
- Unsure (8888)
- refused (9999)

GP22c. Where did you seek help from? (do not read options)

- friends (1)
- family (2)
- Gambler's Anonymous (3)
- family doctor (4)
- psychologist (5)
- psychiatrist (6)
- counselling service (7)
- Pastor/minister/priest/etc. (8)
- telephone help/hotline (9)
- other _____ (91)
- Unsure (8888)
- refused (9999)

GP22d. Have you self-excluded yourself from any Alberta casino or racino in the past 12 months?

- yes (1)
- no (0)
- Unsure (8888)
- refused (9999)

GP23. Have you had problems with gambling *prior* to the past 12 months? (experienced significant problems as a result of gambling and/or had a preoccupation or loss of control associated with gambling).

- No (0)
- yes (1)
- Unsure (8888)
- refused (9999)

The following question only asked of people who have a score of 3 or higher on the CPGI, but report a total past year gambling loss of \$300 or less (GY1b + GY2b + GY3b + GY4b + GY5b + GY6b + GY7b + GY8b + GY9b + GY10b + GY11b + GY12b)[WHEN CALCULATING TOTAL LOSS, ONLY ADD QUESTIONS WITH A LOSS INDICATED (CODE 2/NEGATIVE AMOUNT), DO NOT ADD A WIN/POSITIVE AMOUNT]

GP24. I notice you report having some potential problems with gambling, but your total reported loss in the past 12 months is less than \$300. Can you explain?

-
- Unsure (8888)
 - refused (9999)

The following question only asked of people who have a score of 0 on the CPGI, but report a total past year gambling loss of \$1000 or more.

GP25. I notice you report having lost over \$1000 to gambling in the past 12 months, but don't report any problems or concerns with this. Can you explain?

-
- Unsure (8888)
 - refused (9999)

COMORBIDITIES

C1. Have you used tobacco in the past 12 months?

- yes (1)
- no (0)
- Unsure (8888)
- refused (9999)

C2. Have you used alcohol in the past 12 months?

- yes (1)
- no (0)
- Unsure (8888)
- refused (9999)

C3. Have you used street drugs in the past 12 months? (cannabis (marijuana, hashish, pot, etc.); hallucinogens (LSD, mushrooms, PCP, Special K, mescaline, etc.); cocaine or crack; amphetamine, methamphetamine or other stimulants (e.g., ecstasy); inhalants (e.g., glue, gas/petrol, paint thinner, nail polish, etc.); opiates (heroin, or nonmedical use of morphine, codeine, T3s, etc.); nonmedical use of sedatives, sleeping pills, or minor tranquilizers (Valium, Serepax, Rohypnol, etc.)

- yes (1)
- no (0)
- Unsure (8888)
- refused (9999)

C4. Have you had any problems with drugs or alcohol in the past 12 months? By this we mean difficulties in controlling their use that has led to negative consequences for you or other people.

- no (0)
- Yes (1)
- Unsure (8888)
- refused (9999)

C5a. Have you had any problems with other addictive behaviour in the past 12 months such as overeating, sex or pornography, shopping, exercise, Internet chat lines, or other things? Here again, what we mean is difficulties controlling the behaviour which has led to significant negative consequences for you or other people.

- yes (1)
- no (0) (go to C6)
- Unsure (8888) (go to C6)
- refused (9999) (go to C6)

C5b. Which specific activities have you had problems with? (do not read list; check off as many as apply)

- over-eating (1)
- sex or pornography (2)
- exercise (3)
- shopping (4)
- Internet chat lines (5)
- Video or Internet gaming (6)
- other _____ (91)
- Unsure (8888)
- refused (9999)

C6. In the past 12 months how would you rate your overall level of stress? Would you say

- very high (5)
- high (4)
- moderate (3)
- low (2)
- very low (1)
- Unsure (8888)
- refused (9999)

C7. In the past 12 months how would you rate your overall level of happiness? Would you say

- very high (5)
- high (4)
- moderate (3)
- low (2)
- very low (1)
- Unsure (8888)
- refused (9999)

C8a. In the past 12 months, have you had any serious problems with depression, anxiety or other mental health problems? (NOTE: If asked, 'serious' means something that either you or someone else would say is considerable, important, or major, either because of its frequency or significance)

- Yes (1)
- No (0) (go to C9)
- Unsure (8888)
- refused (9999) (go to C9)

C8b. Which one(s) _____

C9. Do you have any physical disability or chronic health problem that limits the amount or kind of activity you can do at home, work or school?

- Yes (1)
- No (0)
- Unsure (8888)
- refused (9999)

TRIANGULATION (ONLINE PANEL ONLY)

The sampling of 'unique' populations not captured by the other survey mode (Online or CATI) will be established by asking questions in the survey about how often (if ever) the person responds to telephone versus Internet surveys. The ability to integrate findings between the survey modes will depend on whether the results are the same when just comparing the subsample of individuals from each modality that have the same characteristics (i.e., equivalent age, gender, socioeconomic status, education, and Internet access).

T3 and T4 not asked in the CATI questionnaire.

T3. Do you have a telephone (household landline)?

- Yes (1)
- No (0)
- Unsure (8888)
- refused (9999)

T4. How often do you participate in telephone surveys when asked?

- Never (0)
- Sometimes (1)
- Often (2)
- Unsure (8888)
- refused (9999)

DEMOGRAPHICS

I just have a few final questions about your background so we can keep track of the characteristics of people who respond to the survey.

D3. At the present are you.....?

- Single (never married and not living common-law) (0)
- In common-law relationship (1)
- married (2)
- Separated, but still legally married (3)
- divorced , or (4)
- widowed (5)
- refused (9999)

D4. What is the highest level of education you have completed? _____

- Less than high school graduation (1)
- Completed high school and/or some post-secondary (2)
- Trades certificate or diploma (3)
- College certificate or diploma (4)
- University certificate, diploma or degree (5)
- refused (9999)

D5. Are you currently a full or part-time student?

- No (0)
- Part time student (1)
- Full time student (2)
- refused (9999)

D6. Are you presently working for pay in a full-time or in a part-time job?

- No (0)
- Employed part-time (1)
- Employed full-time (2)
- refused (9999)

D6a. Could you tell me how many adults age 18 or older in addition to yourself live in your household?

- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5+ (5)
- Unsure (8888)
- Refused (9999)

D7. To the nearest \$10,000, what was your approximate income last year? Would you say (keep on reading options until respondent provides answer)

- less than \$20,000 (1)
- \$20,000 (2)
- \$30,000 (3)
- \$40,000 (4)
- \$50,000 (5)
- \$60,000 (6)
- \$70,000 (7)
- \$80,000 (8)
- \$90,000 (9)
- \$100,000 (10)
- \$110,000 (11)
- \$120,000 (12)
- More than \$120,000 (13)
- Exact amount _____ (14)
- Unsure (8888)
- refused (9999)

D8a. What do you estimate your current debt to be? This would include mortgages, credit cards, loans, car payments, etc.? Would you say (keep on reading options until respondent provides answer)

- 0 (no debt) (0)
- Less than \$10,000 (1)
- \$10,000 (2)
- \$20,000 (3)
- \$40,000 (4)
- \$60,000 (5)
- \$80,000 (6)
- \$100,000 (7)
- \$120,000 (8)
- \$140,000 (9)
- \$160,000 (10)
- \$180,000 (11)
- \$200,000 (12)
- \$300,000 (13)
- \$400,000 (14)
- \$500,000 (15)
- More than \$500,000 (16)

- Exact amount _____ (17)
- Unsure (8888)
- refused (9999)

Do not ask D8b of people who did not qualify for the PROBLEM GAMBLING SECTION and/or have no debt.

D8b. What percentage of this debt has resulted from gambling? _____

- Unsure (8888)
- refused (9999)

D9. Were you born in Canada?

- No (0)
- Yes (1)
- Refused (9999)

D10a. What are the main ethnic or cultural origins of your ancestors? Would you say...

- Western European (*i.e.*, Austria, Belgium, Denmark, England, Finland, France, Germany, Greece, Holland, Ireland, Italy, Norway, Portugal, Scotland, Spain, Sweden, Switzerland, Wales) (1) (go to D11)
- Eastern European (*i.e.*, Belarus, Bulgaria, Czechoslovakia, Hungary, Moldavia, Poland, Romania, Russia, Slovakia, Ukraine) (2) (go to D11)
- South Asian (*i.e.*, Bangladesh, India, Pakistan, Sri Lanka) (3) (go to D11)
- East Asian (*i.e.*, Cambodia, China, Hong Kong, Indonesia, Japan, Korea, Laos, Malaysia, Philippines, Thailand, Vietnam) (4) (go to D11)
- Aboriginal, Inuit or Métis (5)
- African (6) (go to D11)
- Latin American (*i.e.*, Mexico, all Central American countries, all South American countries) (7) (go to D11)
- Other _____ (91) (go to D11 unless person indicates Aboriginal, Inuit or Metis)
- Unsure (8888) (go to D11)
- refused (9999) (go to D11)

If person provides a specific country that fits into one of these categories then code it into that category. If person answers 'Canadian', 'white', or something similar, then ask a clarifying question (e.g., Where did your ancestors live before coming to Canada, etc.).

D10b. Which First Nation group are you a member of? _____

- Unsure (8888)
- refused (9999)

D11. What is your postal code? _____ (both FSA & LCW required)

- Unsure (8888)
- refused (9999)

D12. What community do you live in? _____

INTERVIEWER DEMOGRAPHICS (CATI ONLY)

I1. Interviewer gender

- Male (1)
- Female (2)

I2. Interviewer year of birth _____

I3. Interviewer ethnic/cultural origins

- Western European (*i.e.*, Austria, Belgium, Denmark, England, Finland, France, Germany, Greece, Holland, Ireland, Italy, Norway, Portugal, Scotland, Spain, Sweden, Switzerland, Wales) (1)
- Eastern European (*i.e.*, Belarus, Bulgaria, Czechoslovakia, Hungary, Moldavia, Poland, Romania, Russia, Slovakia, Ukraine) (2)
- South Asian (*i.e.*, Bangladesh, India, Pakistan, Sri Lanka) (3)
- East Asian (*i.e.*, Cambodia, China, Hong Kong, Indonesia, Japan, Korea, Laos, Malaysia, Phillipines, Thailand, Vietnam) (4)
- Aboriginal, Inuit or Métis (5)
- African (6)
- Latin American (*i.e.*, Mexico, all Central American countries, all South American countries) (7)
- Other _____ (91)

2009 Survey

The 2009 survey was also conducted by Consumer Contact. All procedures were identical to the 2008 survey with the exception of the following:

Data collection occurred between June 10 and August 31, 2009.

Average number of contact attempts for completed interviews was 8.51 and average interview length was 14.55 minutes.

Sample sizes for the 3 groups were different:

- General Population Telephone Sample ($N = 1,004$) (compared to 3,001 in 2008). (Note: budgetary constraints precluded a larger sample size).
- Targeted Telephone Sample ($N = 3,624$) (compared to 4,512 in 2008).
 - 400 people were sampled from each of the 9 following geographic areas: 4 areas that did not have casinos prior to their introduction in late 2007/early 2008 (Cold Lake area; Whitecourt area; Camrose area; Morley area), and 5 areas that have had casinos for many years (Fort McMurray area; Grande Prairie area; Red Deer area; Medicine Hat area; Lethbridge area).
- Online Sample ($N = 1,006$) (compared to 2,019 in 2008).

There was also a change in the online recruitment method. This change was implemented because the prevalence rates of gambling, problem gambling, and associated comorbidities in the 2008 online sample was considerably higher than that obtained in the General Population telephone survey, making the result uncomparable (e.g., the prevalence rate of problem gambling was 2.2 times higher). It was thought that the email solicitation may have over-recruited gamblers and problem gamblers because it stated that the survey was about 'gambling'. Thus, the introduction to the 2009 email changed from indicating it was a gambling survey to "We have a short survey about recreational activities in Alberta being conducted by the University of Lethbridge and University of Alberta. The recreational activity that you are being asked about is randomly chosen. This survey will take 10 to 15 minutes to complete for most people." (Note: this procedure made the two rates more comparable, but the online survey still produced a rate 1.8 times higher.)

Other specific changes to the questionnaire were as follows (Note: budgetary constraints required some shortening of the questionnaire):

Past Year Gambling

Following questions were eliminated: GY13a, GY13b, GY14a, GY14b.

New question added:

GY15. Compared to last year, are you gambling more, less, or about the same?

- More (1)
- Less (2)
- Same (3)
- Unsure (8888)
- Refused (9999)

Gambling Motivation

GM1 eliminated.

Gambling Recreation/Entertainment

GR1, GR2a, GR2b eliminated.

Problem Gambling

Problem Gambling question eligibility criterion changed from spending \$10/month (eliminating 52.6% of the total sample) to gambling at least 1/month on any form (eliminating 48.3% of the total sample).

GP24 & GP25: GY8b was no longer used in the calculation. Also, net win/loss, rather than just losses was used (i.e., subtracting any reported wins from reported losses).

Criteria for asking GP24 and GP25 were expanded:

GP24. I notice you report having some potential problems with gambling, but your total reported loss in the past 12 months is less than \$300. Can you explain? OR I notice you report having some potential problems with gambling, but you only report gambling once a month in the past 12 months. Can you explain?

GP25. I notice you report having lost over \$1000 to gambling in the past 12 months, but don't report any problems or concerns with this. Can you explain? OR I notice you report gambling at least once a week, but don't report any problems or concerns with this. Can you explain?

Comorbidities Section

C5a, C5b, C6, C7 eliminated.

Three new 'validity questions':

C10. Have you ever been ill? Would you say....**Note: if asked, this refers to lifetime and includes minor illnesses such as colds, flu, etc.**

- No, never (0)
- Yes, occasionally (1)
- Yes, frequently (2)
- Yes, I've always been unwell (3)
- Unsure (8888)
- Refused (9999)

C11. Do you have pleasant memories from your childhood? Would you say

- None at all (0)
- Several (1)
- Most, or (2)
- All of my childhood memories are pleasant (3)
- Unsure (8888)
- Refused (9999)

C12. If you had to watch a sport on TV which would it be?

- Archery (1)
- Hockey (2)
- Football, or (3)
- Basketball (4)
- Unsure (8888)
- Refused (9999)

Demographics

D12. List of the most populace Alberta communities provided to interviewers to aid in coding.

New 'End' Section (After Comorbidities)

E1. Do you recall doing this same survey a year ago?

- No (0)
- Yes (1)
- Unsure (8888)
- Refused (9999)

E2. On a scale from 1 to 5, how truthfully would you say have you answered the questions in this survey, with a 5 being completely truthfully and a 1 being not very truthfully?

- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- Unsure (8888)
- Refused (9999)

Response Rate

An overall response rate of 33.1% to the General Population telephone survey and 24.1% to the Targeted telephone survey was achieved using response calculations of the Council of American Survey Research Organizations (CASRO, 1982).

	General Population	Targeted
INELIGIBLE NUMBERS	<i>n</i> = 5937	<i>n</i> = 8685
Not in Service	3046	871
Fax/Modem/Cell	658	1328
Business Number	457	442
Dialler Returns	5	18
Bad Line/Inaudible/Disconnected	47	835
Language Difficulties	59	151
Illness, Incapable	2	32
No one in Household 18+	28	48
Selected/Eligible Respondent not Available	1635	4960
ELIGIBILITY NOT DETERMINED	<i>n</i> = 3198	<i>n</i> = 11739
Busy	66	143
Answering Machine	1034	3803
No Answer	1474	4465
Household Refusal	624	3328
ELIGIBLE	<i>n</i> = 2169	<i>n</i> = 9072
Respondent Refusal	1167	5447
Completed Interviews	1002	3625
Eligibility rate: Eligibles ÷ (Eligibles + Ineligibles)	26.8%	51.1%
Estimated # of Eligibles: Eligibles + (Eligibility not Determined x Eligibility Rate)	3026	15072
Response rate: Completions ÷ Estimated # of Eligibles	33.1%	24.1%

Appendix B: Alberta Population Surveys of Gambling Attitudes, Behaviour, and/or Problem Gambling

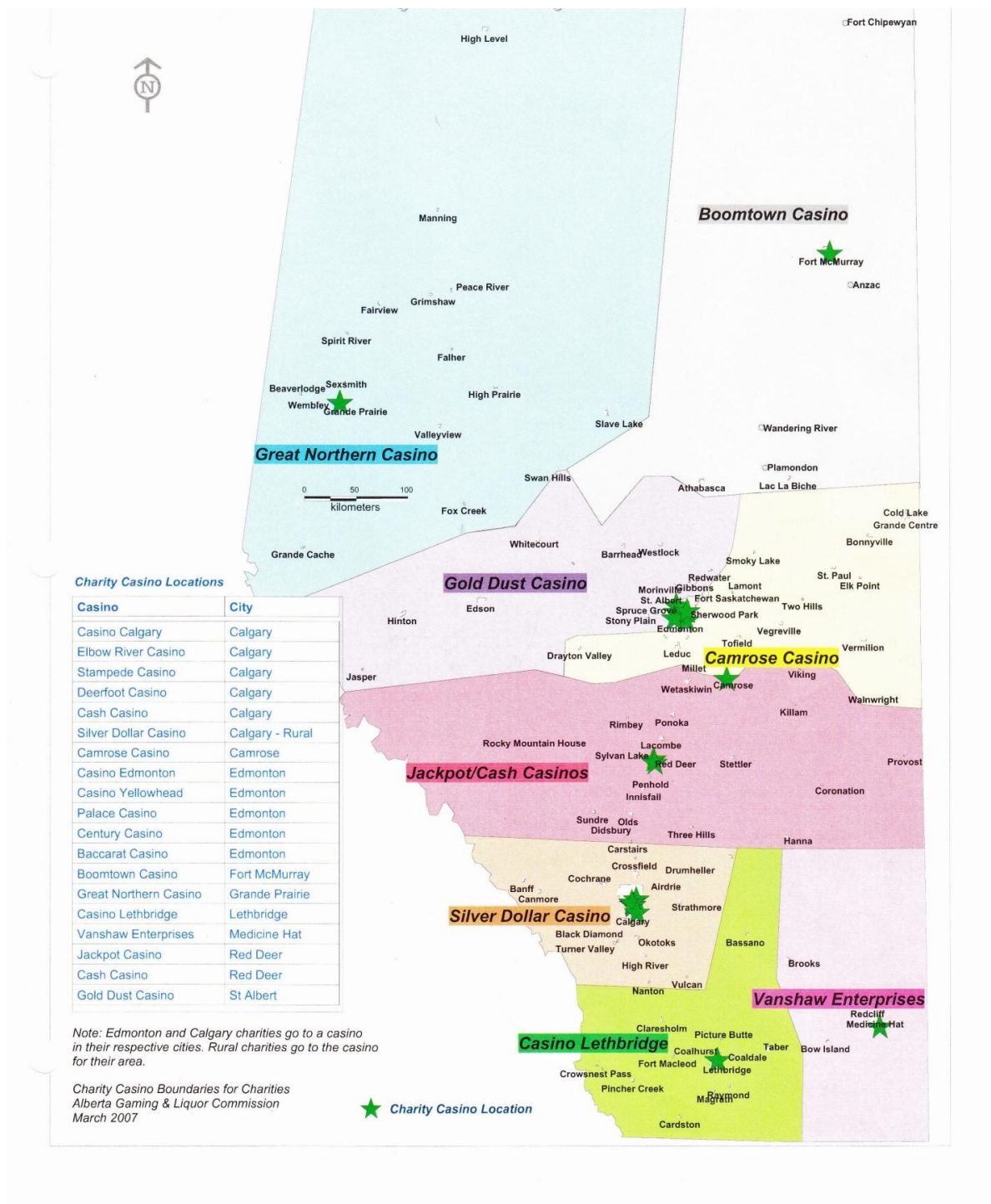
SURVEY YEAR	CITATION	SAMPLE	SAMPLE SIZE	MODALITY	FOCUS OF STUDY ¹⁰⁰
1992	Smith, G.J. (1992). Gambling attitudes and behavior of Albertans . Edmonton: Author.	Adults	1277	Telephone Interview	Attitudes, gambling behaviour
1993	Wynne, H., Smith, G., & Volberg, R. A. (1994). Gambling and Problem Gambling in Alberta . Edmonton: Report prepared for Alberta Lotteries and Gaming.	Adults	1804	Telephone Interview	Attitudes, gambling behaviour, problem gambling (SOGS 3+ = 5.4%)
1995	Hewitt, D. & Auger, D. (1995). <i>Firewatch on Aboriginal adolescent gambling</i> . Edmonton: Nechi Training, Research & Health Promotions Institute.	Aboriginal Adolescents	961		Gambling behaviour, problem gambling (SOGS-RA = 49%)
1996	Wynne, H., Smith, G., & Jacobs, D. (1996). Adolescent gambling and problem gambling in Alberta: Final Report . Edmonton: Alberta Alcohol & Drug Abuse Commission.	Adolescents	972	Telephone Interview	Attitudes, gambling behaviour, problem gambling (SOGS 3+ = 23%)
1998	Wynne Resources. (1998). Adult Gambling and Problem Gambling in Alberta, 1998 . Edmonton: Report to the Alberta Alcohol and Drug Abuse Commission.	Adults	1821	Telephone Interview	Attitudes, gambling behaviour, problem gambling (SOGS 3+ = 4.8%)
2000	Auger, D. & Hewitt, D. (2000). <i>Dream chaser: Alberta Aboriginal adult gambling prevalence study</i> . Edmonton: Nechi Training, Research & Health Promotions Institute.	Aboriginal Adults	500		Gambling behaviour, problem gambling (SOGS 3+ = 25%)
2001	Smith, G. J., & Wynne, H. J. (2002). Measuring gambling and problem gambling in Alberta using the Canadian problem gambling index . Edmonton: Prepared for the Alberta Gaming Research Institute.	Adults	1804	Telephone Interview	Attitudes, gambling behaviour, problem gambling (CPGI 3+ = 5.2%, CPGI 5+ = 2.7%, CPGI 8+ = 1.3%)
2002	Alberta Alcohol and Drug Abuse Commission. (2003). The Alberta Youth Experience Survey 2002: Summary Report . Edmonton: Author.	Adolescents	3394	Self-administered paper + pencil	Gambling behaviour, problem gambling (SOGS-RA = 9.5%)
2002	Statistics Canada Canadian Community Health Survey Cycle 1.2	Adults	3236 in AB	Face-to-face interview	Gambling behaviour, problem gambling (CPGI 3+ = 2.2%, CPGI 5+ = 1.7%, CPGI 8+ = 0.5%)

¹⁰⁰ SOGS = South Oaks Gambling Scale; SOGS-RA = South Oaks Gambling Scale Revised for Adolescents; CPGI = Canadian Problem Gambling Index; NODS = NORC DSM-IV Screen for Pathological Gambling; PPGM = Problem and Pathological Gambling Measure.

2002	Alberta Gaming 2001-2002 Annual Report	Adults	1000	Telephone Interview	Attitudes
2003	Alberta Gaming 2002-2003 Annual Report	Adults	1001	Telephone Interview	Attitudes and gambling participation
2004	Alberta Gaming 2003-2004 Annual Report	Adults	1000	Telephone Interview	Attitudes and gambling participation
2005	Alberta Gaming 2004-2005 Annual Report	Adults	1000	Telephone Interview	Attitudes and gambling participation
2005	Alberta Alcohol and Drug Abuse Commission. (2007). Youth Gambling in Alberta . Author.	Adolescents	3915	Self-administered: paper + pencil	Gambling behaviour, problem gambling (SOGS-RA = 3.6%)
2005	Decima 2005 National Gambling Report	Adults (online panelists)	3,500 (~350 AB)	Self-administered: online	Gambling behaviour
2006	Decima 2006 National Gambling Report	Adults (online panelists)	3,854 (~380 AB)	Self-administered: online	Gambling behaviour, problem gambling (CPGI 8+ = 2.5% - 3.6% for national sample)
2006	Alberta Gaming 2005-2006 Annual Report	Adults	1002	Telephone Interview	Attitudes and gambling participation
2007	Decima 2007 National Gambling Report	Adults (online panelists)	3500 (~300 AB)	Self-administered: online	Gambling behaviour, problem gambling (CPGI 3+ = 7.9%, CPGI 8+ = 1.9% for national sample)
2007	AGLC 2006-2007 Annual Report	Adults	1000	Telephone Interview	Attitudes and gambling participation
2007	Williams & Wood National Study of Gambling & Problem Gambling (unpublished)	Adults	8,496 (680 AB)	Telephone Interview	Attitudes, gambling behaviour, problem gambling (CPGI 3+ = 4.0%; CPGI 5+ = 1.4%; CPGI 8+ = 0.9%; PPGM = 1.3%)
2008	Harris/Decima 2008 National Gambling Report	Adults (online panelists)	3047 (303 AB)	Self-administered: online	Gambling behaviour, problem gambling (CPGI = not reported)
2008	AGLC 2007-2008 Annual Report	Adults	1000	Telephone Interview	Attitudes and gambling participation

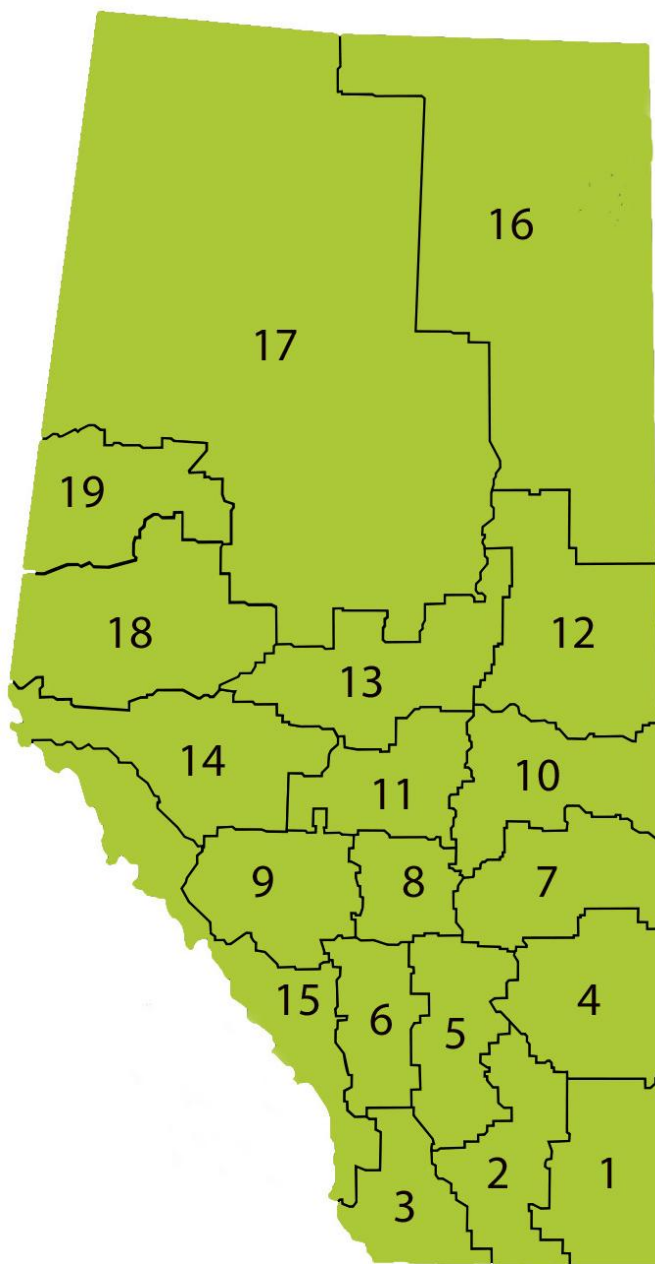
2008	Williams, Belanger, & Arthur (2011). <i>Gambling in Alberta: History, Current Status, and Socioeconomic Impacts</i> . Author. Note: this is the 2008 General Population survey.	Adults	3001	Telephone	Attitudes, gambling behaviour, problem gambling (CPGI 3+ = 3.8%, CPGI 5+ = 1.8%, CPGI 8+ = 1.0%; PPGM = 2.1%)
2008	Williams, Belanger, & Arthur (2011). <i>Gambling in Alberta: History, Current Status, and Socioeconomic Impacts</i> . Author. Note: this is the 2008 Online Panel survey.	Adults	2001	Self-administered: online	Attitudes, gambling behaviour, problem gambling (CPGI 3+ = 9.8%, CPGI 5+ = 5.7%, CPGI 8+ = 3.1%; PPGM = 4.6%)
2009	Williams, Belanger, & Arthur (2011). <i>Gambling in Alberta: History, Current Status, and Socioeconomic Impacts</i> . Author. Note: this is the 2009 General Population survey.	Adults	1054	Telephone	Attitudes, gambling behaviour, problem gambling (CPGI 3+ = 4.9%, CPGI 5+ = 2.5%, CPGI 8+ = 0.9%; PPGM = 3.1%)
2009	Williams, Belanger, & Arthur (2011). <i>Gambling in Alberta: History, Current Status, and Socioeconomic Impacts</i> . Author. Note: this is the 2009 Online Panel survey.	Adults	1092	Self-administered: online	Attitudes, gambling behaviour, problem gambling (CPGI 3+ = 10.4%, CPGI 5+ = 5.9%, CPGI 8+ = 3.1%; PPGM = 5.6%)

Appendix C: Areas Served by the Charity Casinos in Alberta



Appendix D: Alberta Census Divisions

1	Medicine Hat
2	Lethbridge
3	Fort MacLeod
4	Hanna
5	Drumheller
6	Calgary
7	Stettler
8	Red Deer
9	Rocky Mountain House
10	Camrose-Lloydminster
11	Edmonton
12	St. Paul
13	Athabasca
14	Edson
15	Banff
16	Fort McMurray
17	Slave Lake
18	Grande Cache
19	Grande Prairie



Appendix E: Problem and Pathological Gambling Measure (PPGM)

1a. Has your involvement in gambling caused you either to borrow a significant¹⁰¹ amount of money or sell some of your possessions in the past 12 months? (Yes/No).

1b. Has your involvement in gambling caused significant **financial concerns** for you or someone close to you in the past 12 months? (Yes/No). **(Note: do not score 1 for 1b if 1 has already been scored for 1a).**

2. Has your involvement in gambling caused significant **mental stress** in the form of guilt, anxiety, or depression for you or someone close to you in the past 12 months? (Yes/No).

3a. Has your involvement in gambling caused serious problems¹⁰² in your **relationship with your spouse/partner, or important friends or family** in the past 12 months? (Note: Family is whomever the person themselves defines as “family”)(Yes/No).

3b. Has your involvement in gambling caused you to repeatedly neglect your children or family in the past 12 months? (Yes/No). **(Note: do not score 1 for 3b if 1 has already been scored for 3a).**

4. Has your involvement in gambling resulted in significant **health problems** or injury for you or someone close to you in the past 12 months? (Yes/No).

5a. Has your involvement in gambling caused significant **work or school problems** for you or someone close to you in the past 12 months? (Yes/No).

5b. Has your involvement in gambling caused you to miss a significant amount of time off work or school in the past 12 months? (Yes/No). **(Note: do not score 1 for 5b if 1 has already been scored for 5a).**

6. Has your involvement in gambling caused you or someone close to you to write bad cheques, take money that didn't belong to you or commit other **illegal acts** to support your gambling in the past 12 months? (Yes/No).

7. Is there anyone else who would say that your involvement in gambling in the past 12 months has caused any significant problems regardless of whether you agree with them or not? (Yes/No).

PROBLEMS SCORE	/7
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¹⁰¹ If people ask what ‘significant’ means, say ‘significant means something that either you or someone else would say is considerable, important, or major’, either because of its frequency or seriousness.

¹⁰² If people ask what ‘problem’ means say ‘a difficulty that needs to be fixed’.

8. In the past 12 months, have you often gambled longer, with more money or more frequently than you intended to? (Yes/No).

9. In the past 12 months, have you often gone back to try to win back the money you lost? (Yes/No).

10a. In the past 12 months, have you made any attempts to either cut down, control or stop your gambling? (Yes/No). (go to 11 if 'no') (this item not scored)

10b. Were you successful in these attempts? (Yes/No). (score '1' for no and '0' for yes)

11. In the past 12 months, is there anyone else who would say that you have had difficulty controlling your gambling, regardless of whether you agreed with them or not? (Yes/No).

IMPAIRED CONTROL SCORE	/4
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12. In the past 12 months, would you say you have been preoccupied with gambling? (Yes/No).

13. In the past 12 months, when you were not gambling did you often experience irritability, restlessness or strong cravings for it? (Yes/No).

14. In the past 12 months, did you find you needed to gamble with larger and larger amounts of money to achieve the same level of excitement? (Yes/No).

OTHER ISSUES SCORE	/3
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TOTAL SCORE	/14
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PPGM Scoring and Classification

PATHOLOGICAL GAMBLER (4)

1. Problems Score of 1 or higher, plus
2. Impaired Control Score of 1 or higher, plus
3. Total Score of 5 or higher, plus
4. Reported gambling frequency of at least once a month on some form of gambling.

PROBLEM GAMBLER (3)

1. Problems Score of 1 or higher, plus
2. Impaired Control Score of 1 or higher, plus
3. Total Score of 2 to 4, plus
4. Reported gambling frequency of at least once a month on some form of gambling.

OR

1. Total Score of 3 or higher, plus
2. Frequency of gambling¹⁰³ AND average reported gambling loss (not net loss)¹⁰⁴ \geq median for unambiguously identified Problem and Pathological Gamblers in the population (i.e., as established by the most recent population prevalence survey).

AT RISK GAMBLER (2) (this category also includes people who may be problem gamblers in denial)

1. Does not meet criteria for Problem or Pathological gambling, plus
2. Total Score of 1 or higher

OR

1. Frequency of gambling¹ AND average reported gambling loss (not net loss)² \geq median for unambiguously identified Problem and Pathological Gamblers in the population (i.e., as established by the most recent population prevalence survey).

RECREATIONAL GAMBLER (1)

- Gambler who does not meet criteria for Pathological, Problem or At-Risk gambler.

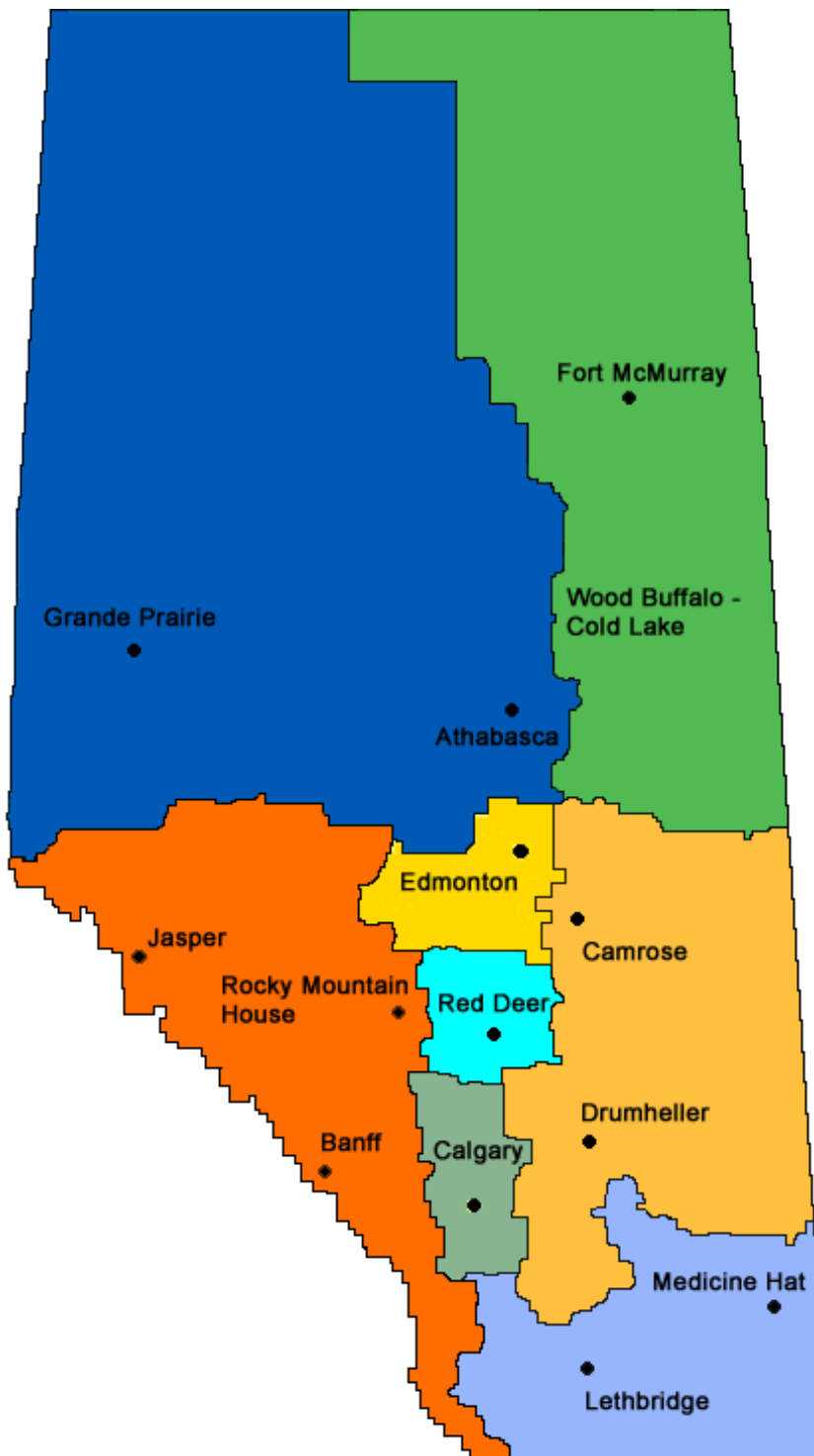
NON-GAMBLER (0)

- No reported gambling on any form in past year.

¹⁰³ Simplest way of establishing this is using the highest frequency of gambling reported for any individual form in the past year.

¹⁰⁴ Reported gambling losses tend to be a more accurate estimate of true losses compared to net loss, especially in problem gamblers (i.e., problem gamblers often report winning as much or more than they lose and thus may not report any net loss) (Wood, R.T. & Williams, R.J. (2007). How much money do you spend on gambling? The comparative validity of question wordings used to assess gambling expenditure. *International Journal of Social Research Methodology: Theory & Practice*, 10 (1), 63-77. <http://hdl.handle.net/10133/752>. Note: The person's income and net worth/debt can be taken into account when deciding whether the gambling loss criterion should apply.

Appendix F: Alberta's Economic Regions



Appendix G: AGLC Casino Approval Procedure

Approved on 19 January 2001, the First Nations gaming policy allowed for the operation of reserve casinos according to Alberta's charitable gaming model. Under the policy established for the Alberta Gaming and Liquor Commission (AGLC), re-serve casinos are required to adhere to the terms and conditions established for other charitable casinos in the province. The eight-step proposal format is as follows:

1. An interested group or individual expresses formal interest in developing a casino in a community.
2. The AGLC issues a notice of expressed interest for a traditional casino or a First Nations casino, as the case may be, determined by the location of the community. The AGLC places an advertisement in a local newspaper, advising interested parties that the AGLC will accept expressions of interest from other groups or individuals for this licence. This process allows all interested parties in a specified area an opportunity to make an application for a casino facility licence in that area and be considered at the same time as the original applicant. The AGLC will advise all municipal and band councils in the surrounding community of the interest in the proposed facility.
3. The AGLC conducts an initial assessment to determine if the responses have merit and meet basic criteria related to market demand and benefit to charitable groups. At this stage, the AGLC does not require municipal land use, zoning, or development approval for an expression of interest to be deemed valid. Applicants are expected to defer seeking appropriate municipal approvals until advised in writing by the AGLC.
4. The Board of the AGLC considers community support — or the lack thereof — as expressed through the municipal or band council, and may conclude the process if, in the Board's view, the council does not support the concept of a new casino facility in the community. If the council is silent and there is no demonstrated opposition, the Board, at its discretion, may decide to continue the application process.
5. The AGLC accepts detailed proposals from applicants who have expressed an interest in the development of a casino in the community under consideration. The proposals must include a business plan, and the applicant must demonstrate to the Commission that the proposal has taken into consideration factors that may affect the community and adjacent communities. The applicants are also required to issue a public notice of their application for a casino facility licence. The AGLC will advise all councils in the surrounding community of any proposals received.
6. A selection committee evaluates proposals using stringent criteria, and the best proposal is selected.

7. A thorough due diligence investigation is conducted into the proponents and other key persons or organizations associated with the selected proposal.
8. If all requirements for a gaming facility have been met (federal and provincial legislation, regulation, and policies, and municipal requirements, permits, licences, or authorizations) the AGLC will make a recommendation to the Board respecting the issuance of a casino facility licence to the successful applicant.