# Informing the Public Debate: Academic Research on Social Costs and Casinos

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## **Executive Summary**

This document is the third in a series intended to inform policy debates on the potential development of a casino resort in the Greater Toronto Area (GTA). The series focuses on common debates that tend to occur during the expansion of gaming in a jurisdiction. In this third report, our focus relates to academic research on the social costs of gaming. While this topic has been the focus of extensive academic research, it is an area that has lacked consensus. This report describes the extent to which this literature can be useful to policymakers.

Social costs are real, and they are an important consideration when considering any new development in a community. However, given the state of the research literature at this time, we encourage skepticism of any party that suggests that they can unequivocally calculate the social costs of casino gaming in the GTA. This is especially true when the methodologies employed rely on dated, irrelevant, or inappropriate data. In our view, and unfortunately for GTA policymakers, there are no current peer-reviewed social cost accounting studies that are sufficiently trustworthy and applicable to the proposed GTA resort-casino. In addition, recent reports by the Centre for Addiction and Mental Health and Toronto Public Health do not, as they acknowledge, address the full range of issues that are important to consider in social cost studies. Specifically, they do not include important studies in the research literature on public health effects of casinos, and they also exclude analyses of employment, economic development, crime, motor vehicle traffic, and other community impacts of casino expansion – all of which need to be incorporated into any comprehensive assessment of social costs (and relatedly, benefits) associated with casino development.

Based on our observations of the literature and the proposed developments, we do believe that if the GTA decides to move forward with the development of an integrated resort casino (instead of a gaming-only facility), there is reason for cautious optimism in at least one sense. Specifically, this facility's tourist-oriented nature, along with the globally recognized research, treatment, and education resources in the area, should lead policymakers to have confidence that the GTA's process can and will constitute a "best practice" approach to casino resort development – at least from the perspective of recognizing, addressing, and mitigating certain social costs.



## 1 Introduction

This document is the third in a series intended to inform policy debates on the potential development of a casino resort in the Greater Toronto Area (GTA). The series focuses on common debates that tend to occur during the expansion of gaming in a jurisdiction. Our intent is to not to advise on the decision to approve or disapprove casino resort development, but rather to outline the relevant academic research pertaining to these issues, and then to provide reasoned applications to the unique economic and social environment in the Greater Toronto Area. This latter step is particularly important in policy considerations, since potential gaming jurisdictions can vary significantly in terms of market structure, amenities, population demographics, economic characteristics, and public health support systems.

In this third report, we focus on academic research on the social costs of gaming. While this topic has been the focus of a number of studies, the research area remains contentious overall. This report describes the extent to which this literature can be useful to policymakers, and the limitations of available research. The sections that follow also include an overview of the conceptual and methodological difficulties in measuring these types of social costs.

## 2 Background

In early 2012, the Ontario Lottery and Gaming Corporation (OLG) announced formal plans to develop a new casino in Greater Toronto. The plan, which is expected to elicit bids from large commercial gaming corporations, is projected to include an "integrated resort" property, combining hotel, restaurant, entertainment, retail, and convention facilities along with gaming amenities.

Presently, there are several forms of gaming available in the GTA, although there is no resort-style casino gaming within an hour's drive of the downtown core. The nearest commercial resort-style casinos are Niagara Fallsview and Casino Rama, located well outside of the city limits, and there are OLG slot machines at more nearby racetrack casinos, such as Woodbine, Georgia Downs, and Ajax Downs.<sup>1</sup> Lotteries, pari-mutuel horse racing, bingo, and multi-game sports wagering are all accessible, and OLG has expressed its

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intention to roll out various forms of Internet gaming, beginning in 2013.

<sup>&</sup>lt;sup>1</sup> There is also a temporary casino at the CNE during a portion of the summer.

In engaging these debates, critics often cite ad hoc research that may or may not be entirely relevant to this particular market – as it may ignore other multidisciplinary fields of research that are relevant to the topic (e.g., sociology, economics, and criminology) or predate an era with modern responsible gambling programs. Whenever possible when engaging these debates, we believe that policymakers should rely on current peer-reviewed research, as it has been subjected to the full rigors of the academic process.

What follows in this paper is carefully reasoned set of policy considerations, drawing on empirical results and theory from the most robust peer-reviewed studies available on the social costs of casinos. As we mentioned in the introduction, there are significant challenges in measuring the social costs of gambling, leading to many areas of legitimate debate that have not yet been resolved between gambling researchers. As a result, we suggest that this is a field where a healthy amount of skepticism is merited when considering claims made with absolute certitude.

#### 3 Issues

#### 3.1 Understanding Social Costs of Gambling

The gambling research field agrees that there are social costs associated with casino gambling. In fact, the founding figure in this research field, Dr. William Eadington, sums up this perspective nicely by dividing the arguments against gambling into three general categories (Eadington, 1996):

"Gambling is immoral and inconsistent with religious views; Gambling is linked to organized crime, fraud, and corruption; and Gambling leads to problem gambling and consequent social costs."

Of these, the first argument remains potent, but societal changes mean that this no longer tends to be the primary policy consideration when introducing gambling. Meanwhile, categories two and three are generally thought to constitute "social costs" of gambling. However, researchers are much more divided on what specific items constitute these social costs, and how these costs should be measured – in terms of both scope and method. This lack of consensus has not been the result of a lack of effort. As noted by an oft-published scholar in the area of social cost estimation, Walker (2008) points out that:

"The gambling literature has lacked a consensus on the definition of 'social cost,' though there have been serious attempts to come to an agreement. With no standardized definition, interpreting and comparing social cost estimates can be tricky."

Indeed, it is important to keep this in mind when considering any studies in this particular field. Even market-specific research should be applied with caution: for example, Chhabra (2007) performs a cost/benefit analysis of casino gambling in Iowa, but in doing so he also warns:



"Studies on benefits and costs of casino gambling are characterized by a high degree of heterogeneity in methodology and indicators used...Additionally, net impacts vary across different communities and statewide positive net impact computations can sometimes be misleading because the overall picture does not capture county-specific effects."

In other words, there can be profound differences in the way that costs are conceptualized (e.g. including only costs that problem gamblers cause to other people vs. including costs they might cause to themselves) and the variables we might use to measure them (e.g. assigning dollar

There can be profound differences in the way that costs are conceptualized and the variables we might use to measure them. In addition, these costs may affect varying regions in very different ways (depending on whether social costs are borne by non-resident tourists or not). values or using qualitative descriptions). In addition, these costs may affect varying regions in very different ways (depending upon whether social costs are borne by non-resident tourists or not).

The primary reason that social cost estimates are so difficult to compare is that there are several legitimate ways to define a social cost. Walker (2007) highlights three different perspectives for socioeconomic cost/benefit analyses that have gained traction, and that are generally believed to have merit in the literature:

- i. The cost of illness approach: this approach attempts to estimate the social costs of treatment, prevention, research, law enforcement and lost productivity from problem gamblers;
- ii. The economic approach: this approach looks at how much less an economy may produce overall as a result of gambling-related costs, ignoring transfers among different people or parties. For example, costs of collecting gambling related debts would be included since it is an added transaction cost, but the debt itself would not be included since it is simply a transfer of wealth from an economic point of view.
- iii. The public health approach: this approach is a more holistic view of gambling-related problems that includes some cost analysis, but also considers components that researchers cannot easily measure, focusing on items like prevention, treatment, and quality of life.

In addition to the availability of several different approaches to social cost estimation, a secondary reason why estimates can be so unreliable is a (mis)understanding of the approaches themselves. In providing a description of the sources of these studies' variation in social cost estimates, Collins and Lapsley (2003) point to two common sources of error:<sup>2</sup>

 $<sup>^2</sup>$  The authors themselves also categorize and describe many different activities associated with gambling that could be considered social costs that are somewhat arbitrarily divided into tangible costs and intangible costs, where intangible costs are those that cannot be readily computed empirically. However, this division seems to be more so on the basis of the ease with which the activities can be estimated, and many of these costs – such as loss of life –

"... (the first are) theoretical errors which result in the production of social cost estimates which are simply incorrect. The major error here tends to arise from confusion between real and pecuniary (that is, transfer) costs. Walker and Barnett (1999) provide a detailed analysis of such errors arising in American studies."

And secondly,

"Different treatment of areas of genuine theoretical controversy. For example, the treatment of the issue of rationality is one on which the literature has yet to reach a conclusive judgment. It is, nevertheless, a crucial aspect of the definition of social costs."

Put simply, some researchers make fundamental errors by either defining a social cost too broadly (or too narrowly), while others make assumptions about whether, for example, problem gamblers are acting irrationally if they gamble excessively.

To illustrate how these (and other) definitions of social costs can create substantial differences in estimates, consider an article by Walker (2008) that critiqued a prior study by Thompson and Schwer (2005). Walker re-calculated the estimated social costs framed by Thompson and Schwer, but Walker used a different methodology based on a definition of social costs that is favored by economists. He concludes thusly:

"After considering the various effects in the context of the economics definition of social costs, most of the effects identified by Thompson and Schwer (2005) turn out to be private or internalized costs and thus should be removed from the social cost estimate. Without debating how they arrive at their specific dollar estimates, the social cost estimate would be reduced to \$1,579 by eliminating transfers and private costs. Taking for granted the prevalence ... it becomes clear that without a very careful review of the inputs of a social cost calculation, it is difficult to trust or even understand the recommendations that the output is providing to policymakers

estimates and related calculations by Thompson and Schwer (2005), the cumulative social costs ...would be revised from \$314-545 million down to \$25-44 million per year."

Looking at these results, it becomes clear that without a very careful review of the inputs of a social cost calculation, it is difficult to trust or even understand the recommendations that the output is providing to policymakers – as these estimates vary by over ten-fold!

have been estimated empirically in the past. The authors do note that many of the intangible costs are difficult to value and are prone to large variation in terms of order of magnitude.

Another strong illustration of how a detailed understanding of study inputs is important is provided by Walker (2007), who outlines a simple case of how limitations can lead to biased estimates of social costs:

"In many cases, social cost estimates are derived from responses given by Gamblers Anonymous (GA) members. Examples of this type of study include Thompson et al. (1997) and Schwer, Thompson, and Nakamuro (2003)... Extrapolating from the experience of the most serious problem gamblers to the general population is inappropriate"

While most researchers would agree that Walker's assessment of these papers' weaknesses is correct, what is less clear is whether there are more reliable estimates available. Unfortunately, social cost accounting is not only potentially unreliable, it is also resource consuming, so it is common for researchers to take shortcuts (like basing costs for all gamblers on the experiences of the most serious problem gamblers).

## 4 Implications for the Proposed Toronto Market

In our view, and unfortunately for GTA policymakers, there are no strong social cost accounting studies that are sufficiently trustworthy and applicable to the proposed GTA resort-casino. In Toronto, we have observed citations of research conducted by Grinols and Mustard (2001), suggesting that social costs clearly outweigh the benefits of casinos. However, this paper has

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Unfortunately, we believe that using this study for policy decisions is a "worse than

useless" approach, as described by Walker and Barnett (1999):

"Under any circumstance, assessing the social costs and benefits of a public policy is a difficult and imprecise endeavor. Even with a clear and conceptually defensible definition of social costs and benefits, the practical problems of quantifying policy impacts are formidable. In short, the best of such studies should be taken with a liberal grain of salt.



But when these studies are done without the conceptual guidance provided by a clear, explicit definition of what is being measured, the results of the studies can be worse than useless. They are more likely to obscure relevant issues than to inform the policy debate."

Another oft-cited publication is the recent report by the Centre for Addiction and Mental Health (CAMH) and Toronto Public Health (2012). While this report invokes the public health approach method in their review of a proposed casino, it does not mention other valid methodological options, like the economic or cost of illness approaches outlined above. In fact, this report notes that it relies entirely on a non-peer reviewed study co...to the extent that casino resort developments serve as a tourism draw, bringing in customers from outside of the region, social costs will be reduced

authored by psychologists to inform a literature review of social and economic impacts of casino effects in Toronto (Williams, Rehm, and Stevens, 2011). Unfortunately, it ignores a similar study on socio-economic impacts of gaming in Alberta that included some different results (Humphreys et al., 2011). For example, this latter study found strong causal evidence that casino participation substantially increased Albertan's happiness levels, which would be useful data when considering the comprehensive social, economic, and health impacts of casino expansion.<sup>3</sup> While this omission is perhaps understandable given time and resource constraints, this report's approach needs to be understood against the backdrop of the broader research literature.

In addition, while the report is titled "The Health Impacts of Gambling Expansion in Toronto," it notes that:

"This report was limited in scope to the potential impact of gambling expansion on problem gambling. Employment, economic development, crime, motor vehicle traffic, and other community impacts were outside the scope of this report, though these factors affect the health and well-being of individuals, families and communities."

Once again, these limitations are understandable, but they are not consistent with a comprehensive assessment of health impacts, as the title implies. At the very least, research in this area needs to be appropriately thorough and appropriately cautious, acknowledging the very real limitations and methodological concerns expressed in this broad research field.

Social cost analysis can be a very powerful tool in making decisions, but our current belief is that social cost estimates should not be considered a reliable decision-making tool for the adoption or rejection of casinos until an inter-disciplinary consensus is reached among researchers. That said, we do have cautious optimism that some of the social cost literature can inform broader considerations in the GTA debates. For example, this literature suggests broadly

<sup>&</sup>lt;sup>3</sup> Both of these reports remain outside of the scope of our report, as we seek to focus on peer-reviewed academic studies.

that to the extent that casino resort developments serve as a tourism draw, bringing in customers from outside of the region, social costs should be reduced (Eadington, 1999). Also, we would note that the presence of strong research, treatment, and education resources in the area will serve to further reduce social costs – and in the GTA and Ontario, these resources are globally recognized as leaders in the field.

## 5 Conclusion

This study examined the social cost literature in order to provide an assessment of its relevance to the proposed resort-casino in the GTA. Social costs are an important consideration, but unfortunately, this is a research field that is far from definitive. In fact, there seem to be no clear examples of social cost accounting studies that are sufficiently trustworthy and applicable to the proposed GTA development. In general, academics agree that there is too much disagreement in the current research literature to provide firm direction or solid quantifiable estimates of these social costs.

Based on our observations of the literature and the proposed developments, however, we do believe that if the GTA decides to move forward with the development of an integrated resort casino (instead of a gaming-only facility), there is reason for cautious optimism in at least one sense. Specifically, this facility's tourist-oriented nature, along with the globally recognized research, treatment, and education resources in the area, should lead policymakers to have confidence that the GTA's process can and will constitute a "best practice" approach to casino resort development -- at least from the perspective of recognizing, addressing, and mitigating certain social costs.



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#### References

- Chhabra, D. (2007). Estimating benefits and costs of casino gambling in Iowa, United States. *Journal of Travel Research*, 46, 173-182.
- Collins, D., and Lapsley, H. (2003). The social costs and benefits of gambling: An introduction to the economic issues. *Journal of Gambling Studies*, *19*(2), 123-148.
- Eadington, W.R. (1999). The economics of casino gaming. *The Journal of Economic Perspectives*, *13*(3), 173-192.
- Grinols, E. L., and Mustard, D. B. (2001). Business profitability versus social profitability: Evaluating industries with externalities, the case of casinos. *Managerial and Decision Economics*, 22(1-3), 143-162.
- Humphreys, B.R., Soebbing B.P., Wynne, H., Turvey, J., and Lee, Y.S. (2011). *The Socio-Economic Impact of Gambling in Alberta*. Available at: http://dspace.ucalgary.ca/bitstream/1880/48545/1/Humphreys\_et\_al\_final\_May\_25\_2011.pd f.
- Thompson, W. and Schwer, K. (2005). Beyond the Limits of Recreation: Social Costs of Gambling in Southern Nevada. *Journal of Public Budgeting, Accounting & Financial Management, 17*(1), 62-93.
- Thompson, W., Gazel, R., and Rickman, D. (1997). Social and legal costs of compulsive gambling. *Gaming Law Review*, *1*(1), 81-89.
- Toronto Public Health (2012). *The Health Impacts of Gambling Expansion in Toronto.-Technical Report*. Available at: http://www.toronto.ca/legdocs/mmis/2012/hl/bgrd/backgroundfile-51873.pdf
- Walker, D.M. (2007). Benefit-cost analysis: Problems in quantifying the social costs and benefits of gambling. *American Journal of Economics and Sociology*, 66(3), 609-644.
- Walker, D.M. (2008). Clarification of the social costs of gambling. *Journal of Public Budgeting, Accounting & Financial Management, 20*(2), 141-152.
- Walker, D.M. and Barnett, A.H. (1999). The social costs of gambling: An economic perspective. *Journal of Gambling Studies*, 15(3), 181-212.
- Williams, R. J., Rehm, J., and Stevens, R. (2011). The social and economic impacts of gambling. Available at: https://uleth.ca/dspace/bitstream/handle/10133/1286/SEIG\_FINAL\_REPORT\_2011.pdf?seq uence=1



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