



REVIEW OF THE ECONOMIC IMPACTS OF GAMBLING



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SGS Economics and Planning Pty Ltd
ACN 007 437 729
www.sgsep.com.au
Offices in Canberra, Hobart, Melbourne, Sydney

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EXECUTIVE SUMMARY

Purpose

The current City of Greater Bendigo Gaming Policy – Accessible but not Convenient – was established in 2008. Since this time there have been changes to State Government legislation, and significant work has been undertaken across Victoria to better understand the social and economic impacts of gambling. The City of Greater Bendigo (Council) recognises the importance of this and has included reducing harm from gambling as a priority area in the 2017 – 2021 Greater Bendigo Municipal Public Health and Wellbeing Plan.

The City is now developing a new policy, to be referred to as Council's Reducing Harm from Gambling Policy. SGS were engaged by the City of Greater Bendigo to prepare this Report to provide Council with a clear understanding of the net economic and social impacts of gambling, in particular gambling associated with electronic gaming machines (EGMs).

Recently, the cap on EGM entitlements within the City of Greater Bendigo was increased from 663, as stipulated under the Gambling Regulation Act 2003, to 870. This has raised the prospect of an additional 207 EGMs being established in the local community. This document will provide an important resource for Council in ensuring that entitlements to operate these EGMs (if they are to be established) are attached to City of Greater Bendigo locations that are best able to accommodate them with minimal cost to local communities. Further, the document will help to ensure that new or expended venues are established subject to conditions that ensure that local communities derive maximum benefit.

The need for a new policy was driven by was driven by the age of the previous policy, the potential to take a broader public health approach to management of EGM-related harms, and the emergence of new evidence on EGM-related community harm.

Literature review

SGS' literature review addressed the most significant studies on the impact of the gambling sector on Victorian and Australian communities. It included notable studies by the Victorian Responsible Gambling Foundation and the Australian Gambling Research Centre. Among key findings are:

- that gambling generates costs that appear to be out of proportion to the scale of the industry, the tax revenue generated, and any generous assumptions about the likely recreational value of the activity to Victorians¹;
- the prevalence of EGM gambling and problem gambling on EGMs in Victoria is high and increasing²;
- EGMs are clearly the form of gambling associated with the greatest level of community harm, with 91 per cent of problem gamblers gambling on EGMs, compared with only 34 per cent on races, 25 per cent on table games and 16 per cent on sports³;
- characteristics of EGM gamblers confirm those people who are unemployed, low income earners and have mortgages have a higher spend on EGMs⁴; and

¹ Browne, M, Greer, N, Armstrong, T, Doran, C, Kinchin, I, Langham, E & Rockloff, M (2017). The social cost of gambling to Victoria, Victorian Responsible Gambling Foundation, Melbourne

² Howe, P, Vargas-Saenz, A, Hulbert, C, Boldero, J, (2018). Gambling and problem gambling in Victoria, Victorian Responsible Gambling Foundation, Melbourne

³ Billi, R., Stone, C.A., Marden, P., Yeung, K., (2014). The Victorian Gambling Study: A longitudinal study of gambling and health in Victoria, 2008–2012. Victoria, Australia: Victorian Responsible Gambling Foundation.

⁴ Brown, K., Pickernell, D., Keast, R., McGovern, M. (2011). Socio-economic impacts of access to electronic gaming machines in Victoria. Queensland University of Technology

- an estimated forty percent of gambling expenditure by regular gamblers, aggregated across all activities, was accounted for by the 17 per cent who experienced problems⁵.

Wider costs of problem gambling were also revealed, including its correlation with poor health, trauma and social isolation⁶, and the impacts on families of problem gamblers⁷.

A review of Ian Pinge's work for Council on EGMs in Bendigo was also conducted. The 2008 report sets out to assess the economic impact of EGMs, concluding that they are detrimental to the economy of Greater Bendigo.

The current gambling landscape in Greater Bendigo

A statistical review of gambling in Greater Bendigo found that EGM gambling is by far the dominant form of gambling in terms of expenditure (\$47 million in 2017/18), followed by racing (\$10 million) and Lotto (\$9.3 million). Sports betting (\$5.1 million) was found to be the fastest growing, with expenditure growing at an average rate of 23 per cent per annum since 2006/07.

The Victorian Responsible Gambling Foundation⁸ has found that the online accessibility of sports betting, as well as the saturation of advertisements, promotions and inducements in sports and sports-related media have arguably normalised sports betting the sports betting with type of gambling emerging as a significant contributor to problem gambling, especially among younger adult males.

A review of EGMs in Greater Bendigo found that EGM expenditure has grown between 2008/09 and 2017/18, from \$46.5 million to \$48.7 million; an average annual growth rate of 0.5 per cent per annum. When considering EGM expenditure by machine and per capita, expenditure has actually fallen slightly over the same period (-0.5 per cent and -1.2 per cent per annum respectively). This may be due to State Government legislation introduced to prevent problem gambling and reduce community harm. It should be noted however that EGM expenditure in Victoria in 2017/18 was at its highest level in a decade.

It was also revealed that EGM venues in Greater Bendigo are located in areas of socio-economic disadvantage and that expenditure per machine is dictated by whether the venue is a club or hotel. Expenditure per EGM is \$103,234 in hotels, but lower in clubs at \$64,375.

Estimated economic impact

This section replicated the analysis by Pinge (2008) on the economic impact of EGMs in Bendigo. It considered the economic impact of the recently announced (September 2017) changes to regional caps and municipal limits on gaming machine entitlements. This included new maximum permissible number of gaming machine entitlements in Greater Bendigo. Under the new cap an additional 207 EGMS are permitted in the municipality.

In the analysis it was found that Pinge's conclusions remain valid, and that an increase in the number of EGMs in the City of Greater Bendigo will lead to a reduction in regional expenditure, and a decline in local employment. SGS have used updated input-output tables to show that if new EGM expenditure generated by the increase in the regional cap is redirected away from mixed spending on food and beverage services (hospitality) and retail the impact is a loss of \$3.2 million of economic value-add per annum and 40 jobs across the Greater Bendigo economy.

⁵ Armstrong, A., & Carroll, M. (2017) Gambling Activity in Australia. Australian Gambling Research Centre, Australian Institute of Family Studies.

⁶ Billi, R., Stone, C.A., Marden, P., Yeung, K., (2014). The Victorian Gambling Study: A longitudinal study of gambling and health in Victoria, 2008–2012. Victoria, Australia: Victorian Responsible Gambling Foundation

⁷ Australian Gambling Research Centre (2014). The impact of gambling problems on families AGRC Discussion Paper No. 1 – November 2014.

⁸ Jenkinson, R, de Lacey-Vawdon, C, Carroll, M, 2018, Weighing up the odds: young men, sports and betting, Victorian Responsible Gambling Foundation, Melbourne

Net community benefit

The increase in the regional cap was also considered from a net community benefit perspective, which includes a range of costs and benefits besides the economic factors. This includes the cost of problem gambling and the positive benefits from the safe recreational use of EGMs, community contributions made by venues, and any induced spending on capital works and employment.

The assessment found that under the most realistic outcomes from the increase in EGMs in Greater Bendigo, the overall community impact would be detrimental. The harm generated via problem gambling of each additional EGM is not likely to be off-set by the benefits generated. It was found that for every dollar of community impact only 31 cents was offset from recreational benefits, 10 cents from community contributions, 5 cents from induced capital works, and 3 cents from community use of new or facilities; for a total of 49 cents off-set per dollar of community harm. Once regional impacts on employment are included, only 43 cents per dollar of harm is off-set.

Even under a more optimistic scenario with a 25 per cent reduction in harm (from 40 per cent to 30 per cent of gambling expenditure) and an increase in all the benefits, including the addition of benefits from increased employment, the community costs still outweigh the benefits.

Council response

SGS modelling estimates that, in order to achieve an outcome where costs associated with the introduction of additional EGMs to Greater Bendigo are fully offset, \$57.2 million of community benefits must be generated over the twenty-year time period under the realistic, or BAU, scenario. This is equivalent to benefits equivalent to around \$275,000 per EGM.

The key for Council in achieving a community benefit, through their policies and actions, is to limit the community costs and increase the benefits.

Ways in which Council can achieve this are to:

- Minimise expenditure from problem gamblers and ensure that as much EGM expenditure as possible derives from non-problematic users. Ways in which Council could seek to achieve this include:
 - Given that expenditure per machine is significantly higher in hotels than clubs, (where reasonable) favour the expansion of EGMs into club rather than hotel venues.
 - Given the increased risk of problem gambling among low socio-economic groups, ensure that the new EGMs are located in regions whose populations are relatively advantaged.
 - Ensure that new venues are not located in highly-visible prominent locations, or close to activity centres. 'Destination venues' should be favoured.
 - Ensure that new and expanded venues are designed in such a way that EGMs are separated from non-EGM parts of a venue.
 - Continued pressure should also be placed on existing and new venue operators to operate in accordance with all safe gambling requirements.
- Increase the benefit associated with community use of a new, expanded or redeveloped facility by ensuring that EGM applications are tied to new or vastly improved services for community members that don't use EGMs.
- Increase the benefits from expenditure on capital works by securing guarantees that capital works will be performed. Encouraging the use of local contractors whenever possible will also increase the benefits.
- Venue operators should agree to make significant and on-going community contributions to community groups. Contributions should ideally be in the form of donations, gifts and sponsorships to local community and support groups. Community contributions are often

held up by venues as evidence that they benefit the community. However, as demonstrated in this analysis, community contributions are typically insignificant in comparison to the harm generated.

Conclusion

The economic impact assessment and net community benefit assessment in this report, supported by a literature review and consideration of the current gambling landscape in Greater Bendigo, found that new EGMs in the City of Greater Bendigo are likely to have an overall negative impact on the community of Greater Bendigo.

The increased cap is expected to lead to a negative outcome from an economic impact perspective (chapter 4). If the increased cap is fully realised and 207 new EGM machines are installed in the municipality, and new EGM expenditure is redirected away from mixed spending on food and beverage services (hospitality) and retail, the impact is a loss of \$3.2 million of economic value-add per annum and 39.7 jobs.

The assessment of the net community benefit of the increase in the regional cap found that the likely costs to the community from gambling on the new EGMs is likely to be in the range of \$38.7 million to \$52.8 million, in present value terms, over twenty years. It is clear that, all else being equal, the establishment of EGMs in a community will have a detrimental impact on the local community. This is recognised in legislation, with venue operators required to demonstrate how these negative impacts of their proposals will be offset by community benefits.

In order to offset the costs of problem gambling associated with EGMs, there are a range of benefits that can be considered, namely the consumer surplus non-problem gamblers enjoy, expenditure on capital works for new or improved venues tied to the increase in EGM expenditure, any labour surplus generated from new employment opportunities for workers in the municipality, improved facilities that can be utilised by the community and community contributions made by venue operators.

In managing the detrimental impacts of EGMs in the Greater Bendigo community, Council should seek to ensure that the costs of problem gambling are offset by donations, gifts and sponsorships (including cash, goods and services) made directly to community clubs and organisations. It is important to recognise that these community contributions can only ever hope to partly offset the costs of problem gambling on EGMs. It is estimated that annual contributions of around \$2,500 per annum lead to benefits over a 20-year period equivalent to only around 11 per cent of total costs.

1. INTRODUCTION

1.1 Overview

The current City of Greater Bendigo Gaming Policy – ‘*Accessible but not Convenient*’ – was developed in 2008. Since then there have been changes to State Government legislation, and significant work has been undertaken across Victoria to better understand the social and economic impacts of gambling. The City recognises the importance of this and has included reducing harm from gambling as a priority area in the *2017 – 2021 Greater Bendigo Municipal Public Health and Wellbeing Plan*.

On 20 September 2017, the Minister for Consumer Affairs, Gaming and Liquor Regulation announced a number of changes to regional caps and municipal limits on gaming machine entitlements, with the cap on EGM entitlements within the City of Greater Bendigo increased from 663 to 870.

This has raised the prospect of an additional 207 EGMs being established in the local community. This document will provide an important resource for Council in ensuring that entitlements to operate these EGMs (if they are to be established) are attached to City of Greater Bendigo locations that are best able to accommodate them with minimal cost to local communities. Further, the document will help to ensure that new or expended venues are established subject to conditions that ensure that local communities derive maximum benefit.

The City is now developing a new policy, to be referred to as the City’s *Reducing Harm from Gambling* Policy. This policy will draw extensively on the research conducted by the Victorian Gambling Foundation.

The economic impact assessments in this Report will be developed concurrently to a range of other Council and external activities including a social impact study, review of the City’s current policies, an issues and opportunities paper and an extensive community engagement process. Together these will provide a comprehensive understanding of the current social and economic impacts of gambling on the local community and will allow the City to take a public health approach in the development of a new policy that will reduce harm from gambling.

It is hoped that this Report will assist Council in developing a strong local planning policy to guide decision making when dealing with applications for planning approvals for electronic gaming machines (EGMs) and to develop measures to counter problem gambling in other areas.

The need for a new policy was driven by was driven by the age of the previous policy, the potential to take a broader public health approach to management of EGM-related harms, and the emergence of new evidence on EGM-related community harm.

1.2 Structure

A brief literature review is performed first (chapter 2), including a review of Ian Pinge’s work for Council on EGMs in Bendigo. There have been several very significant studies about the impact of gaming sector since the Pinge Report. A summary of this updated research is provided.

Chapter 3 explores the present-day situation regrading gambling and EGM use in Greater Bendigo including the number, distribution and performance of EGMs and venues as well as a consideration of trends over the past ten years. State and regional indicators are also provided to give context to Greater Bendigo.

In chapter 4, SGS then broadly replicates the approach adopted by Ian Pinge in 2008, using an updated input-output model for the Greater Bendigo economy, to once again estimate the economic impact of EGM gambling across the municipality, and the likely economic impacts of the increase in gaming machine entitlements.

Chapters 5 and 6 then take the economic analysis further by utilising a structured cost-benefit framework in which SGS quantify cost and benefit categories to provide an enhanced understanding of the range and scale of impacts. The purpose of this section is to provide an independent assessment as to whether an increase in the number of EGMs in the municipality would represent a net benefit or detriment to the local community from a wider social and economic perspective. Chapter 7 then considers how Council should respond to applications for planning approvals that enable a minimisation of costs and generate benefits for the community to offset harm.

2. LITERATURE REVIEW

2.1 Introduction

In undertaking other pieces of work concerned with the assessment of economic impacts associated with electronic gaming machines, SGS has a strong understanding of the social and economic impacts of electronic gaming machines on surrounding communities. In undertaking these engagements, SGS have undertaken extensive reviews of relevant literature into these impacts. The subsequent section explores the relevant literature and identifies those studies that relate most directly to the City of Greater Bendigo.

2.2 Electronic Gaming Machines in Bendigo

Pinge, I (2008). Electronic Gaming Machines in Bendigo 2008 – assessing their economic impact. Jimbrada. Prepared for the City of Greater Bendigo.

This 2008 report sets out to assess the economic impact of EGMs in Greater Bendigo. The author carries out a process of ‘hypothetical extraction’ using input-output tables to estimate the impact to the economy of removing EGMs and redirecting expenditure to other parts of the economy, concluding that the transfer of expenditure to EGMs from other sectors costs the Bendigo economy around \$20.5 million and 207 jobs.

The study reviews the distributional nature of EGM expenditure, highlighting the tendency for EGM venues to be located in areas of socio-economic disadvantage. State government taxes on EGM expenditures are therefore shown to be regressive, in that lower-earning cohorts make disproportionately large contributions.

The study also reviews a range of studies that attribute social costs to EGMs, including loss of job efficiency, poor health and increased crime.

The study assesses the likely impact of an additional 100 EGMs to the Greater Bendigo region, concluding that the introduction of these machines would cost the region around \$8 million in output and result in the loss of 29 jobs. This demonstrates that from a purely economic perspective, additional EGM’s would have a detrimental impact on Greater Bendigo.

2.3 The Social Cost of Gambling to Victoria

Browne, M, Greer, N, Armstrong, T, Doran, C, Kinchin, I, Langham, E & Rockloff, M (2017). The social cost of gambling to Victoria, Victorian Responsible Gambling Foundation, Melbourne.

In 2011 the Victorian Parliament created the Victorian Responsible Gambling Foundation. The Foundation has undertaken extensive research and has formed an evidence base for reducing harm from gambling. In this report, the authors of the study⁹ argue that while research in Australia had substantially advanced the understanding of gambling harm, attempts to estimate the aggregate costs caused by gambling harms on the individual, affected others and the community provide methodologies that are inconsistent and incomplete. In response, the Victorian Responsible Gambling Foundation (VRGF) identified the need for a comprehensive economic measure of the social cost of gambling. The objective of the research in the study was to estimate the current social cost of gambling in Victoria using all available information, including recent findings on gambling harms. The benefits of gambling, of which the authors recognise, are not quantified in the study.

⁹ Browne, M, Greer, N, Armstrong, T, Doran, C, Kinchin, I, Langham, E & Rockloff, M 2017, The social cost of gambling to Victoria, Victorian Responsible Gambling Foundation, Melbourne.

The first phase of the study utilised a systematic review of peer-reviewed literature on gambling-related harms and costs. The second phase estimates the cost of gambling-related harm at different levels of gambling severity levels (low-risk, moderate-risk, and problem gambling). The authors argue that all levels create a social cost, not just problem gambling.

The approach adopted an existing gambling framework that included gambling-related harms across a range of domains including;

- financial
- emotional and psychological
- relationships and family
- crime
- productivity loss and work
- the cost to the Victorian Government.

The social costs above were calculated using cost estimates for each item, the prevalence of gambling by severity level (the PGSI index) and population data.

TABLE 1: PREVALENCE OF GAMBLING IN VICTORIA BY PROBLEM GAMBLING SEVERITY

Problem gambling severity index (PGSI)	Prevalence in Victoria population	Estimated number in Victoria population
Non-gambler (last 12 months)	29.9%	1,312,769
Non-problem gambler (0 score)	57.6%	2,528,381
Low-risk gambler (1–2 score)	8.9%	391,206
Moderate-risk gambler (3–7 score)	2.8%	122,667
Problem gambler (8+ score)	0.8%	35,415

Source: Victorian Gambling and Health Study 2014 weighted dataset (Hare 2015)

The total cost of gambling problems in Victoria was estimated to be \$7 billion in 2014–15 with over one-third of this total cost attributable to low-risk gambling (\$2.45 billion), one-third to problem gambling (\$2.36 billion) and one-quarter to moderate-risk gambling (\$1.9 billion).

The study estimates the following breakdown of costs by broad category:

- 31 per cent of the total costs of gambling problems are accounted for by the costs to relationships and family;
- 23 per cent to emotional and psychological;
- 19 per cent to financial impacts;
- 16 per cent are costs borne by the Victorian Government.
- The remainder are attributed to crime (1 per cent) and loss of productivity and work impacts (9 per cent).

The Social Cost of Gambling to Victoria study also considers where the impacts accrue in terms of the gamblers themselves, affected others, the community and government. Gamblers themselves experience just over 45 per cent of the total costs, followed by affected others (such as the gambler's family) with 29 per cent, Government (18 per cent) and community/businesses (7 per cent).

The authors find that gambling leads to the redistribution of wealth from low-risk, moderate-risk and problem gamblers to other groups – including interests within government and industry. This is reflected in the finding that about 75 per cent of the total cost of gambling is borne by gamblers, their families and their social networks. The immediate cost is primarily felt in terms of financial deprivation due to the opportunity cost of funds spent on gambling. Financial deprivation leads to significant further costs in terms of quality of life to both gamblers and affected others. Major cost items include relationship and family breakdown and emotional and psychological suffering.

The authors conclude that although gambling is not the only industry or recreational pursuit that involves costs (road transportation and activities like surfing and SCUBA diving used as examples) the costs of gambling appear to be of a different magnitude when compared to the benefits. Although judgements about whether gambling is 'worth the cost' are beyond the scope of the report, the authors' conclusion is that gambling generates costs that appear to be out of proportion in relation to the scale of the industry, the tax revenue generated, and any generous assumptions about the likely recreational value of the activity to Victorians.

2.4 Gambling and Problem Gambling in Victoria

Howe, P, Vargas-Saenz, A, Hulbert, C, Boldero, J, (2018). Gambling and problem gambling in Victoria, Victorian Responsible Gambling Foundation, Melbourne

This study examined the prevalence of gambling and problem gambling in Victoria, how they vary with age and gender and how they have evolved from 2010 to 2016. The report also investigates which factors predict an individual's gambling frequency for different gambling activities.

The major findings of the study were:

- Gambling is highly prevalent in Victoria, more so than previously acknowledged. Approximately 95 per cent of adult Victorians had gambled in the previous year and half of adult Victorians have participated more than six times in at least one gambling activity in the previous year.
- Gambling prevalence generally increased from 2010 to 2016.
- The prevalence of high-risk problem gambling is greater than previously thought. The prevalence of high-risk problem gambling varies with age and peaks for the 25-34 year old age group for which the prevalence rate is 23 per cent. Averaged across all age groups, the prevalence rate is 11 per cent. This prevalence rate is higher than what the authors found in 2010 (8 per cent).
- The top five predictors of an individual's problem gambling severity index (PGSI) score were the individuals positive urgency score (which measures rashness or impulsivity); their frequency of use of EGM machines at pubs, hotels or sporting clubs; their frequency of discussing online betting on gaming tables at casinos; their frequency of gambling on the internet; the degree to which they overestimate the chances of winning.

2.5 Socio-economic impacts of access to electronic gaming machines in Victoria

Brown, K., Pickernell, D., Keast, R., McGovern, M. (2011). Socio-economic impacts of access to electronic gaming machines in Victoria. Queensland University of Technology

The theme of accessibility to gambling products is a key area of interest and focus for this study. The impact of venue characteristics in terms of size, venue type, service on offer and other operational features on demand are central to access-related issues.

Findings from the study include that:

- Characteristics of EGM gamblers confirm those people who are unemployed, low income earners and have mortgages tend to spend more on EGMs.
- Concentration of EGMs and venues with EGMs in poorer areas is evident. This profile is clear even within disadvantaged regions.
- Volunteering activity is linked to lower EGM spend per adult, per machine and as a proportion of income.
- Input-output analysis found that groups directly benefiting from EGM activity are the Victorian Government, EGM owners, the hotels and clubs who operate the machines, and those able to access Community Support Funds.
- EGM inputs are paid for by other firms in the services sector, other industry sectors and non-EGM operators in the hotel and club sectors in regions, in the form of reduced

spending. However, there are also spillovers to the local community from some of the beneficiaries.

- Tourism and related cultural activities assist in creating growth if aligned with gambling activities. There is a need to capitalise on synergies of clubs, tourism, cultural experiences and retail to improve, rather than diminish, local trade.
- For smaller gaming venues, such as community clubs, EGM gambling appears to direct a range of benefits to the community. These benefits include a contribution to community social capital and the provision of voluntary opportunities for community members. Both benefits are identified as strong mitigating factors to the harmful effects of EGM gambling.

2.6 The Victorian Gambling Study: A longitudinal study of gambling and health in Victoria 2008–2012

Billi, R., Stone, C.A., Marden, P., Yeung, K., (2014). The Victorian Gambling Study: A longitudinal study of gambling and health in Victoria, 2008–2012. Victoria, Australia: Victorian Responsible Gambling Foundation

This study is a large longitudinal study of gambling and health in Victoria. With a starting sample size of 15,000 Victorian adults (aged 18 years and over) in the first wave, it represents the largest study of its kind in Australia.

The main findings of the study included that:

- Most of the Victorian adult population gambles at least occasionally.
- In 2008, 73 per cent of adult Victorians participated in gambling activities, whereas 27 per cent did not.
- In Victoria in 2008, the estimated problem gambling prevalence was 0.7 per cent. An additional 2.4 per cent were moderate-risk gamblers and 5.7 per cent were low-risk gamblers.
- Problem gamblers are more likely to be young men (25–34 years old); be employed as a sales worker, machinery operator/driver or labourer; have an annual income of \$31,200–51,999 or annual household income of \$62,400–103,999.
- 91 per cent of problem gamblers gamble on EGMs, 34 per cent bet on races, 25 per cent gamble on table games and 16 per cent bet on sports.
- Problem gamblers reported poor health more often than zero-risk gamblers (i.e. non gamblers and non-problem gamblers).
- Problem gamblers were also more likely to report poor social capital – for example they don't feel valued by society, don't often volunteer, or are not often involved in community activities.
- Problem gamblers more often reported having experienced a lot of major trauma and hardship in their lives, compared with zero-risk gamblers.
- Progression from non-problem gambling to at-risk gambling (i.e. low-risk, moderate-risk or problem gambling) is associated with being male, speaking a language other than English, having a year 10 education or less, showing signs of alcohol dependence, having a lifetime problem or pathological gambling risk, and having anxiety and/or obesity.

2.7 Gambling Activity in Australia

Armstrong, A., & Carroll, M. (2017) Gambling Activity in Australia. Australian Gambling Research Centre, Australian Institute of Family Studies.

This report provides an overview of gambling activity in Australia in 2015, with respect to participation, expenditure, and problems among regular gamblers. The content consists primarily of descriptive statistics with a focus on population estimates. The statistics were obtained from cross-sectional analysis of Household, Income and Labour Dynamics in Australia (HILDA) Survey data, wave 15, which is the first wave to include gambling questions.

Key findings from the study included that while lotteries and instant scratch tickets were the most popular activities, individual gamblers spent comparatively little on these activities (\$248 per year). Those who gambled on Electronic Gaming Machines spent a great deal more per year (\$1,292 on average). So too did those who regularly gambled on races (\$1,308), sports (\$1,032), casino table games (\$1,369), and particularly poker (\$1,758).

Regular gamblers, viewed by activity, have quite different profiles. For example;

- lottery participants were over-represented among older couples living without children;
- EGM participants were over-represented among people for whom welfare payments formed their main source of income;
- bingo participants were over-represented among retired women living alone;
- regular race or sports bettors were over-represented among men on higher incomes, yet the race bettors were more likely to be older and live in outer regional/remote areas; and
- sports bettors were more likely to be younger and live in an inner-regional area or major city.

According to the survey, there are 1.1 million regular gamblers who are estimated to have behaved in ways that caused or put them at risk of gambling-related problems.

Those who experienced problems are generally more likely to be young, single, unemployed or not employed (excluding retirees and full-time students), Indigenous, men, living in rental accommodation, in a low socioeconomic area, and were more likely to draw their income from welfare payments than those who had no problems.

Problem gambling is high among participants in six activities (EGMs, race betting, sports betting, casino table games, private betting, and poker) with almost 1-in-2 gamblers on any of these activities experiencing one or more issues. Further, those experiencing the greatest problems spent more than four times as much on these activities, and on gambling overall, as those without problems. Well over half of all expenditure by regular gamblers on EGM, race and sports betting came from people who had problems.

Overall, “more than forty percent of gambling expenditure by regular gamblers, aggregated across all activities, was accounted for by the 17 per cent who experienced problems”.

2.8 The impact of gambling problems on families

Australian Gambling Research Centre (2014). The impact of gambling problems on families AGRC Discussion Paper No. 1 – November 2014.

This study by the AGRC found that gambling problems can have a significant impact on the families of problem gamblers including intimate partners, and other family members such as children, parents, grandparents and siblings. Common family impacts include financial hardship, impaired family relationships, diminished emotional and physical health, family conflict, mistrust, family neglect, communication breakdown and confusion about family roles and responsibilities. There is also consistent evidence that gambling problems are associated with family violence and gambling problems are passed down from one generation to the next.

2.9 2012 Victorian Competition and Efficiency Commission Inquiry

The aim of this inquiry was to inform policy makers and the community about the true costs of problem gambling and which groups bear them. The findings were to be used to ensure that government, the community and industry have the information and incentives necessary to reduce problem gambling, to develop harm reduction strategies that are based on robust evidence, targets and performance indicators, and thereby increase the net benefit from the conduct of gambling for all Victorians.

The report found that the combined social and estimated costs of problem gambling in 2010-11 across Victoria was between \$1.5 billion and \$2.8 billion.

The Commission qualifies these findings by recognising the indicative nature of these costs, and identifying the following obstacles to identifying the true economic and social cost of problem gambling in Victoria:

- There are significant data gaps, methodological issues and a lack of consistency among existing data sources. For example, there are gaps in survey data and a general lack of screening for problem gambling amongst users of health and social welfare services.
- Many of the costs are intangible and difficult to estimate and value.
- Problem gambling is often closely associated with other mental and physical issues, raising the question of causality due to comorbidities.

The report also addresses the idea that electronic gaming expenditure leads to a loss of employment (owing to the diversion of expenditure for more employment intensive sectors). The report concluded that the likely long-term impacts on employment were likely to be neutral, agreeing with the findings of the Productivity Commission in relation to this matter.

This finding contrasts with some of the more critical studies of employment impacts, which posit that the establishment of an EGM venue is actually likely to generate a net loss of employment within a community.

2.10 2010 Productivity Commission Inquiry

This inquiry was commissioned to look into broader issues around gambling in Australia. The inquiry addressed the question of problem gambling, and the costs and benefits to the community associated with EGM use and misuse. Among the key findings of the inquiry were:

- Gaming machines were the most likely form of gambling to be linked with problematic gambling behaviours.
- The report estimated that of the 600,000 Australians who play EGMs at least weekly, around 15 per cent would be considered problem gamblers. This 'problem gambler' category was estimated to contribute 40 per cent of total EGM expenditure.
- 95,000 of the estimated 115,000 problem gamblers in Australia are EGM players.
- The total social costs associated with problem gambling across Australia are estimated at \$4.7 billion per annum.
- Recreational gamblers typically play at low intensities, however high-intensity players could lose up to \$1,500 per hour.

3. CURRENT GAMBLING LANDSCAPE

3.1 Gambling in Greater Bendigo

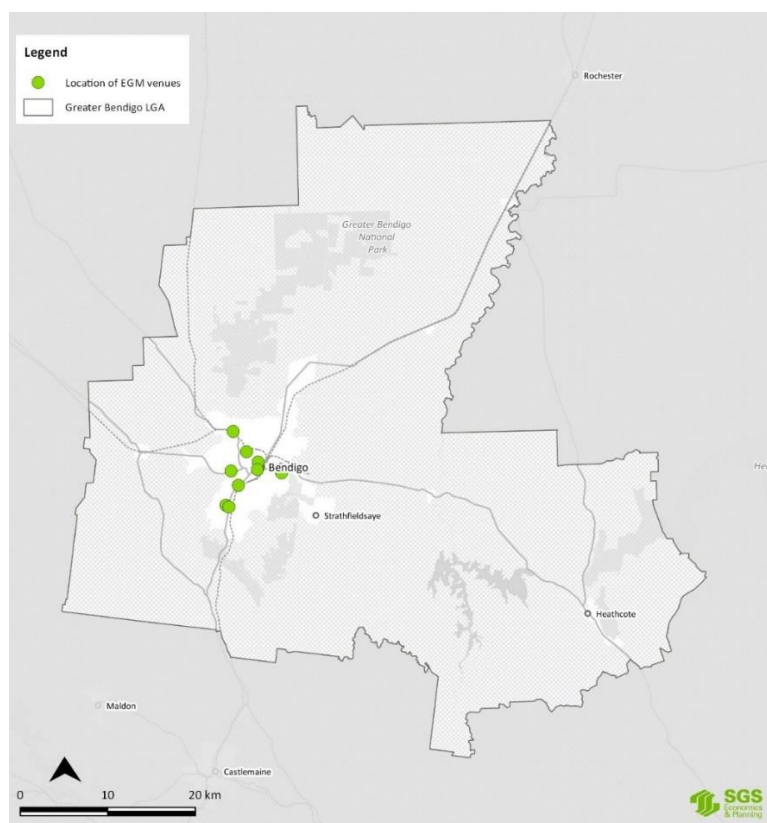
This section provides a statistical review of gambling in Greater Bendigo. The review begins by providing an in-depth look at EGMs. EGMs have been shown to be the most harmful form of gambling in Victoria, with the 2010 Productivity Commission report into Gambling found that EGM users were far more susceptible to problem gambling than users of other gambling products. Further, a 2008 prevalence report quoted in the study found that whilst 9 per cent of ‘no risk’ gamblers used EGMs primarily, the figure rose to 46 per cent for ‘moderate risk’, and 80 per cent for severe problem gamblers.

Although the most harmful form of gambling, of all the forms likely to impact the Bendigo community, gambling on EGMs is the one over which Council is best able to exercise influence through policy and advocacy.

3.2 Electronic gambling machines

EGMs are ubiquitous in the Bendigo metropolitan area. As of the end of the 2017/18 financial year there were 10 venues offering EGMs in the Greater Bendigo municipality. As shown in Figure 1, all EGMs in the City of Greater Bendigo are located within the Bendigo metropolitan area.

FIGURE 1: LOCATION OF EGM VENUES IN GREATER BENDIGO (2018)



Source: VCGLR (2018), SGS Economics and Planning (2018)

As at June 30, 2018, the ten venues in Greater Bendigo contained 600 EGMs¹⁰ (see Table 2). An estimated \$49.34 million was expended on EGMs in Greater Ballarat in 2017/18, equivalent to \$81,176 per machine. Expenditure relates to the component of total revenue that is not 'won back' by gamblers. The average expenditure for EGMs across all Victorian venues is \$102,156.

Of all venues in the municipality, the All Seasons International had the highest expenditure, with an annual total of \$11.06 million. On a per machine basis, EGMs at the Windermere Hotel were the most productive, with average expenditure per EGM of just under \$150,000.

TABLE 2: LIST VENUES AND KEY STATS (EXPENDITURE, NUMBER OF MACHINES, OPENING HOURS, ETC)

Venue	Type	2017/18 expenditure (\$ millions)	EGMs at 30 June 2018	Attached Entitlements	Expenditure per EGM
All Seasons International Hotel Bendigo	Hotel	\$11.06	100	100	\$110,639
Bendigo District RSL Club	Club	\$7.39	76	93	\$97,238
Bendigo Stadium	Club	\$6.21	104	105	\$59,712
City Family Hotel (closed at end of FY 2017/18)	Hotel	\$0.61	0	39	-
Kangaroo Flat Sports Club	Club	\$2.29	60	60	\$38,201
Rising Sun Hotel	Hotel	\$3.75	35	35	\$107,119
Shamrock Hotel	Hotel	\$4.00	60	60	\$66,646
The Bendigo Club	Club	\$2.60	60	60	\$43,296^
The Borough Club	Club	\$3.40	40	40	\$84,939
The Foundry Hotel Complex	Hotel	\$2.03	25	25	\$81,176
Windermere Hotel	Hotel	\$6.00	40	40	\$149,990
Total	5 hotels, 5 clubs	\$49.34	600	618	\$81,214*

Source: VCGLR (2018)

*excludes the two months of expenditure at the City Family Hotel before closure.

^ The Bendigo Club added 16 new EGMs during 2017/18 bringing the total to 60. Annual expenditure per EGM is likely to be substantially higher at that venue once all 60 machines have been operational for an entire year.

Expenditure by EGM varies across venues, with venue size, venue type (i.e. hotel or club), catchment demographics, venue design and venue location having an influence on the scale of expenditure by venue.

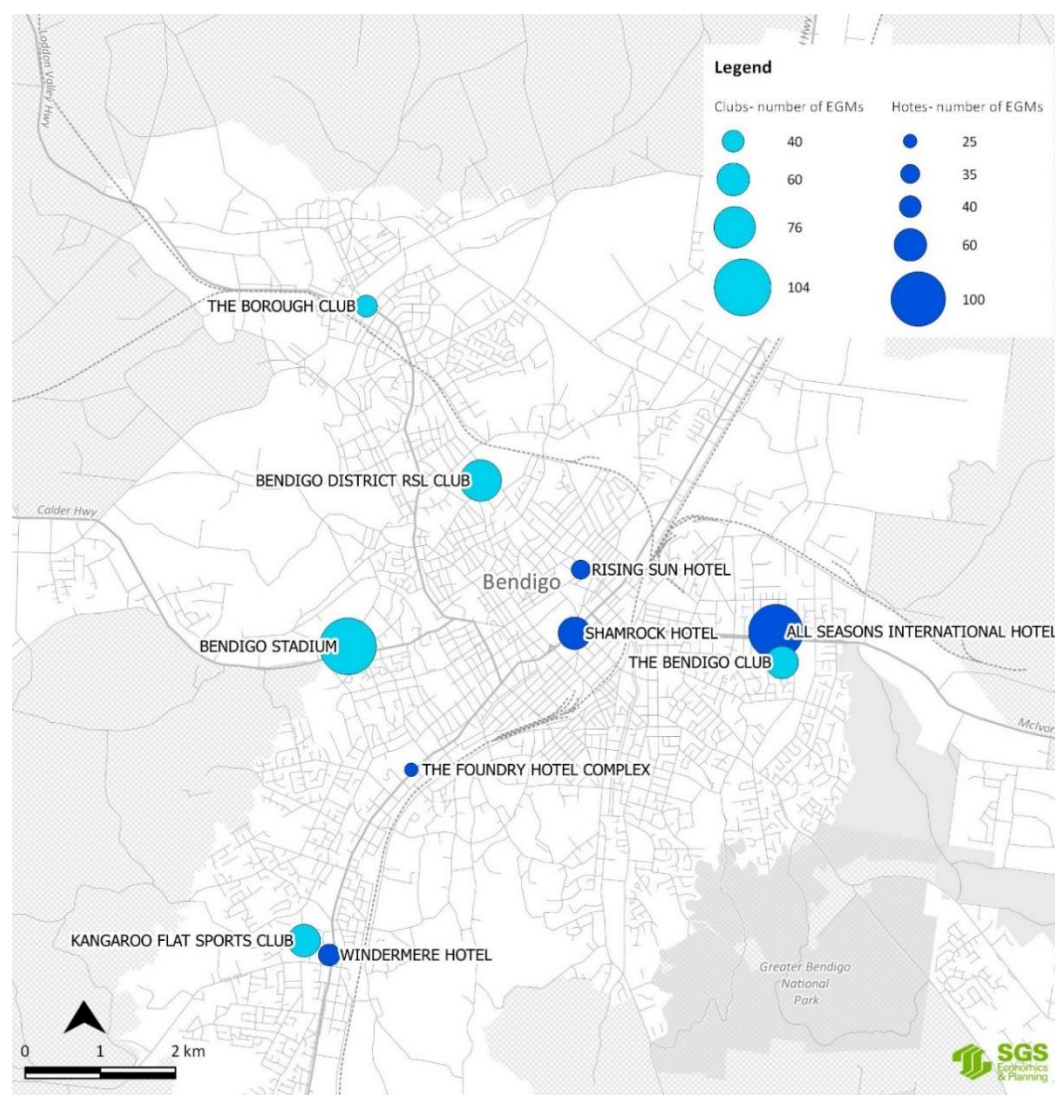
Across Victoria, smaller venues tend to have lower per capita expenditure. Larger venues with a greater choice of machines, can offer 'anonymity' for gamblers leading to higher expenditures in the bigger venues. The influence of venue scale appears to be reflected in the Bendigo EGM data, with the second largest venue (the All Seasons International) having the highest expenditure and second highest expenditure per EGM. That said, many of the smaller venues in Greater Bendigo have high expenditure per EGM, demonstrating the impact of other factors.

Victorian data demonstrates that venues located with good access to activity centres, and/ or with good visibility from major thoroughfares, are generally able to attract greater quantities of expenditure per EGM. In the case of Greater Bendigo, four of the five venues with the highest expenditure per EGM are located on major thoroughfares.

¹⁰ At the beginning of 2017/18 there were 11 venues in Greater Bendigo, however one venue, the City Family Hotel, closed in August 2017 and is therefore not included in the figures for the end of financial year. The City Family Hotel had a permit and entitlements for 39 electronic gaming machines. The Hotel reopened early in the 2018/19 financial year.

Figure 2 provides a visual representation of the locations of EGM venues within the Bendigo metropolitan region.

FIGURE 2: GREATER BENDIGO EGM VENUES (HOTELS AND CLUBS) AND NUMBER OF MACHINES (2018)



Source: VCGLR (2018), SGS Economics and Planning (2018)

Expenditure per machine is also dictated by whether the venue is a club or hotel, with clubs generally drawing lower revenues and considered less harmful. One reason is the clubs' membership structures that make these venues less convenient and less attractive to impulsive gamblers. All five club venues in Greater Bendigo have membership programs; from \$5 a year at Bendigo Stadium and the Borough Club, to \$25 a year at the Bendigo Club. Club members are more likely to be both aware of intense gambling behaviours by other patrons and, forming as they do part of a community, are more likely to be conscious of being observed. Clubs are also more likely to require guests to sign in. The factors arguably make clubs less attractive to problem gamblers who might wish to remain anonymous.

A recent study¹¹ relating to hotel venues found that codes of conduct, and requirements to observe gamblers to determine signs of gambling harm, are frequently ignored, with the need to achieve revenue targets conflicting with a legislative requirement to fully enforce

¹¹ Angela Rintoul, Julie Deblaquiere & Anna Thomas (2017) Responsible gambling codes of conduct: lack of harm minimisation intervention in the context of venue self-regulation, *Addiction Research & Theory*, 25:6, 451-461

responsible gambling management practices. Thus, there is generally less likelihood of management scrutiny and/or associated interventions in a hotel venue.

Club venues are also often located 'out of centre', making them less accessible in comparison to hotel venues. The five clubs in Bendigo are located, on average, 4.5 kilometres from the centre of the city compared to 2.4 kilometres for the hotels.

In 2017/18, expenditure per EGM across Greater Bendigo was \$103,234 in hotels, but lower in clubs at \$64,375.

Another important consideration is not simply the number of EGMs, but also their location with reference to vulnerable communities. The Socio-Economic Indexes for Areas – Index of Relative Socio-economic Advantage and Disadvantage (SEIFA-IRSAD) summarises data relating to the economic and social conditions of people and households within an area, focusing on socio-economic and demographic characteristics found to be the most important drivers of relative advantage or disadvantage in Australian regions. Figure 3 shows the location of EGM venues in Greater Bendigo and the SEIFA-IRSAD decile of the surrounding areas¹².

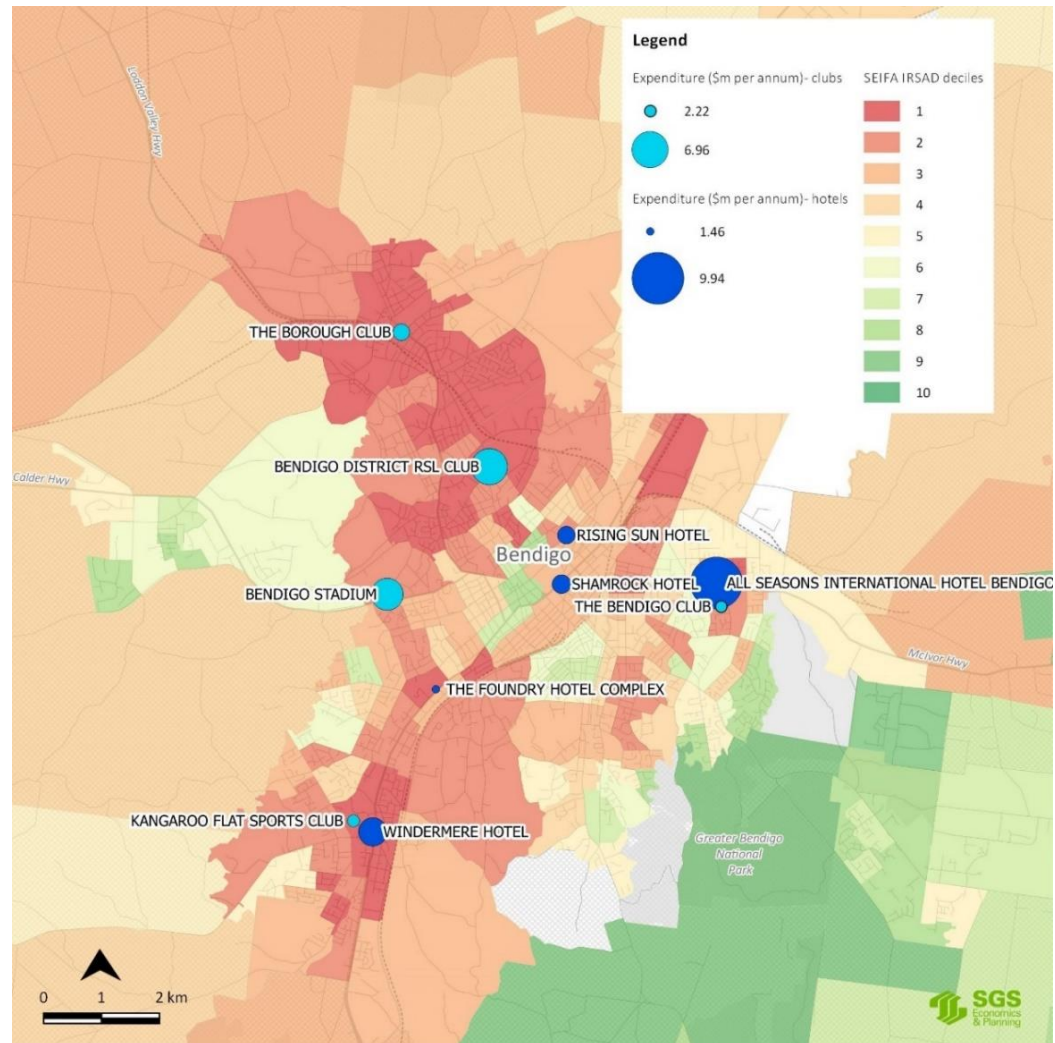
Low SEIFA-IRSAD scores are driven by a range of indicators that are also associated with vulnerability to problem gambling, including:

- Low individual and household incomes,
- Low educational attainment,
- Unemployment, and
- Employment in relatively unskilled occupations (i.e. labourers, sales)

Figure 3 presents the SEIFA-IRSAD score for Statistical Areas Level 1 (SA1s) across the Bendigo metropolitan area. It shows that all Greater Bendigo EGM venues are located within SA1s that is classified by SEIFA-IRSAD as being strongly disadvantaged (with SEIFA-IRSAD scores in the lower three deciles) relative to SA1s elsewhere in Victoria. Notably, those living in relatively advantaged parts of the Bendigo metropolitan area have relatively poor access to EGM venues.

¹² Deciles: all areas are ordered from lowest to highest score, then the lowest 10 per cent of areas are given a decile number of 1, the next lowest 10 per cent of areas are given a decile number 2 and so on, up to the highest 10 per cent of areas which are given a decile number of 10. This means that areas are divided up into ten equal sized groups, depending on their score.

FIGURE 3: VENUES, EXPENDITURE (\$M) AND AREAS OF SOCIAL ADVANTAGE AND DISADVANTAGE (2017/18)



Source: ABS (2016) Socio-Economic Indexes for Areas (SEIFA), VCGLR (2017), SGS Economics and Planning (2018)

Research into gambling across Victoria and Australia has revealed, on many occasions, the links that exist between areas of low-socioeconomic performance, EGM use and problem gambling. This include the Australian Gambling Research Centre, which has found that EGM participants were over-represented among people for whom welfare payments formed their main source of income¹³; Brown et al¹⁴, who found that the concentration of EGMs in poorer areas is evident and that people who are unemployed, are low income earners or have mortgages have a higher spend on EGMs; and Pinge¹⁵ (2008) who found that there is a tendency for EGM venues to be located in areas of socio-economic disadvantage in Bendigo.

3.3 Other forms of gambling

With Council well-positioned to influence the way in which EGMs are imposed upon the community, they comprise the focus of this paper. It should be recognised, however, that other forms of gambling are important sources of problem betting behaviours and subsequently drivers of community harm. These other forms include: thoroughbred, harness and greyhound racing, sports betting, casino gambling, and lotteries. Data on these other

¹³ Armstrong, A., & Carroll, M. (2017). Gambling activity in Australia. Melbourne: Australian Gambling Research Centre, Australian Institute of Family Studies.

¹⁴ Brown, K., Pickernell, D., Keast, R., McGovern, M. (2011). Socio-economic impacts of access to electronic gaming machines in Victoria. Queensland University of Technology

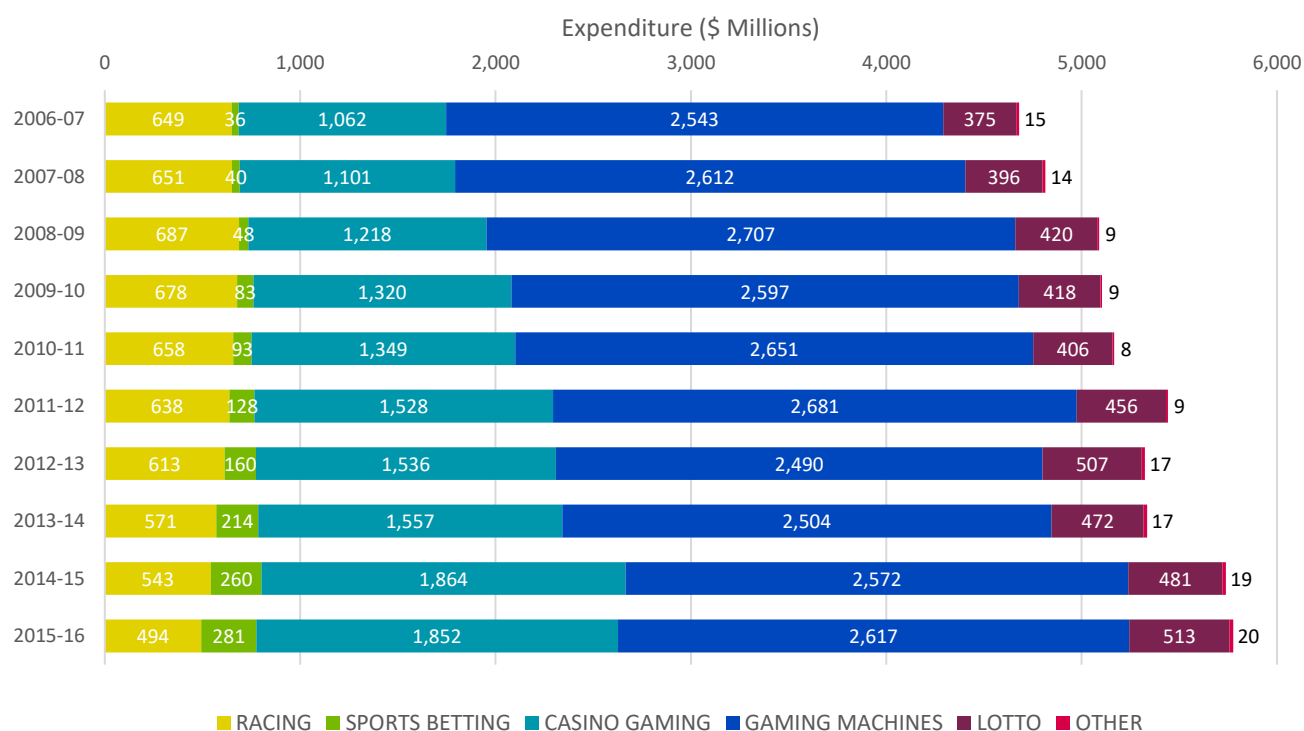
¹⁵ Pinge, I. (2008). Electronic Gaming Machines in Bendigo.

forms of gambling is not available at the local government level, however datasets for Victoria can be utilised to estimate expenditure by different types in Greater Bendigo.

Figure 4 shows expenditure on gambling across different types of activities from 2006/07 to 2015/16. Expenditure again relates to the component of total revenue that is lost by gamblers. It shows that over the 10 years from 2006/07 annual expenditure on racing¹⁶ has declined (down 24 per cent), while sports betting¹⁷ (up 680 per cent), casino gaming¹⁸ (up 74 per cent), Lotto¹⁹ (up 37 per cent) and other (lotteries, instant lotteries, Keno and pools) (up 38 per cent) have increased. EGM expenditure has increased since 2006/07 (up 3 per cent) and remains the dominant form of gambling in terms of expenditure generated.

Sports betting has been the fastest growing type, increasing nearly seven-fold in the ten years from 2006/07. The Victorian Responsible Gambling Foundation found that the online accessibility of sports betting, as well as the saturation of advertisements, promotions and inducements in sports and sports-related media have arguably normalised sports betting the sports betting with type of gambling emerging as a significant contributor to problem gambling, especially among younger adult males²⁰.

FIGURE 4: GAMBLING EXPENDITURE BY TYPE – VICTORIA (2006-07 TO 2015-16)



*Other refers to lotteries, instant lotteries ('scratchies'), Keno (non-casino) and pools

Source: Australian Gambling Statistics (2017), 33rd edition, Queensland Government Statistician's Office, Queensland Treasury

A review of gambling expenditure on a per capita basis shows that EGMs have the highest expenditure whilst sports betting is the fastest growing (albeit off a small base). Overall the

¹⁶ Related to betting on horse and greyhound races both on racecourses and off-course (TAB).

¹⁷ The wagering on approved types of local, national or international sporting activities (other than the established forms of horse and greyhound racing), whether on or off-course, in person, by telephone, or via the internet.

¹⁸ The various figures reported under this heading represent wagers at casinos and include wagers on table games, gaming machines and keno systems.

¹⁹ Lotto covers a variety of lottery games, commonly known as Tattsлото, Gold Lotto, Lotto, X-Lotto or Powerball, depending on the jurisdiction

²⁰ Jenkinson, R, de Lacey-Vawdon, C, Carroll, M, 2018, Weighing up the odds: young men, sports and betting, Victorian Responsible Gambling Foundation, Melbourne

amount of money Victorian gamblers spend on gambling per annum has risen by 2.1 per cent per annum between 2006/07 and 2015/16, from \$1,189 per adult to \$1,468.

TABLE 3: PER CAPITA (ADULT) EXPENDITURE ON GAMBLING – VICTORIA (\$MILLIONS)

	Victoria			
Gambling type	2006/07	2015/16	Change	AAGR (%)
Racing	\$165.0	\$105.3	-\$60	-4.9%
Sports betting	\$9.2	\$59.9	+\$51	23.5%
Casino	\$270.0	\$394.6	+\$125	4.3%
Gaming machines	\$646.2	\$557.6	-\$88	-1.6%
Lotto	\$95.2	\$109.2	+\$14	1.5%
Other	\$3.8	\$4.4	+\$0.6	1.6%
Total (all types)	\$1,189.1	\$1,467.6	+\$277	2.4%

Source: Australian Gambling Statistics (2017), 33rd edition, Queensland Government Statistician's Office, Queensland Treasury

Unlike other forms of gambling, EGM expenditure per adult has been decreasing. This is partly explained by the increase in the Victorian population over the period of analysis, and the inability of the state's EGM network to expand in response to these new populations (owing to the state-wide cap). Reforms undertaken in 2013 were intended to limit the amount of expenditure relating to at-risk groups. These are also likely to have influenced EGM expenditure across the state's venues.

Utilising per adult expenditure in Table 3, an estimate of gambling expenditure by type is calculated for Greater Bendigo. This reasonably assumes that the behaviour of gamblers in Greater Bendigo are the same as for Victoria as whole. SGS note that figures for other gambling types are not directly comparable to EGM expenditure, with the latter figure linked to expenditure *within* the LGA (and not necessarily linked to Bendigo residents). Nonetheless, given the likelihood that there is little transfer of expenditure into and out of the Bendigo LGA, the table is instructive in demonstrating the relative importance of gambling by type.

The table shows that in 2016/17, around two thirds of gambling expenditure associated with residents of the City of Greater Bendigo is linked to EGMs.

TABLE 4: ESTIMATES OF EXPENDITURE ON GAMBLING IN GREATER BENDIGO (\$MILLIONS)

	Greater Bendigo			
Gambling type	2006/07	2016/17	Share of total expenditure (2016/17)	AAGR (%)
Racing	\$11.54	\$8.96	12.6 per cent	-2.5%
Sports betting	\$0.64	\$5.09	7.2 per cent	23.0%
Casino*	N/A	N/A	-	-
EGMs (actual from VCGLR)	\$43.48	\$47.42	66.7 per cent	0.9%
Lotto	\$6.66	\$9.29	13.1 per cent	3.4%
Other	\$0.26	\$0.37	0.5 per cent	3.5%
Total (all types)	\$62.59	\$71.13	100.0 per cent	1.3%

* SGS has not attempted to estimate Bendigo residents' total gambling expenditure on casino games. Although many residents are likely to visit the state's only casino from time-to-time, there is no way of knowing what this translates to in terms of expenditure. Given the distance of Bendigo from Crown Casino, this proportion is not likely to be high.

Source: Australian Gambling Statistics (2017), 33rd edition, Queensland Government Statistician's Office, Queensland Treasury, SGS Economics and Planning (2018)

4. ECONOMIC IMPACTS

4.1 Estimating the Economic Impact of Gambling

Utilising SGS's in-house input-output model, the contribution of the gambling industry makes to the Greater Bendigo economy is estimated first in 'gross' terms. The impact is then considered in net terms i.e. what are the economic impacts if the communities' expenditure on gambling was spent in other recreational industries.

4.2 The Input-Output (I-O) Model

The basic steps in undertaking an EIA include:

- Isolating how the expenditure stimulates the regional economy (direct impacts).
- Generating region specific econometric models and subsequently deriving economic multipliers for major regional industry groups.
- Applying these multipliers (by relevant industry group) to the direct impacts to estimate total regional impacts in terms of regional (output) value added and employment.

The Input-Output (I-O) Model is a tool which quantifies the linkages of all sectors in a given economy. A region-specific model for Greater Bendigo was utilised to assess economic impacts of gambling expenditure. Multipliers derived from the model estimated three key measures:

- Output (or income);
- Value added Gross Regional Product (GRP); and
- Full time equivalent (FTE) jobs.

The model examines how gambling expenditure impacts the Greater Bendigo economy through upstream and downstream linkages. The assessment traced all the flow on effects – 'production' and 'consumption' induced effects. The economic impact in terms of output (or income), value added (GRP) and employment (FTE jobs) have been summarised in this chapter for the economic impact of EGMs at their current prevalence, and the impacts resulting from the increase in the regional cap.

4.3 Gross Economic Impact of EGMs

This assessment will examine the economic impacts of the ten hotels and clubs that presently offer EGM facilities in Greater Bendigo (see Table 2), followed by an assessment of the gross impact of an increase in the number of entitlements across the City of Greater Bendigo to the level permissible under the regional cap (870 EGMs).

This analysis considers the gross economic impact of gambling expenditure under an assumption that all the expenditure on EGMs would not have otherwise been spent and is therefore 'new' expenditure in the economy.

Existing expenditure

Pinge (2008) argues that the gambling component of venues is separated from other services including accommodation, food, bulk liquor and beverage services. Pinge argues that that it is likely these services were provided before EGMs were introduced into Bendigo and would continue to be supplied if EGMs were taken away. Pinge argues that the isolation of EGM gambling from food, beverages and retail liquor sales has been a consistent approach in nearly all independent studies.

It is important to recognise that most expenditure associated with EGMs leaks out of the local economy. Many owners of machines are not based in Greater Bendigo, and that group's share of profits is not likely to be captured by the local population. Further, the State's share of expenditures (captured through taxation) is almost entirely lost to the region (with a small proportion potentially returning as part of other spending programs).

These components of expenditure are therefore excluded as an economic impact.

It is assumed that venue operators in Greater Bendigo capture around a third of total regional EGM expenditure, with this local dividend amounting to \$16.4 million, as shown in Table 5.

TABLE 5: EGM GAMBLING EXPENDITURE IN GREATER BENDIGO (2017/18)

Source of Stimulus	Total
Total EGM expenditure	\$49,335,224 ²¹
Estimated share of expenditure captured by venues in Greater Bendigo	33%
EGM expenditure captured in Greater Bendigo	\$16,428,630

Table 6 shows the estimated economic impact of the expenditure on EGMs in Greater Bendigo utilising the input-output model. It shows that:

- The initial (direct) output is \$16.4 million per annum. When flow-on effects are incorporated the output totals \$28.7 million per annum.
- Total value-add, which incorporates profits, taxes and wages generated for the local economy, totals \$11.3 million per annum.
- This stimulus provided by gambling supports an estimated (initial and flow-on) 91.2 FTE jobs in Greater Bendigo.

TABLE 6: GROSS ECONOMIC IMPACT OF CURRENT EXPENDITURE ON EGMS

Source of Stimulus	Initial	Flow-On	Total
Current expenditure on EGM gambling			
Output (millions of dollars)	\$16.43	\$12.26	\$28.68
Value Added (millions of dollars)	\$4.82	\$6.43	\$11.25
Employment (FTE)	43.4	47.8	91.2

Increased cap – new EGMs in Greater Bendigo

This next modelling exercise considers the gross economic impacts of the increased regional cap and the new EGMs the increased cap will allow to operate in Greater Bendigo.

The table below calculates the likely expenditure that will be generated if EGM entitlements are granted to Greater Bendigo venues to such an extent that the cap is reached. The number of new machines is multiplied by the average expenditure on machines currently in Greater Bendigo. Some of this expenditure (for the purposes of this analysis, SGS estimate 50 per cent) is likely to be transferred from existing venues and expenditure that leaks out of the local economy via state taxes and out of region machine operators – this expenditure is removed. Accounting for these factors, it is estimated that \$2.8 million of new gambling expenditure will be captured within the Greater Bendigo economy.

²¹ Note that this figure differs from regional expenditure presented in Table 4. This is due to the figures relating to different financial years.

TABLE 7: EGM GAMBLING EXPENDITURE IN GREATER BENDIGO – INCREASE IN THE CAP

Source of Stimulus	Total
Increase in cap – number of new EGMs	207
Expenditure by machine (current rate in Greater Bendigo)	\$81,214
Total expenditure on new machines	\$16,811,263
EGM expenditure transferred from other venues	50 per cent
Total new regional expenditure	\$8,405,631
Share of expenditure captured by venues in Greater Bendigo	33 per cent
EGM expenditure captured in Greater Bendigo	\$2,799,075

An increase in EGM expenditure of this scale is estimated to generate the following gross economic impacts, which are summarised in Table 8:

The initial (direct) output is \$2.8 million per annum as estimated in

- Table 7, when flow-on effects are incorporated the total output is \$4.9 million per annum.
- Total value-add, which incorporates profits, taxes and wages generated for the local economy, totals \$1.9 million per annum.
- This stimulus provided by the increased cap generates an estimated (initial and flow-on) 15.5 FTE jobs in Greater Bendigo.

TABLE 8: GROSS ECONOMIC OF NEW EGM EXPENDITURE WITH INCREASED CAP

Source of Stimulus	Initial	Flow-On	Total
Estimated new expenditure from increase in regional cap			
Output (millions of dollars)	\$2.80	\$2.09	\$4.89
Value Added (millions of dollars)	\$0.82	\$1.09	\$1.92
Employment (FTE)	7.4	8.1	15.5

4.4 Net Economic Impact of Gambling

Pinge found that from a national and regional economic perspective, the EGM gambling sector is a poor performer relative to other industry sectors. In this section SGS's regional input-output model is used to test this finding by redistributing expenditure under the new cap from mixed spending on hospitality and retail to gambling.

Table 9 below outlines the 'multipliers' generated by the input-output model for Greater Bendigo for the gambling industry, alongside the retail and food and beverage services industries for comparison.

It shows that for every \$1 of expenditure on gambling captured in the local economy, 29 cents of value is produced (i.e. profits, taxes and wages). For retail and food and beverage services the direct value-added per dollar is much higher at 64 cents and 50 cents respectively.

Similarly, the multipliers for direct employment show that expenditure on gambling creates fewer jobs in the local economy than if that expenditure was spent in other sectors, such as retail or food and beverage services. \$1 million worth of gambling expenditure captured in the local economy will support an estimated 2.6 FTE jobs. In comparison, if that same \$1 million had been spent at local shops, restaurants or cafes, it would support 7.8 to 8.2 FTE jobs in the local economy.

TABLE 9: ECONOMIC PERFORMANCE OF THE GAMBLING INDUSTRY COMPARED TO OTHER INDUSTRIES

Sector	Gambling	Retail	Food and Beverage Services
Direct value added	0.29	0.64	0.50
Direct employment (per \$1 million of captured expenditure)	2.6	7.8	8.2

Source: SGS Economics and Planning (2018)

Another factor is leakage from the regional economy. With machine operators likely to be based in Melbourne or interstate, and high state taxation rates, EGM gambling leads to a significant share of expenditure leaking out of the local economy (estimated at 66 per cent). In comparison, the retail and food and beverage industries are likely to have much lower leakage, with a greater portion of total expenditure returning to the local community in the form of profits for local business owners and wages.

Net economic impact of the increased expenditure under a higher regional cap

Table 8 revealed that the establishment of 207 new EGMs in Greater Bendigo would lead to \$1.75 million of value-added to the Greater Bendigo economy, supporting an additional 14 jobs in total (direct and flow-on). However, this only considers the 'gross' impact, which assumes new expenditure on EGMs is not redirected from other sectors of the economy.

In calculating the 'net' impact of EGMs, SGS assumes that gambling expenditure is redirected from elsewhere in the economy. Under this scenario, the economic impact of an increase in EGM expenditure is found to be negative, as Table 10 outlines. If new gambling expenditure is redirected from mixed spending on retail and food and beverage services, for example, the increase in the regional EGM cap is estimated to cost the Greater Bendigo economy \$3.2 million per annum in value-added and 39.7 FTE jobs.

TABLE 10: THE NET IMPACT OF THE INCREASED EGM CAP

Source of Stimulus	Initial	Flow-On	Total
Plus - estimated gross impacts of increase in regional cap			
Output (\$millions)	\$2.80	\$2.09	\$4.89
Value Added (\$millions)	\$0.82	\$1.09	\$1.92
Employment (FTE)	7.4	8.1	15.5
Minus - Economic impact if expenditure redirected (removed) from mixed spending in the retail and food and beverage industries			
Output (\$millions)	-\$5.04	-\$4.11	-\$9.15
Value Added (\$millions)	-\$2.51	-\$2.22	-\$4.73
Employment (FTE)	-41.4	-14.4	-55.8
Result – net economic impact of the increase in the regional cap			
Output (\$millions)	-\$2.24	-\$2.08	-\$4.32
Value Added (\$millions)	-\$2.05	-\$1.18	-\$3.23
Employment (FTE)	-33.1	-6.7	-39.7

Source: SGS Economics and Planning (2018)

Limitations of I-O modelling and likely implications

Though a cost-effective and widely used technique for economic impact analysis, I-O modelling has some limitations, as follows.

- The model assumes relationships between industries are static. That is, **productivity improvements are not factored in** and historic relationships are assumed to hold;
- The input output model derives relationships between industries using total production estimates. Consequently, the relationships are 'average', whereas the stimulus used as an input is 'marginal'. Such an approach **does not account for any 'underutilised capacity'** at the industry level or additional economies of scale that might ensue, as production expands from its existing base;
- The model assumes that there are **no supply constraints**. A drawback is that the model does not take into account the 'crowding out' of other sectors. This is recognition of the fact that there are scarce resources in an economy.

A feasible alternative to using I-O modelling for economic impact assessments is to utilise partial or general equilibrium econometric models.

4.5 Conclusion

In his 2008 report Pinge found that any switch in expenditure towards EGM gambling is not a 'zero-sum game'. A shift in spending away from traditional sectors and towards EGM

gambling will cost the regional economy of Greater Bendigo jobs as a consequence of the very low level of labour intensity for EGM gambling compared to other sectors. Pinge also found that the regional output and value-add produced by the gambling industry is significantly lower than other industries.

SGS agree with these conclusions and concur that an increase in the number of EGMs in Greater Bendigo will lead to reduced regional expenditure and employment. If an increase in EGM expenditure results in an equivalent transfer of expenditure away from mixed spending on food and beverage services (hospitality) and retail, there will be net impact on the regional economy amounting to a reduction of \$3.2 million in economic value-add per annum and 39.7 FTE jobs.

5. LIKELY SOCIAL AND ECONOMIC COSTS OF AN EXPANDED CAP

5.1 Introduction

The purpose of this chapter and the following is to provide an independent assessment as to whether an increase in the number of EGMs in the municipality would represent a net benefit or detriment to the local community from a wider social and economic perspective. From this analysis an overall assessment of the net community impact of the increased regional cap is determined.

The net community benefit is considered under two scenarios:

- The first scenario is a 'realistic' outcomes scenario. This scenario estimates the costs and benefits based on the most likely outcomes based on SGS's and others', notably the Victorian Responsible Gambling Foundation and the Australian Gambling Research Centre, into the impacts of EGMs.
- The second scenario is an 'optimistic' scenario based on outcomes where 'better' outcomes are achieved such as lower rates of problem gambling and higher community contributions.

The assessment draws on a structured cost-benefit framework in which SGS quantify cost and benefit categories to provide an enhanced understanding of the range and scale of impacts.

5.2 Costs

Social and economic cost of problem gambling

The total social and economic cost of gambling has been calculated using data produced by the Victorian Competition and Efficiency Commission (2014).

SGS has used its findings to estimate an incremental cost for every additional problem gambler in Victoria. A figure of around \$61,000 has been arrived at in the following way:

- Using estimated costs by category, SGS has assessed the extent to which these are likely to be borne by either the state government or areas beyond the boundaries of the local community. These have been stripped out of the 'total' cost figure to facilitate the calculation of a marginal cost figure. It is estimated that around 85 per cent of costs associated with problem gambling are borne by local communities (see appendix for detail of this calculation).
- In line with the findings of the Study of Gambling and Health Victoria, SGS assumes a total of 35,563 problem gamblers in Victoria, 77.5 per cent of whom use EGMs²².
- Based on the upper and lower estimates generated by the VCEC, the incremental costs (adjusting for annual CPI of 2.5 per cent) are estimated at between \$42,700 and \$78,900 per problem gambler.
- SGS has estimated the cost per problem gambler to be just under \$60,800 – the midpoint of these upper and lower bounds.

To estimate average EGM expenditure per problem gambler, SGS started with annual EGM expenditure in 2017/18 (around \$2.645 billion) and assumed that 40 per cent (around \$1.058 billion) of this was attributable to problem gamblers. With an estimated 77.5 per cent of

²² Productivity Commission, 2009

problem gamblers using EGMs, it is estimated that the number of problem gamblers using EGMs is estimated at 27,561. Dividing total EGM losses associated with problem gambling by the number of EGM-playing problem gamblers gives an annual local cost per problem gambler of around \$39,400.

TABLE 11. EXPENDITURE PER PROBLEM GAMBLER CALCULATION

Total expenditure on EGM, Victoria 2017/18	\$2,645,434,727
Proportion of total EGM expenditure attributable to problem gamblers	40 per cent
Total expenditure on EGMs attributable to problem gamblers, Victoria 2016/17	\$1,058,173,891
Estimated number of problem gamblers in Victoria	35,563
Proportion of problem gamblers that play EGMs	77.5 per cent
No. of problem gamblers that play EGMs	27,561
Expenditure per problem gambler	\$39,393

Of total new expenditure on EGMs (estimated in Table 7 at around \$8.4 million) under a scenario in which the number of entitlements increases to the maximum possible under the cap, SGS estimates that 40 per cent (or \$3.4 million) will be attributable to problem gamblers. With average expenditure of around \$39,400 per gambler, new EGM expenditure is estimated to translate to an additional 85 problem gamblers in the City of Greater Bendigo.

Under a more optimistic scenario, where it is assumed that 30 per cent of the new expenditure is spent by problem gamblers, total problem gambling expenditure of \$2.5 million could be expected to lead to the creation of 64 new problem gamblers.

The analysis undertaken above shows that an increase EGMs in Greater Bendigo is likely to lead to an economic and social cost to the municipality's community. The net present value of social and economic costs flowing to the community over a period of 20 years are around \$52.8 million under a realistic scenario, and \$38.7. million under the more optimistic scenario.

6. ESTIMATED NET COMMUNITY BENEFIT (PART B)

As explored in section 5, the increase in EGMs in the municipality will lead to costs to the community. This section explores the community benefits that will need to be achieved to offset the detrimental community impacts.

6.1 Community benefits required to offset impact

It is clear that, all else being equal, the establishment of EGMs in a community leads to a loss of welfare for the local population. This is recognised in legislation, with venue operators required to demonstrate the extent to which these detriments are 'offset' by a range of benefits associated with their proposals.

In net terms, the social and economic detriment to the community of the increase in EGMs to the level of the new cap is estimated at around \$38.7 million to \$52.8 million over twenty years. A range of benefits could be sought from club and hotel owners to help offset these costs to the community. The most notable being:

- **Recreational use** by non-problem gamblers, who can participate in their recreational activity of choice.
- **Expenditure on capital works** that are linked directly to revenue generated by EGMs, such as the redevelopment and expansion of existing venues, or the construction of brand-new facilities.
- **Increased employment** directly linked to gambling revenues. The increase in EGMs in a venue can lead to new staff being hired to work in the gaming room, as well as via the employment of trade persons during capital works.
- **Community use of facilities** at venues other than EGMs. If the revenue derived from EGMs is utilised (in part) to provide facilities for the community this counts as a benefit. Such facilities can include restaurants/bistros, function facilities, club rooms and sporting facilities.
- **Community contributions** made by venue operator to the community, such as funding or sponsorships of community groups and sporting teams.

These benefits are considered under a 'realistic' scenario of outcomes based on the SGS literature review and prior research, alongside a more optimistic scenario of the outcomes.

Consumer surplus associated with EGM expenditure not associated with problem gambling

For many users, EGMs are a recreational activity that generates utility in the same way as attending cinemas, shopping or attending sporting events. A standard approach to measuring the value of this category of benefit is to take the total additional hours spent playing EGMs (by non-problem gamblers only) as a result of the new machines in the municipality and multiply these by a generally accepted value of leisure time (estimated at \$15 per hour²³).

²³ Private travel time is valued at 40 per cent of seasonally adjusted full time Average Weekly Earnings for Australia, equivalent to \$14.99 per person-hour. Source: <https://atap.gov.au/parameter-values/road-transport/3-travel-time.aspx>

Total leisure time is assumed to equate to time spent playing EGMs, as well as travel time to and from the venue.

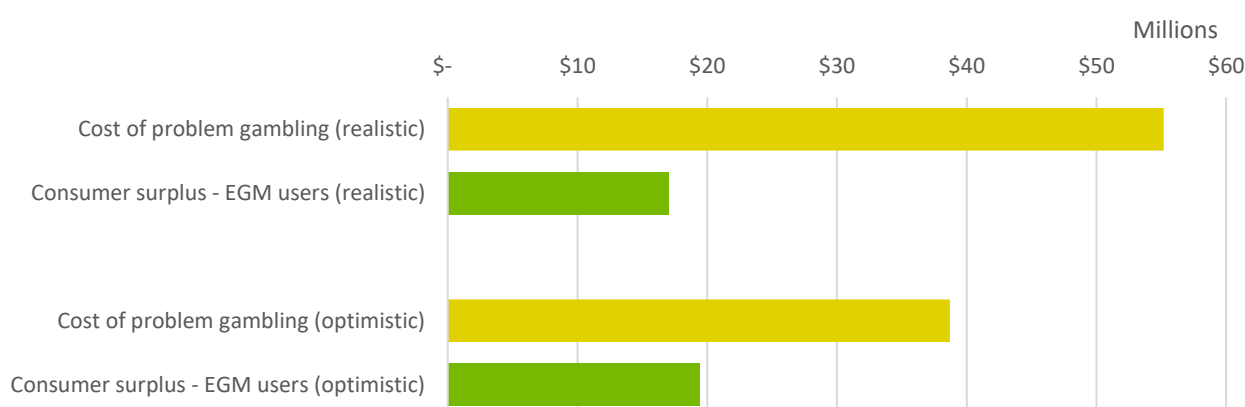
To calculate the consumer surplus generated by the addition of new EGMs in the municipality, the total new expenditure generated is first calculated. This is estimated at \$81,214 per EGM, based on VCGLR data for Greater Bendigo for the FY 2017/18. If the cap increase leads to 207 new EGMs in Greater Bendigo, this equates to a total expenditure of \$16,811,263.

In line with expenditure patterns witnessed across Victoria's EGM network²⁴, SGS assume that an estimated 40 per cent of new expenditure will be generated as a result of problem gambling. SGS also test a scenario in which a reduced rate of 30 per cent of expenditure is assumed to be drawn from problem gamblers.

Next, SGS assumes that non-problematic users spend \$45 per hour playing machines²⁵. This, once again, is conservative²⁶, and premised on the assumption that non-problematic users play more slowly and are likely to take breaks. Assuming \$1 games, 15 per cent commission per spin, and an average of five spins per minute, average hourly losses are estimated at \$45.

Assuming that the new gaming machines become operational in 2019 and the cap is reached in 2020, the net present value of benefits flowing to the non-problematic users of EGMs is around \$17.0 million under the realistic scenario, and \$19.4 million under the optimistic scenario.

FIGURE 5: SCALE OF CONSUMER SURPLUS BENEFITS IN COMPARISON TO THE COST OF PROBLEM GAMBLING



Summary and implications

Under the realistic scenario an estimated 31 per cent of costs associated with problem gambling are offset by utility generated through use of EGMs by non-problem gamblers. For the optimistic scenario, 50 per cent of the costs are off-set.

There is evidence that, in general, low socioeconomic status communities are more vulnerable to harm associated with EGM use. It is probable that venues located in lower socioeconomic status communities will draw a relatively high proportion of total expenditure from problem gamblers, whilst the reverse will be true for higher socioeconomic status regions. This would tend to indicate that any additions to Council's stock of EGMs be limited to regions with higher socioeconomic status populations.

Expenditure on capital works

Under Victorian legislation, no single approved venue may have more than 105 entitlements attached. This means that the increased cap could theoretically lead to the increased number

²⁴ By most estimates between 40 and 50 per cent of EGM revenue in Victoria is associated with problem gambling.

²⁵ See appendix for table showing how this figure is calculated

²⁶ The Productivity Commission estimates that it is possible to lose \$600 in a single hour of playing EGMs.

of machines being absorbed into the eleven existing venues – only two venues have 100 or more machines, with most having 60 or less.

Typically, hotel and club owners apply for increases in entitlements on the basis that a portion of new EGM revenues will be used to improve and/or expand their facilities.

SGS' analysis of the ten most recent applications to the Victorian Commission for Gambling and Liquor Regulation reveals that an increase in one EGM is associated with an average capital works expenditure of \$80,700 in existing venues and \$217,500 for brand new venues.

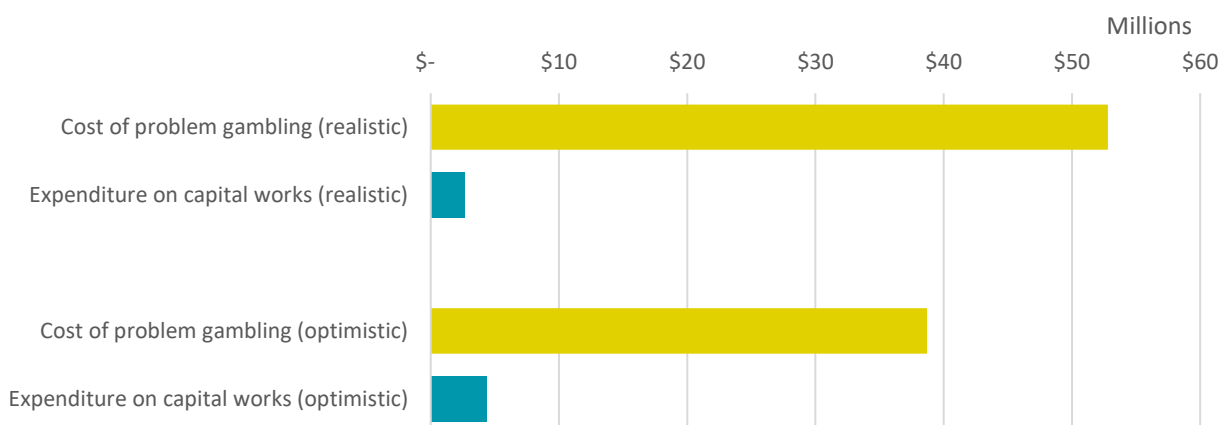
In most cases outlined in the below, an increase in EGMs at a venue leads to improvements to existing, as opposed to new, facilities for the community. Nonetheless an improvement in the facilities can be considered a benefit (explored in next benefit item).

Expenditure on capital works is not an economic benefit to the local community in and of itself. In fact, only the 'value added' associated with the expenditure can be considered a benefit to the local community. Further, only value added relating to locally sourced inputs can be considered a benefit to the local community. SGS assumes that value added amounts to around 35 per cent of total final demand.

For the purposes of this analysis, assuming that the applicants would make a concerted effort to source local inputs, but given that the construction industry is less concentrated in Greater Bendigo than Victoria as a whole²⁷, SGS estimates that up to 50 per cent of inputs may be drawn from the local economy. SGS highlights that this number should be considered optimistic, and that based on the structure of the local economy, the proportion has the potential to be significantly lower. A lower proportion of locally-derived activity would result in a lower net present value for this benefit.

Based on the capital works expenditure laid out above, SGS estimate the net present value of benefits associated with construction to be around \$2.6 million, assuming all new EGMs are absorbed into existing venues. A more 'optimistic scenario' would see one new venue created – if 80 EGMs were located in a new venue, with the remainder in existing, the benefits associated with construction would total \$4.4 million.

FIGURE 6: SCALE OF CAPITAL WORKS BENEFITS IN COMPARISON TO THE COST OF PROBLEM GAMBLING



Summary and implications

Under the realistic scenario, around 5 per cent of the costs of problem gambling are offset by capital works that are likely to be proposed by venue operators. Under the optimistic scenario, 11 per cent of the costs are offset by capital works.

²⁷ Across Victoria as a whole 8.3 per cent of employment is dedicated to the construction. In Greater Bendigo 7.5 per cent of employment is dedicated to construction, below the Victorian rate, indicating a slight under concentration of the industry within the municipality.

It is important to recognise that an increase in the proportion of inputs sourced from the local economy will lead to a greater economic benefit accruing to the local economy. Likewise, the appointment of a large Melbourne-based contractor would significantly reduce the benefits accruing to the local economy.

Labour surplus associated with changes to employment

This benefit considers the benefits derived from employment, both on-going within venues, and the economic activity generated by the capital works.

Modelling in Section 4 reveals that the overall economic impact and impacts on expenditure is likely to be negative as EGM expenditure is redirected from elsewhere in the economy. As such there are reservations in relation to the assumption that expenditure on EGMs creates employment. For the purpose of this assessment it has been optimistically assumed that the expenditure on EGMs will create some employment in hotels clubs and there will be no wider impacts due to the transferred regional expenditure to EGMs under the optimistic scenario.

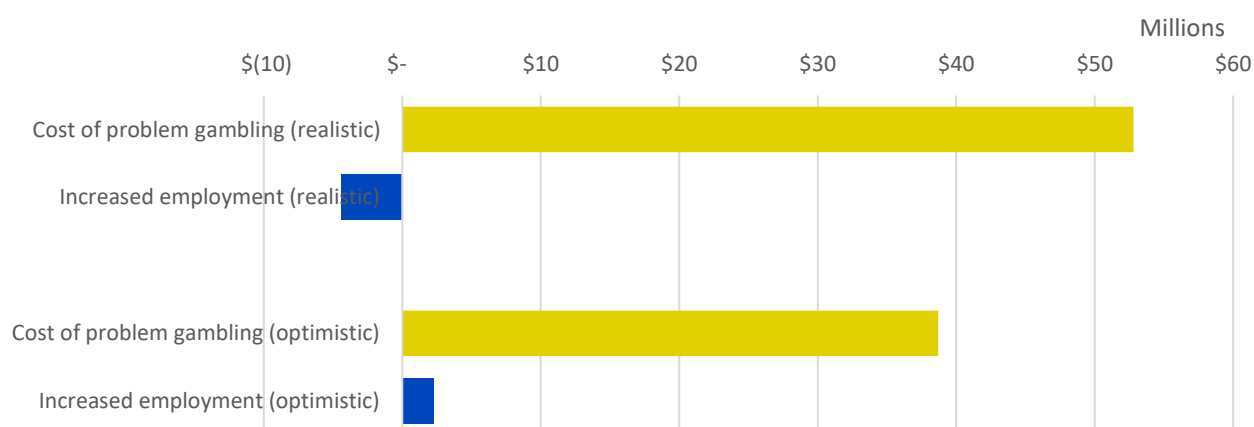
For the 'realistic scenario' it has been assumed that there is employment generated via the construction works enabled under this scenario, but overall there is loss of employment in Greater Bendigo due to the redirection of expenditure to EGM gambling, in line with the results (direct jobs) from the I-O modelling exercise in chapter 4.

To determine the economic benefit associated changing employment, SGS has used ABS data to arrive at an hourly wage for workers in the food and hospitality, and construction sectors. In order to calculate the labour surplus accruing to these workers, SGS has deducted the opportunity cost of these workers' time (the value of leisure time, or \$15 per hour). The employment enabled by the increase in EGMs is estimated at 7 FTE jobs, as calculated in the gross I-O modelling in chapter 4.

Employment only delivers an economic benefit in the form of labour surplus to the local community if work goes to unemployed workers. Where workers who would otherwise be employed elsewhere are employed as a result of the increase in EGMs, there is no community benefit.

The net present value of labour surpluses related to employment from the increase in EGM expenditure is estimated at \$2.3 million under the optimistic scenario. SGS assumes, however, in line with research findings, that the most likely scenario is that the impact on overall jobs within the region is expected to be negative. The net present value of labour surpluses related to employment from the increase in EGM expenditure is estimated at -\$4.4 million under the realistic scenario

FIGURE 7: SCALE OF LABOUR SURPLUS FROM INCREASED EMPLOYMENT IN COMPARISON TO THE COST OF PROBLEM GAMBLING



Summary and implications

The I-O modelling carried out as part of this work indicates that increased expenditure on EGMs is likely to be associated with a reduction of expenditure in other parts of the economy. With employment and expenditure multipliers associated with EGMs significantly lower than multipliers associated with other sectors, it is likely that increased EGM expenditure will be associated with a reduction of regional expenditure and employment.

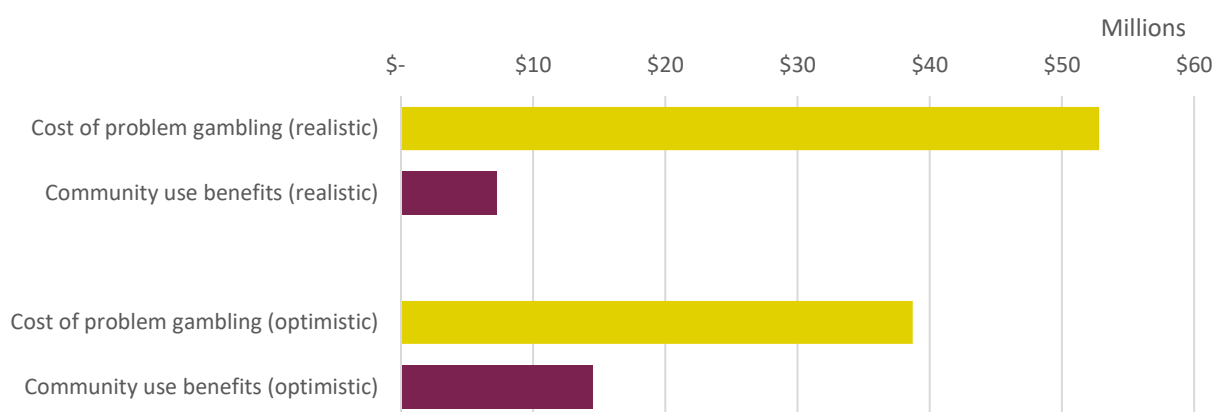
Benefit associated with community use of a new, expanded or redeveloped facility

The installation of EGMs can allow for new hotels and clubs to be built, or for existing hotel and club owners to improve or expand their offering. Any new or improved hotels/clubs are likely to lead to an improved recreational opportunity for residents of the surrounding region. This benefit is separate to that associated with EGM users. SGS have estimated this benefit based on the 'travel time method', estimating that the average patron will spend 2.5 hours per visit, including time spent travelling to and from the venue. Leisure time has been valued at \$15 per hour.

SGS estimates around 50 (realistic) to 100 (optimistic) daily visits to improved venues might be expected to occur as a direct consequence of improvements to the non-EGM components of venues.

The net present value of time spent by these new hotel and club users is estimated at \$14.5 million under the optimistic scenario, and \$7.3 million under the realistic scenario.

FIGURE 8: SCALE OF COMMUNITY USE BENEFITS IN COMPARISON TO THE COST OF PROBLEM GAMBLING



Under a realistic scenario, around 13 per cent of the costs of problem gambling are offset by the community use of new or improved facilities. For the optimistic scenario, 37 per cent of total costs are offset.

Contributions per annum

Contributions are estimated to provide a benefit to the community equivalent to their value. The increase in community contributions is based on extrapolating the current level of Type A contributions in Greater Bendigo to the new EGMs allowed under the increased cap. Type A contributions include:

- Donations, gifts and sponsorships (including cash, goods and services)
- Cost of providing and maintaining sporting activities for use by club members
- Cost of any subsidy for the provision of goods and services but excluding alcohol
- Voluntary Services provided by members and/or staff of the club to another person in the community

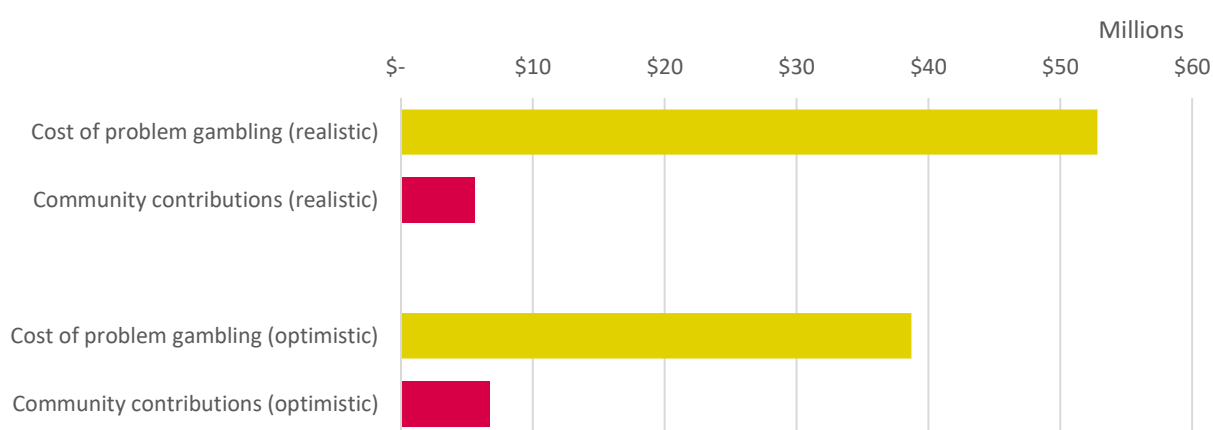
- Advice, support and services provided by the RSL (Victorian Branch) to ex-service personnel, their carers and families

Type B contributions (capital and operating costs) are not included to avoid double counting with previous benefits.

According to VCGLR data, Type A community contributions by venues in Greater Bendigo are \$2,544 per machine. For the realistic scenario it is assumed that this contribution per machine is applicable to the new machines under the cap. For the optimistic scenario it has been assumed that venue operators with the new EGMs contribute 20 per cent extra per new machine than the current estimated rate.

Discounted to take into consideration the time value of these benefits, the net present value is estimated at \$5.6 million for the realistic scenario and \$6.7 million for the optimistic scenario.

FIGURE 9: SCALE OF COMMUNITY CONTRIBUTIONS IN COMPARISON TO THE COST OF PROBLEM GAMBLING



Under a realistic scenario 11 per cent of the costs of problem gambling are offset by the community contributions. For the optimistic scenario, 17 per cent of the costs are offset.

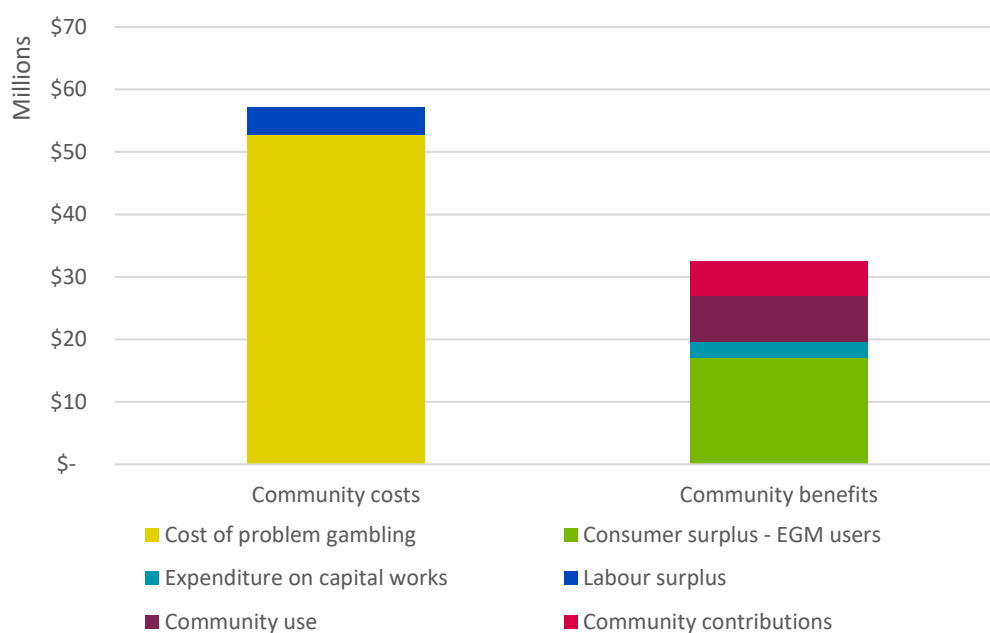
Overall results

The charts below show the scale of the community costs and benefits under the two scenarios;

- The most likely, or realistic, flow of costs and benefits (as adjudicated by SGS based on research), and
- An optimistic scenario where a high level of benefits is achieved, including a net increase in employment across the economy.

Under a realistic scenario, the increase in the regional cap (resulting in 207 new EGMs) will lead to a net community benefit of **-\$24.7 million** over a 20-year analysis period. For every dollar of harm generated, benefits with a combined estimated value of 57 cents are returned to the community.

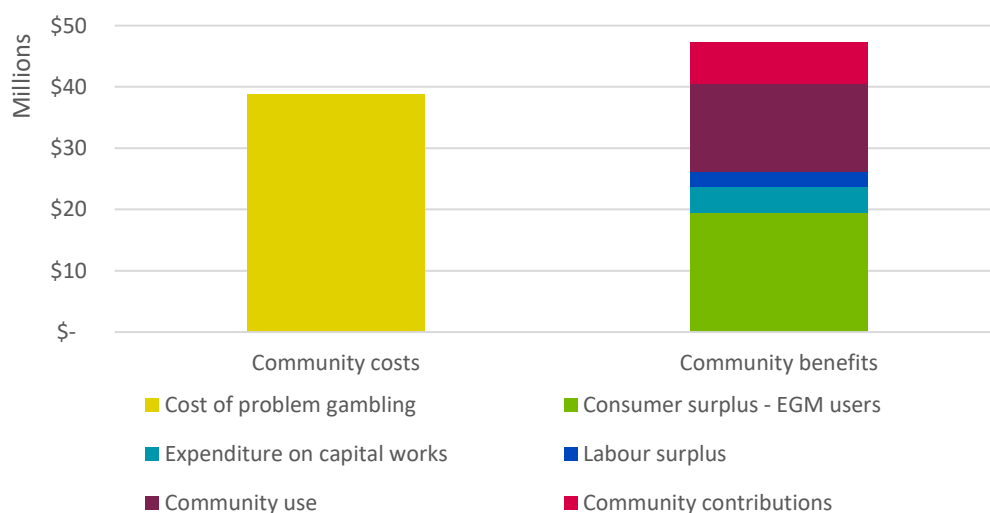
FIGURE 10: SCALE OF COMMUNITY BENEFITS COMPARED TO THE COMMUNITY COSTS - REALISTIC SCENARIO



Under an optimistic scenario, in which the incidence of problem gambling is reduced from 40 per cent to 30 per cent, expenditure on capital works leads to the creation of new facilities for the community, new EGMs lead to an overall net increase in employment, and venues provide community contributions 20 per cent above their current efforts, the increase in the cap and new EGMs is marginally beneficial from a net community perspective.

Under this scenario, the net community benefit amounts to 8.6 million over the 20-year analysis period. For every dollar of harm caused there is an estimated \$1.22 in benefits returned to the community.

FIGURE 11: SCALE OF COMMUNITY BENEFITS COMPARED TO COMMUNITY COSTS - OPTIMISTIC SCENARIO



The following section of the Report explores how Council can ensure that any additions to the regional supply of EGMs are made in a way that minimises their negative impacts on the local community, and ensures that these negative impacts are fully offset.

7. COUNCIL RESPONSE

7.1 The approvals process

To take advantage of the increase in entitlements on offer, venue operators must lodge an application to the VCGLR for an increase to their entitlements.

In order to operate an EGM in Victoria, the venue operator must obtain an EGM entitlement for each machine they operate. These entitlements are not readily transferrable, with each attached to a specific venue. Section 3.3.7 of the Gambling Regulation Act 2003 states that the applicant must convince the VCGLR that:

- A) the applicant has authority to make the application in respect of the premises;
- B) the premises are or, on the completion of building works will be, suitable for the management and operation of gaming machines; and
- C) the net economic and social impact of approval will not be detrimental to the well-being of the community of the municipal district in which the premises are located.

The part of the Act that tends to be by far the most contentious in deciding applications for EGMs is part (c) – commonly referred to as the ‘no net detriment test’.

Under the Gambling Regulation Act 2003, when an application to increase the number of EGMs or for a new gaming premise is lodged with the VCGLR the applicant must notify the relevant local government. If the Council believes that the proposed application is likely to have a detrimental impact on the local community, it has the option of preparing a Social and Economic Impact Assessment (SEIA) in response to the VCGLR application.

In addition to a VCGLR application, the applicant may need to lodge a Planning Permit Application with the City of Greater Bendigo (the City) to:

- Increase the number of gaming machines at an approved venue; or
- Operate gaming machines at a new venue.

Research, such as this Report, along with a strong Council gaming policy can establish a critical evidence base when these applications are assessed. In this process there is an opportunity for Council to demonstrate the community harm likely to be caused to gain concessions from applicants to counteract all, or a portion of, the likely harm generated.

7.2 Generating a beneficial community outcome

SGS modelling estimates that, in order to achieve an outcome where costs associated with the introduction of additional EGMs to Greater Bendigo are fully offset, \$57.2 million of community benefits must be generated over the twenty-year time period under the realistic, or BAU, scenario. This is equivalent to benefits equivalent to around \$275,000 per EGM.

The key for Council in achieving a community benefit, through their policies and actions, is to limit the community costs and increase the benefits.

Ways in which Council can achieve this are to:

- Minimise expenditure from problem gamblers and ensure that as much EGM expenditure as possible derives from non-problematic users. Ways in which Council could seek to achieve this include:
 - Given that expenditure per machine is significantly higher in hotels than clubs, (where reasonable) favour the expansion of EGMs into club rather than hotel venues.

- Given the increased risk of problem gambling among low socio-economic groups, ensure that the new EGMs are located in regions whose populations are relatively advantaged.
- Ensure that new venues are not located in highly-visible prominent locations, or close to activity centres. 'Destination venues' should be favoured.
- Ensure that new and expanded venues are designed in such a way that EGMs are separated from non-EGM parts of a venue.
- Continued pressure should also be placed on existing and new venue operators to operate in accordance with all safe gambling requirements.
- Increase the benefit associated with community use of a new, expanded or redeveloped facility by ensuring that EGM applications are tied to new or vastly improved services for community members that don't use EGMs.
- Increase the benefits from expenditure on capital works by securing guarantees that capital works will be performed. Encouraging the use of local contractors whenever possible will also increase the benefits.
- Venue operators should agree to make significant and on-going community contributions to community groups. Contributions should ideally be in the form of donations, gifts and sponsorships to local community and support groups. Community contributions are often held up by venues as evidence that they benefit the community. However, as demonstrated in this analysis, community contributions are typically insignificant in comparison to the harm generated.

8. CONCLUSION

The economic impact assessment and net community benefit assessment in this report, supported by a literature review and consideration of the current gambling landscape in Greater Bendigo, found that new EGMs in the City of Greater Bendigo are likely to have an overall negative impact on the community of Greater Bendigo.

The increased cap is expected to lead to a negative outcome from an economic impact perspective (chapter 4). If the increased cap is fully realised and 207 new EGM machines are installed in the municipality, and new EGM expenditure is redirected away from mixed spending on food and beverage services (hospitality) and retail, the impact is a loss of \$3.2 million of economic value-add per annum and 39.7 jobs.

The assessment of the net community benefit of the increase in the regional cap found that the likely costs to the community from gambling on the new EGMs is likely to be in the range of \$38.7 million to \$52.8 million, in present value terms, over twenty years. It is clear that, all else being equal, the establishment of EGMs in a community leads to a loss of welfare for the local population. This is recognised in legislation, with venue operators required to demonstrate how any negative impacts of their proposals will be offset by community benefits.

In order to offset the costs of problem gambling associated with EGMs, there are a range of benefits that can be considered, namely the consumer surplus non-problem gamblers enjoy, expenditure on capital works for new or improved venues tied to the increase in EGM expenditure, any labour surplus generated from new employment opportunities for workers in the municipality, improved facilities that can be utilised by the community and community contributions made by venue operators.

The net community benefit assessment found that under a realistic scenario, the benefits generated will not offset the costs of problem gambling. A more optimistic scenario in which realistic assumptions were relaxed demonstrates how an application might be beneficial to the community, should a certain set of conditions hold.

In managing the detrimental impacts of EGMs in the Greater Bendigo community, Council should seek to ensure that the costs of problem gambling are offset by donations, gifts and sponsorships (including cash, goods and services) made directly to community clubs and organisations. It is important to recognise that these community contributions can only ever hope to partly offset the costs of problem gambling on EGMs. It is estimated that annual contributions of around \$2,500 per annum lead to benefits over a 20-year period equivalent to only around 11 per cent of total costs.

Other benefits are required in order to offset the costs of problem gambling, including decreasing the incidence of problem gamblers by encouraging appropriately located, well-designed, and well-managed venues. Benefits can also be generated by ensuring applications include establishment of community use of improved facilities for the use of the entire community. Finally, the benefits from the expenditure on capital works and any new employment can be maximised by securing guarantees local contractors and workers will be prioritised whenever possible.

APPENDIX

Share of costs felt locally

SGS has estimated that whilst some cost categories are likely to be felt locally, for others, the impact is felt outside of the municipality (TABLE 12). The basis for these is as follows:

- The local catchment is assumed to contribute 0 per cent for each state government-related cost category.
- Catchment employment self-containment assumed to be 12 per cent informing all cost categories that relate to the workplaces of problem gamblers.
- The catchment contains 100 per cent of the population of Bendigo. Therefore, it is assumed that the same proportion of local government costs are borne by local residents.
- Due to the nature of their addiction/ compulsion, SGS estimate that it is unlikely that problem gamblers will travel long distances to gamble – particularly in a regional area such as Bendigo, which has a relatively large number of EGM venues and a large surrounding catchment. Given this, SGS has assumed that 90 per cent of problem gambling expenditure at venue is undertaken by residents of Greater Bendigo.

TABLE 12. ESTIMATED COST OF GAMBLING TO LOCAL CATCHMENT, 2010-11\$

Cost	Victoria		Proportion borne locally (SGS estimate)	Catchment population	
	Low (\$m)	High (\$m)		Low (\$m)	High (\$m)
Economic costs					
Victorian Government policy, regulatory, research and education and treatment services costs	42	42	0%	0	0
Victorian Government health and human service costs	6	79	0%	0	0
Victorian Government justice system costs	26	26	0%	0	0
Productivity loss at work	6	39	12%	3.6	23.4
Economic costs of excess expenditure	1,000	1,400	90%	900	1,260
Job change costs	12	12	60%	7.2	7.2
Productivity losses outside work	2	14	90%	1.8	12.6
Bankruptcy	0.5	6	0%	0	0
Financial costs of divorce and separation	1	1	90%	0.9	0.9
Local government costs	0.35	0.7	100%	0.35	0.07
Total economic costs (a)	1,100	1,600		914	1,304
Social costs					
Emotional distress to gambler	60	120	90%	54	108
Emotional distress to immediate family members	340	960	90%	306	864
Emotional distress to parents	-	160	50%	0	80
Total social costs	400	1,200		360	1,052
Total economic and social cost	1500	2,800		1,274	2,356
Proportion of total Victorian cost borne locally				84 per cent	83 per cent

Source: Counting the Cost of Gambling (VCEC), SGS Economics and Planning

Non-problem gambler expenditure per hour

SGS assumes that non-problematic users spend \$45 per hour playing machines. This, once again, is conservative²⁸, and premised on the assumption that non-problematic users play more slowly and are likely to take breaks. Assuming \$1 games, 15 per cent commission per spin, and an average of five spins per minute, average hourly losses are estimated at \$45

TABLE 13. NON-PROBLEM GAMBLER EXPENDITURE PER USER HOUR

	Category	Figure	Source
W	Average bet size per spin	\$1	Lack of local data. SGS assumes \$1. Reasonable given \$5 is the maximum possible in Victoria,
X	Margin per spin	15 per cent	Minimum returns in Victorian machines per spin 87 per cent
Y	Expenditure per spin	\$0.15	(W) x (X)
Z	Spins per minute	5 (1 every 12 seconds)	Lack of data, but reasonable given it is possible to bet every 2.14 seconds on Victoria EGMs (equivalent to 28 spins per minute).
AA	Expenditure per minute	\$0.75	(Y) x (Z)
AB	Expenditure per hour	\$45	60 minutes x (AA)

Source: SGS Economics and Planning

²⁸ The Productivity Commission estimates that it is possible to lose \$600 in a single hour of playing EGMs.



Contact us

CANBERRA

Level 2, 28-36 Ainslie Place
Canberra ACT 2601
+61 2 6257 4525
sgsact@sgsep.com.au

HOBART

PO Box 123
Franklin TAS 7113
+61 421 372 940
sgstas@sgsep.com.au

MELBOURNE

Level 14, 222 Exhibition St
Melbourne VIC 3000
+61 3 8616 0331
sgsvic@sgsep.com.au

SYDNEY

209/50 Holt St
Surry Hills NSW 2010
+61 2 8307 0121
sgsnsw@sgsep.com.au