Inquiry into Gaming Machine Numbers

Submission to the

Independent Gambling Authority

Submitted by the

Provincial Cities Association of South Australia

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Contents

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Executive Summary

The Provincial Cities Association of South Australia is pleased to provide this submission to the Independent Gambling Authority to ensure that a regional perspective is considered in the work being undertaken by the IGA.

This submission notes the much higher concentration of EGMs in the Provincial Cities relative to the State and metropolitan areas and the unambiguously negative impacts — in the range of -$0.6 million to -$43.6 million — on community well being in South Australia's Provincial Cities. Key factors explaining this result include the estimate of the prevalence of problem gamblers being higher in the cities relative to the Adelaide metropolitan area, the concentration of EGMs in the cities, and a number of socio-demographic variables including unemployment, the proportion of ATSI's and the proportion of SAHT rental dwellings.

The vulnerability of non-metropolitan regions of the State is more acute than has been acknowledged. Higher EGM spending per head results in higher contributions to the EGM tax revenue.

The essential research finding of independent and authoritative studies is that the management of machine numbers is an important policy tool for minimising harm. From a regional perspective, the close correlation between the density of EGMs in a jurisdiction and average gaming expenditure per capita requires a reduction in the number of EGMs in the Provincial Cities.

The Centre for Economic Studies most recent research (SACES, 2003) indicates that the implementation of the freeze on new gaming licenses from 7th December 2000 has had little impact on gaming expenditures within the Provincial Cities. The cities maintain a gaming machine density rate of 20.2 machines per adult compared to 12.2 machines for the State.

A statewide cap in itself is not sufficient to address harm from problem gambling because of the existing regional differences in the density of gaming machines.

A regional approach based on demographic risk profiles (susceptibility or risk profile index) could be used to guide policy measures. Some form of regional restrictions may be desirable. Currently, South Australia has no effective statewide or regional policy to achieve any stated goal in regard to the location of EGMs. The history of the introduction of EGMs has effectively led to a situation where profits are privatised, losses are socialised.

We do not provide any single recommendation, preferring instead to review the outcomes of this second consultation phase. We do believe that the Inquiry needs to consider regional issues and a regional approach to the management of machine numbers, as raised in this submission.

1. Introduction

The Provincial Cities Association of South Australia[1] welcomes the Inquiry into management of gaming machine numbers being conducted by the Independent Gambling Authority (SA).

The Association is pleased to respond to the invitation to provide a written submission to the Inquiry. The emphasis of this submission is to provide an important regional dimension or perspective to the work being undertaken by the Inquiry, a perspective which the Association believes was actually lacking in the March 2003 discussion paper.

1.1 Terms of Reference

The Provincial Cities note that the Terms of Reference for the Inquiry are focussed on the specific question, namely

> "all reasonably practicable options for the management of gaming machine numbers, with particular attention to strategies to minimise gambling related harm". (ToR: 1.1).

The Information Sheet published by the IGA (12 August, 2002) indicated that written submissions should propose one or more options for the management of EGMs;

- status quo option: continuation of the freeze.
- default option: present freeze provisions lapse and return to "need" based application system.
- managed number option: a set of principles for the allocation or transfer of gaming machines is enacted.

While the IGA advised written submissions to be in this form, the March 2003 discussion paper did not report using an equivalent structure, nor did it summarise of "identify general principles" (although they may be yet underdeveloped) in relation to option 3. We address these difficulties in Section 2.1.2.

The Terms of Reference directed the IGA to give consideration to regional issues, specifically:

> ToR: 1.3.6 measures which would allow for the management of gaming machine turnover on both regional and state wide basis ... ; and
>
> ToR: 2.4 the appropriate number of gaming machines for South Australia at particular future points in time, noting (among other things):
>
> a) distribution geographically,
>
> b) and c).

We understand this to imply for all of South Australia, metropolitan and non-metropolitan.

[1] Port Lincoln, Whyalla, Port Augusta, Port Pirie, Murray Bridge, Mount Gambier, Renmark-Paringa, Berri-Barmera, Loxton-Waikerie.

The IGA has provided a brief historical overview of the history of the introduction of EGMs in South Australia noting that the original legislation did not generally address the issue of problem gambling. Consumer protection strategies and other initiatives for harm minimisation are only now being addressed by government.

1.2 Comments on the Discussion Paper

In attempting to respond to the issues raised and discussed in the IGA's March discussion paper, the Provincial Cities Association encountered a number of difficulties. Despite being released around five months later than originally intended, the Provincial Cities Association believes the discussion paper was a disappointing culmination of the first phase of the inquiry process.

The main shortfall of the discussion paper was its lack of analysis of options for the management of electronic gaming machines in South Australia and the failure to present either the tentative or developing position of the Authority as regards these issues. The Authority had commissioned research and received stakeholder submissions/input but no real summary of views was provided.

In its information sheet regarding the process and guidelines for submissions, the Authority stated that it would like those presenting written submission to the inquiry to propose one (or more) of three broad options for the management of electronic gaming machines (even if in preliminary outline) — the status quo option, the default option, or a managed number option. However, although a summary of stakeholder submissions was presented in the report, the discussion paper failed to clearly draw together arguments for and against each of these options or to use the information available to form any conclusions about the possible effects of each option on the South Australian gaming industry and environment.

Another feature which caused additional confusion in the reading and interpretation of the discussion paper was the use of statements or information from studies and research which were not referenced and are not available in the public arena. In particular, work done by the Office of the Liquor and Gambling Commissioner was cited on numerous occasions and was not presented (with the other submissions) for public scrutiny. The Provincial Cities Association finds it difficult to consider and critically discuss the findings of such research when the background of and more information about the studies are not available.

Overall, our reaction was one of disappointment. The discussion paper was a poorly structured document which drew few conclusions about options for management of gaming machines in South Australia and contributed little additional information to the public arena. In making these criticisms we acknowledge that the IGA has a difficult task but the presentation of the results of the first phase of the Inquiry has, in our view, not assisted the broader debate on this issue.

1.2.1 South Australian Background Research

Although sections 1 and 2 of the discussion paper present concise summaries of the history of gaming in South Australia and the current regulatory arrangements in South Australian, the other States of Australia and New Zealand, little data or information on machine numbers is presented. Of particular interest to the Provincial Cities Association, numbers of machines broken down spatially (metro/non-metro area) and by clubs/hotels would have assisted in the Provincial Cities Association's ability to respond to the discussion paper.

The Provincial Cities Association is also concerned about the incompleteness of the information presented to the inquiry and back to stakeholders through the discussion paper. While the discussion paper mentions the work done by the Productivity Commission in regard to Australia's gambling industries (completed in 1999)[2], and draws on (and includes) the work done by Delfabbro[3] covering the Adelaide metropolitan area, there is no discussion or even mention of the work done by the SA Centre for Economic Studies on behalf of the Provincial Cities Association (completed in 2001)[4]. This is an important, relevant body of work pertaining to the impact of electronic gaming machines in non-metropolitan areas of South Australia and cannot be disregarded when considering issues surrounding the future South Australian gaming environment.

1.2.2 Issues relating to Non-Metropolitan Areas

From the point of view of the Provincial Cities Association, the discussion paper showed a disappointing lack of analysis of issues relevant to non-metropolitan South Australia. The Provincial Cities Association have long-held concerns about the South Australian gaming environment and future policy directions and, to gain a better understanding of these, commissioned a study of the impact of electronic gaming machines in non-metropolitan communities. As mentioned above, there was no discussion or even mention of this work in the discussion paper which is specifically South Australian focussed.

Furthermore, the discussion paper draws no distinction between the environment in regional South Australia and that in metropolitan Adelaide. There is no discussion of issues of particular relevance to regional areas and no suggestion that non-metropolitan areas may need special consideration when determining the allocation of gaming machines (as in some other states). This is of concern to the Provincial Cities Association.

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2 Productivity Commission (1999), *Australia's Gambling Industries*, Report No. 10, AusInfo, Canberra.

3 Delfabbro, P.H. (2002), "The Distribution of Electronic Gaming Machines (EGMs) and Gambling-related Harm in Metropolitan Adelaide", a report for the Independent Gambling Authority, Department of Psychology, University of Adelaide.

4 SA Centre for Economic Studies (2001), "The Impact of Gaming Machines on Small Regional Economies", a report prepared for the Provincial Cities Association of SA.

1.2.3 Concluding Comments

Overall, the Provincial Cities Association has had difficulty in attempting to respond to the issues raised in the discussion paper due to lack of clarity of the information presented, lack of positions or recommendations presented by the Authority and no discussion whatsoever of issues relevant to non-metropolitan South Australia. The Authority commissioned work for the inquiry which related solely to metropolitan Adelaide. Furthermore, the commissioned study merely supported the extensive work undertaken by the Productivity Commission and failed to consider the intra-suburban mobility factor which is relevant for metropolitan areas (and which the Liquor and Gambling Commissioner discussed with examples of his personal leisure experiences).

The lack of mobility in non-metropolitan areas creates unique issues for these regions and leaves regional communities vulnerable to the potential harmful effects of electronic gaming machines. None of these issues was mentioned or considered in the paper.

2. Management of Machine Numbers

2.1 A Regional Perspective

In 2001 the Association commissioned the South Australian Centre for Economic Studies to prepare an independent report on the Impact of Gaming Machines on Small Regional Economies (August 2001). This initiative represented the first independent analysis of the impact of EGM undertaken in South Australia.

That report was presented to the then Premier, John Olsen, and referred to the then Minister for Gambling, Robert Brokenshire. Copies of the report have been supplied to the current Premier, the Hon. Mike Rann and Minister Hill and Minister Weatherall, the current Minister responsible for gambling issues.

Reflecting on that report, the Association records that no formal or informal response has ever been provided by either Government. However, we note that Mr Garry Banks, Chairperson of the Australian Productivity Commission had this to say about that report,

> ... [the report] found predominantly negative impacts (net losses) from gaming machines in small regional economies (even with the assumed re-injection of money lost in pokie taxes), but with some possibility of a net benefit for the State as a whole. This was broadly consistent with the Commission's[5] own findings.[6]

In a muted criticism of some industry funded reports, Mr Banks reiterated "the importance of securing arrangements for *independent* research in this complex and highly contentious area of public policy",[7] to avoid a situation where the needs of the sponsor exert undue influence on the research undertaken.

It is rewarding to see the Chairperson of the Productivity Commission comment favourably on the report commissioned by the Association, and it reflects well on the quality of analysis undertaken by the researchers and the independence and integrity of the Centre. That analysis and subsequent report forms the basis of the Association's submission to this inquiry.

From a regional perspective, and based on work commissioned by the Association (which is referred to in this submission) we are concerned with:

- research findings that indicate higher estimates of social costs for the Provincial Cities arising from the large number of gaming machines per capita; and
- the observed relationship between the concentration of gaming machines and higher expenditure.

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5 Here he was referring to Productivity Commission (1999), Australia's Gambling Industries, Report No. 10, AusInfo, Canberra.

6 Banks, G., p. 6.

7 *op. cit.*, p. 7.

2.2 Summary of Recent Findings[8]: South Australian Centre for Economic Studies

In this section we provide a brief summary of the findings of the report commissioned by the Association. For the council areas that are members of the Provincial Cities Association of SA, the most optimistic estimate of the community benefits from recreational use of electronic gaming machines (EGMs) is more than outweighed by even the least pessimistic estimate of the community costs of problem gamblers.

As a result, the Centre for Economic Studies estimated that the *net* impact of EGMs on community well-being in SA's Provincial Cities is unambiguously negative — in the range -$0.6 million to -$43.6 million (or between -$5.20 and -$396.64 per head of adult population in the Cities). This disquieting conclusion may understate the true net costs because it assumes that all the EGM tax revenues raised from the Provincial Cities are returned to them through State Government spending programs.

The Centre's estimate for the Provincial Cities stands in contrast to one conclusion of the Productivity Commission (PC) that, for Australia as a whole, the net impact of EGMs on social welfare at least included the *possibility* of a positive outcome, with national net benefits estimated to be in the range +$1.1 billion to -$2.6 billion (or +$77.78 to -$183.85 per head of Australia's adult population).

It also stands in contrast to the Centre's estimate that, for SA as a whole, the range of net impacts also includes the possibility of a positive outcome — the estimated net benefits being between +$54 million and -$280.3 million (+$47.60 to -$246.33 per adult in SA).

The key factor explaining the difference between these results is the fact that the Centre has estimated that the prevalence of problem gamblers using EGMs is significantly higher in (all bar one of) the Provincial Cities (2.81 per cent of their adult population on average, or about 3,100 people) than in the Adelaide metropolitan area (2.06 per cent) and even more so than in other non-metropolitan areas of SA (1.43 per cent). The PC estimated the national prevalence rate to be about 2.1 per cent of Australia's adult population. The Centre's estimates also point to a substantial variance in the prevalence rate between the Provincial Cities themselves. Only Loxton-Waikerie has a below State-average prevalence rate (1.38 per cent): the other Cities range from 2.25 per cent (Mt Gambier/Grant) to 4.68 per cent (Berri-Barmera).

The Centre's analysis also reveals that, despite most of the Provincial Cities having below State-average incomes, non-problem (recreational) gamblers in most of them have above-average annual expenditures on EGMs ($673.85 per non-problem gambler on average in the Cities, compared with a State average of $648.87) and some have *substantially* above average spending (the range being from $583.92 in Murray Bridge to $763.29 in Mt Gambier/Grant).

[8] The findings were summarised in an Economic Issues Paper released by the Centre and provided to the IGA as an attachment to this submission. A copy of the original report was also provided to the IGA as an attachment.

These facts appear to be explained largely by,

- on the one hand, a higher presence and concentration of EGMs in the Provincial Cities than elsewhere in SA: for 2000-01 the Cities have 19.8 EGMs per 1,000 adult persons compared with a State average of 12.2,[9] and all except Murray Bridge have a smaller number of adults per gaming venue than the State average;
- on the other hand, higher spending within and between the Cities is positively related to a number of socio-demographic factors: in particular, the regional unemployment rate, the proportion of ATSI's, and the proportion of SAHT rental dwellings.

These factors also are highly likely, among others, to be significant explanators of the higher prevalence of problem gamblers in the Provincial Cities, on average. This suggests that the vulnerability of non-metropolitan regions of the State, including the Provincial Cities, is more acute than has been acknowledged. The much higher concentration of EGMs (per capita: adult persons) and the more limited entertainment opportunities available to populations in the Provincial Cities have been shown to contribute to higher spending.

Whatever one's view of above-average EGM spending in Provincial Cities among people mainly with below State-average incomes, it almost certainly has an (unintended) negative impact on the economies of most of the Cities. Higher EGM spending per head results in higher contributions to EGM tax revenues: $217 per adult in the Provincial Cities on average compared with $185 per adult for SA as a whole, with the outcomes for individual Cities ranging from $172 per adult in Port Pirie to $287 per adult in Mt Gambier. Unless State government spending in the Cities has grown commensurately with the disproportionate growth in EGM tax revenue contributed by the Provincial Cities, there will have been a potentially significant net resource outflow from the Cities on average.

2.3 Summary of Recent Findings: Productivity Commission

The Productivity Commission approached the question of the management of gaming machine numbers as a policy tool for minimising gaming related harm, by seeking to determine whether there exists a link between accessibility to gaming machines and the incidence of problem gambling.

Policy intervention would only be effective to the extent that such a link could be established. After considering a range of evidence, the Productivity Commission concluded that, in terms of all forms of gambling:

> "…the evidence is highly suggestive of a positive link between availability of legalised gambling – especially gaming machines – and the incidence of gambling problems. In particular, the feminisation of problem gambling [i.e.,

[9] As at 2001-02. In 1999-2000 at the time of the report, the Cities had 18 per 1,000 adult population compared to 11 for South Australia.

> an increase in the number and share of female problem gamblers] appears strongly associated with the spread of gaming machines."[10]

In terms of electronic gaming machines, the Commission found evidence of a "statistically significant positive relationship between the number of machines per adult in a jurisdiction [i.e., state or territory] and the overall problem gambling prevalence rate".[11] Similarly, there appeared to be a positive correlation between numbers of gaming machines per capita and the number of clients seeking help from counselling services. In support of this, the Commission cited data from the BreakEven Counselling Service in Victoria. The Centre for Economic Studies has analysed similar data,[12] and finds this to be consistent with the Commission's findings and international research. That is to say, the Commission (and others) came to a view that there exists a link between accessibility and the incidence of problem gambling. Equally compelling, as the Centre has noted, is the fact that Western Australia not only has no EGMs outside of the Burswood Casino, it also has an incidence of problem gambling around half that of other States.

Finding: This suggests that the management of gaming machine numbers is an important policy tool for minimising harm.

Lending further support to this finding, the Commission also found a close positive correlation between the density of gaming machines in a jurisdiction and average gaming expenditure per capita.

From a regional perspective, of particular interest was the identification of a potential link between the location of gaming machines and the socio-economic status of these areas:

> "the Commission found evidence of a concentration of gaming machines in areas of low socio-economic status in Victoria, New South Wales and South Australia (although not in Queensland). This in turn suggests that a greater proportion of residents in these areas are likely to be problem gamblers, and thus the social costs in these areas will be higher".[13]

This was an important finding in respect of the Provincial Cities, as they tend to have lower per capita incomes relative to the state or national average. In an econometric analysis of the relationship between income, gaming expenditure and the number of gaming machines for New South Wales, Victoria, Queensland and South Australia, the Commission confirmed the following relationships:

- an inverse relationship between income levels and the density of gaming machines in New South Wales, Victoria and South Australia. That is, regions associated with lower income levels are associated with a higher density of gaming machines. No such relationship was found for Queensland;

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10 Productivity Commission (1999), "Australia's Gambling Industries", Report No. 10, AusInfo, Canberra, p 8.31.

11 Productivity Commission (1999), p 8.8.

12 Some 71 per cent of all service users cited gaming problems using EGMs, 85 per cent of females cited EGM use as the source of problems.

13 Productivity Commission (1999), p 11.8.

- a positive relationship between the number of gaming machines in a location and the amount spent per machine in Queensland, New South Wales and South Australia. This implies that although gaming machines have a tendency to be located in areas of lower income, the spending per machine is not necessarily lower but in fact higher on average; and
- for South Australia only, an inverse relationship between income and the total amount spent on gaming machines. Hence, regions with lower socio-economic status were associated with greater absolute amounts of gambling expenditure.

2.4 Summary of Recent Findings: IGA - Commissioned Paper

To better understand the relationship between the density or availability of EGMs and gaming related harm, the IGA commissioned a report on the Distribution of EGMs and Gambling related harm in metropolitan Adelaide.[14] In an economic analysis of the relationship between EGM expenditure and harm and the density of gaming machines for statistical local areas in the Adelaide metropolitan area, the report found the following:

- a strong positive relationship between the density of EGMs in statistical local areas and net gaming revenue in the Adelaide metropolitan area;
- a very high correlation between the number of EGMs in statistical local areas and the number of venues;
- higher net gaming revenue in areas with a greater number of venues;
- gambling losses were modestly associated with indicators of social and economic disadvantage, with gaming losses being higher in areas which have a relatively higher indigenous population, a greater number of housing trust properties, a higher proportion of young people, and a larger number of people not in stable relationships (i.e., separated/divorced and never married); and
- some evidence of a positive relationship between the distribution of Break Even problem gambling clients and the prevalence of gaming machines.

While there was evidence of gaming losses being higher in regions of greater social and economic disadvantage, after controlling for differences in demographic factors across regions, the report found that differences in the density of gaming machines was easily the most significant factor explaining differences in gambling expenditure across regions. Nevertheless, the finding of a consistent pattern between EGM losses and indicators of social and economic disadvantage did indicate that people in such regions were more likely to spend more on gaming machines.

2.5 All States and Regional Comparison

Table 2.1 provides a brief overview of the current status of Electronic Gaming Machines (EGMs) in the States and Territories in terms of the number and density of EGMs and average relative net gaming revenue (i.e., gaming machine expenditure or player losses).

[14] Conducted by Dr Paul Delfabbro, Department of Psychology, University of Adelaide.

The comparative situation for the Provincial Cities is shown in the last row where the contrast between South Australia and the Provincial Cities on a density measure and NGR per adult can be observed.

Table 2.1
Electronic Gaming Machine Prevalence and Expenditure
States and Territories[1] – 2000-01

	Number of EGMs	Density of EGMs[2] No per 1,000 adults	Net Gaming Revenue $ million	NGR per Adult[2] $	NGR per Machine $
New South Wales	100,162	20.2	4,119	830	41,128
Victoria	27,444	7.5	2,366	648	86,213
Queensland	35,199	13.0	1,014	376	28,808
South Australia	14,096	12.2	543	469	38,555
Tasmania	1,837	5.2	81	230	44,087
Northern Territory	706	5.1	28	203	39,649
ACT	4,999	20.8	168	699	33,529
Australia	184,443	14.0	8,320	630	45,107
SA Prov Cities	**2,079**	**19.8**	**-**	**590**	**-**

Note: [1] As EGMs have not been introduced in hotels and clubs in Western Australia, WA has been excluded.
[2] Calculated by SACES using estimated adult population as at 30th June 2001.
Source: Tasmanian Gaming Commission and ABS, AusStats, Population Trends and Estimates.

The Australia Capital Territory had the highest density of gaming machines of all States and Territories in 2000-01, with an average of 20.8 machines per 1,000 adults. Reflecting a longer period in which gaming machines have been legalised, New South Wales has a mature gaming market and therefore high penetration of gaming machines with an average of 20.2 machines per 1,000 adults in 2000-01. New South Wales is followed by Queensland (13.0 machines) and South Australia (12.2 machines) in terms of density of gaming machines. The lowest prevalence of gaming machines was in Tasmania and the Northern Territory where there were just over 5 machines per 1,000 adults.

Generally those States and Territories with a higher density of gaming machines have a higher net gaming revenue per adult. For instance, New South Wales and the Australian Capital Territory, the two areas with the highest density of machines in 2000-01, had the highest expenditure per adult, while Tasmania and the Northern Territory both had the lowest density and expenditure per adult. The main exception here is Victoria, which has a relatively low density of gaming machines but high expenditure per adult. This is explained by a much higher level of spending per machine ($86,213 per machine versus an average of $45,107 for all Australia), which appears to be a factor related to the mobility of machines between venues, the geographical location of machines and the duopoly nature of the market which exists in Victoria.

Delfabbro cited the econometric analysis undertaken by the Productivity Commission (1999) on the relationship between EGM numbers and gambling losses per capita and the relationship between problem gambling (SOGS 5+) and gaming machine numbers which showed a positive relationship on both measures (IGA, pp. 47-48).

At first glance it may appear that Queensland goes against the trend of higher expenditure in areas of highest prevalence of gaming machines as it has a modestly higher density of gaming machines relative to South Australia (13.0 machines per adult versus 12.2 machines), but a lower expenditure per adult ($376 versus $469). However, a lower relative expenditure in Queensland is largely explained by the presence of three additional casinos in the State and its higher population growth rate.

South Australia had both a lower prevalence of gaming machines (12.2 machines per 1,000 adults) and a lower gaming expenditure per adult ($469) in comparison with the average for Australia as a whole (14.0 machines per 1,000 adults and $630 per adult). This, together with the fact that New South Wales and the Australia Capital Territory both have a very high prevalence of EGMs and gaming expenditure, suggests that there is scope for further increases in the density of gaming machines and relative expenditure on gaming machines in South Australia in the absence of any cap on gaming machines or other actions designed to curb the availability of gaming. We are not recommending this course of action.

However, the Provincial Cities have a much higher penetration rate of machines (19.8) per 1,000 adults and a gaming expenditure per adult of $590. Equally, this suggests that there is scope to redirect gaming machines from the Provincial Cities to reduce the density of machines to the metropolitan average. There are a range of possible policy mechanisms to do this, which may be influenced by other policy decisions.

2.6 Summary of Research Conclusions

While the IGA sought to satisfy itself, beyond the Productivity Commission inquiry, that 'access to gaming machines is a driver of problem gambling", it provides no indication of whether the report it commissioned satisfies the IGA of the nature of the relationship between harm and the number of gaming machines in total and the number in particular locations.

Notwithstanding, the body of evidence cited here suggests that the number of gaming machines and the number in particular places is a driver of problem gambling.

The imbalance between the Adelaide metropolitan area and the Provincial Cities is well documented. Where similar conditions have prevailed in other jurisdictions, policy responses such as regional caps have been imposed.[15]

[15] The South Australian Centre for Economic Studies is currently analysing the Victorian Government policy of regional caps in five regions for the Victorian Gambling Research Panel. Four of the five regions are required to reduce the number of machines over a three year period.

3. A Regional Perspective

3.1 Regional Dimension of Impact

A critical issue that has arisen from the studies conducted by SACES that has concerned the Provincial Cities is that there are significant differences in regional outcomes in terms of the incidence and impact of problem gambling. Such regional differences we believe have important implications for the management of gaming machine numbers in order to minimise gambling related harm, with the main implication being that a regional perspective should be adopted when implementing measures designed to minimise such harm.

The important factors which drive regional differences in terms of the impacts of gaming machines are:

- the prevalence of gaming machines and gaming venues, with there being evidence of a positive relationship between the prevalence of machines and venues and net gaming expenditure and problem gambling; and
- the socio economic status of regions, with there being evidence of higher gaming expenditure and increased density of gaming machines in regions of lower socio economic status as identified by demographic 'risk' factors.

These relationships have been identified in work carried out by the Centre and also by the Productivity Commission[16] and for the IGA[17].

The following sections present the Centre's findings in respect of its investigations into these relationships. The discussions are drawn from the Centre's report on the impact of gaming machines prepared for the Provincial Cities Association and the subsequent Issues Paper that was developed by the Centre based on the original report. These discussions have been updated to take account of the findings of Delfabbro (2002), which support the findings of the Centre's work. Where appropriate, important policy recommendations of relevance to the IGA's inquiry are identified and discussed.

3.2 Indicators of Regional EGM Expenditure

The Productivity Commission found evidence of concentration of gaming machines in lower socio-economic areas. In particular, they found an inverse relationship between a region's income and the total amount spent on gaming machines. They also found a negative and significant relationship between median weekly income and average annual expenditure on electronic gaming machines for regions in South Australia. This could be seen as suggesting that persons in lower income groups:

- are more likely to gamble using electronic gaming machines; and/or
- are more likely to lose (spend) more when they do so.

16 Productivity Commission (1999),

17 Delfabbro, P. (2002), "The Distribution of Electronic Gaming Machines (EGMs) and Gambling-related Harm in Metropolitan Adelaide" in *Inquiry into Management of Gaming Machine Numbers*, Independent Gambling Authority (IGA), pp 40-75.

This is not necessarily the case, however, as statistical correlation does not imply causation. It could just as easily be the case that expenditures and income are both related to some other factor, such as age.

The Centre was interested in testing the factors which influence the differences in net gaming revenue between different areas in an attempt to determine if there was a link between low incomes and electronic gaming machine revenue, or whether it was other factors which were influential. The regression technique used was ordinary least squares (OLS) regression, current council areas were used as the regions, and the dependant variable chosen was Average Net Gaming Revenue per Adult in each council area.

A significant number of demographic and macroeconomic factors were included in the analysis but were eliminated from the final estimated equation as they were not statistically significant. The results of the analysis are summarised in Table 3.1. As can be seen from the various test of significance,[18] this equation is a good model of the factors influencing the level of Net Gaming Revenue per adult in South Australia, explaining 84 per cent of the variation in regional net gaming revenue.

Table 3.1
Influences on Net Gaming Revenue per Adult in Council Areas.

	Coefficients	Standard Error	t Stat	P-value
Intercept*	-222.838	106.68	-2.09	0.0410
No. of Venues/km^2 *	273.261	58.53	4.67	0.0000
No. of machines/1000 adults*	11.731	2.19	5.36	0.0000
Ave disposable income *	0.015	0.01	2.86	0.0059
UE as a % of Adults*	27.559	11.42	2.41	0.0190
ATSI % of population**	9.596	5.23	1.84	0.0713
Proportion housing trust***	4.402	2.81	1.57	0.1227

* Significant at the 5 per cent level
** Significant at the 10 per cent level
*** Significant at the 15 per cent level
Adjusted R^2: 0.8431
F-statistic: 59.2307
Prob. F: 3.8 E^{-23}

Turning to the results of the analysis as summarised in Table 3.1, it can be seen that there is a slight positive relationship between disposable income and average per adult net gaming revenue, implying that all other factors being equal, expenditure would be higher in a high income council area than in a poor one. This is the opposite of the results of the Productivity Commission's analysis, suggesting that it was the correlation between some or all of the five other demographic factors linked with low incomes which produced the apparent link between lower incomes and higher electronic gaming machine expenditure for South Australia.

[18] Adjusted R-squared is the most commonly used measure of significance for OLS regressions, measuring the proportion of the actual variation in the dependant variable explained by the estimated equation. The F-test statistic is a measure of the overall significance of the coefficients in the equation, hence the 'Probability F' is the probability that all of the coefficients other than the intercept are zero.

The number of electronic gaming machines relative to the adult population, and the geographic concentration of machines in the council area are also influential factors in explaining differences in average net gaming revenue between councils.

The influence of the number of gaming machines and density of gaming venues on net gaming revenue is supported by the recent findings of Delfabbro, who found a very strong positive relationship between the density of gaming machines in statistical local areas and net gaming revenue in the Adelaide metropolitan area. Unsurprisingly, Delfabbro also found that the number of gaming machines was very highly correlated with the number of venues, and that losses were higher in areas with a greater number of venues.

The identification of a strong positive relationship between the density of gaming machines and net gaming revenue by the Centre, Delfabbro and others provides strong support for the implementation of some form of state-wide cap on gaming machines. This position is also reinforced by the widely reported evidence of a relationship between the distribution of Break Even problem gambling clients and the prevalence of gaming machines.

Previously the Centre has argued that a state-wide cap or reduction in machines may not be desirable in order to protect the legitimate benefits that arise from gaming machines in terms of consumer surplus and taxation revenue. However, if the benefits that arise in the form of a decline in gaming related harm due to a reduction in the number of gaming machines outweighs the benefits lost through a fall in consumer surplus and taxation revenue, then a reduction in the number of gaming machines would seem appropriate. Implementing a cap at the point where the extra costs of allowing additional gaming machines begins to outweigh the benefits of doing so would be an ideal outcome. Identifying the number or density of gaming machines at which this balance is achieved represents a potential area of research which should be undertaken prior to permanently establishing any state-wide cap.

One possible guide as to the appropriate number of gaming machines is provided by Delfabbro's conclusion that "maintaining densities of less than 10 or 11 machines per 1000 population would appear to be a potentially useful way of minimizing the risks of gambling-related harm within small clusters of continuos SLAs". It should be noted that as at 30th June 2002, the prevalence of gaming machines for the whole of South Australia was 12.5 machines per 1,000 adults, a density slightly above the recommended benchmark. If one takes into account that there remain a number of gaming machines which have been approved but not yet installed, then the potential density of gaming machines is closer to 13 machines per 1,000 adults if all approved machines were installed.[19] The current and potential prevalence of gaming machines is therefore at a level which suggests that there should be no further rise in the number of gaming machines if the aim is to minimise gaming related harm.

[19] The number of gaming machines approved was current as at Thursday 17th April 2003, while the density estimate was based on estimated resident population as at 30th June 2002.

A concern from the Provincial Cities perspective is that a state-wide cap in itself is not sufficient to address harm from problem gambling because of significant regional differences in the density of gaming machines and incidence of problem gambling. The Centre has estimated that problem gambling is higher in the Provincial Cities relative to the average for the state and that the net benefits of gaming machines are negative for the Provincial Cities as a whole (see Section 2.2). This suggests that regional caps should also form an important component of any attempts to reduce gaming harm through the management of gaming machine numbers. This conclusion also flows naturally from Delfabbro's findings.

Of particular concern to the Provincial Cities is the high prevalence of gaming machines in the regions and Delfabbro's identification of 10 or 11 machines per 1,000 adults as a potential ceiling for minimizing the risks of gambling-related harm. Table 3.2 shows, the density of gaming machines in the Provincial Cities is very high relative to Delfabbro's benchmark of 10 or 11 machines. In 2000-01, the Provincial Cities had an average of 20 machines per 1,000 adults compared to 12 machines for South Australia. Gaming machine density was particularly high in Port Augusta (31 machines per 1,000 persons), Mount Gambier (26 machines) and Port Lincoln (22 machines). These densities suggest that gaming related harm is significantly higher in the Provincial Cities, which is consistent with the Centre's estimates of relatively higher problem gambling and negative overall net benefits from gaming machines in the Provincial Cities. On this basis there seems to be a clear need to reduce the number of gaming machines in most Provincial Cities.

Returning to the Centre's econometric analysis, there were also several demographic variables associated with increased annual average net gaming revenue (the last three variables in Table 3.1). The significant factors are:

- higher unemployment as a proportion of adults;
- higher proportions of persons identifying as Aboriginals or Torres Straits Islanders; and
- higher proportions of private dwellings rented from the Housing Trust.

The demographic profile of South Australia's Provincial Cities appears to support the econometric results (see Table 3.3). Eight of the nine Provincial Cities are above the state average in terms of annual net gaming revenue per adult, but only two of the nine are above average in terms of income (Mt Gambier and Port Lincoln, only very marginally). This suggests that the higher expenditure is related to other "risk factors", and may well not be desirable. Of the seven Provincial Cities with unexpectedly high annual net gaming revenue per adult all have above average unemployment, and six of the seven are above average for each of the proportion of Aboriginals and the proportion of dwellings rented from the Housing Trust.

Table 3.2
Gaming Machines
Provincial Cities – 1995-96 to 2001-02

LGA Area	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
Number of Gaming Machines							
Mount Gambier	262	307	342	361	411	434	434
Murray Bridge	96	152	150	160	160	160	160
Port Augusta	165	177	231	260	263	315	305
Port Pirie	172	212	212	217	238	247	247
Whyalla	167	179	179	183	216	216	216
Port Lincoln	100	187	185	209	180	225	225
Riverland	353	385	397	422	432	474	492
Total Provincial Cities	1,315	1,599	1,696	1,812	1,900	2,071	2,079
South Australia	9,262	10,451	10,898	11,944	12,738	14,096	14,647
Gaming Machines per 1,000 Adult Population							
Mount Gambier	15.7	18.3	20.3	21.3	24.2	25.0	na*
Murray Bridge	7.9	12.5	12.2	12.8	12.7	12.6	na
Port Augusta	16.1	17.6	23.0	26.2	26.5	31.1	na
Port Pirie	12.9	15.9	15.8	16.2	17.9	18.8	na
Whyalla	9.5	10.3	10.3	10.7	12.8	13.3	na
Port Lincoln	10.8	20.2	19.7	22.1	18.7	22.3	na
Riverland	14.4	15.7	16.0	17.0	17.4	19.0	na
Total Provincial Cities	12.7	15.4	16.3	17.4	18.2	19.8	na
South Australia	8.3	9.3	9.6	10.5	11.1	12.2	na

Note: * na = not available. The Centre uses ABS estimates of the regional population as at 30th June of each financial year to estimate gaming machines per 1,000 adult population. However, population estimates for 30th June 2002 are currently unavailable and hence gaming machines per 1,000 adults cannot be calculated at this stage.
Source: Office of the Liquor and Gambling Commissioner, ABS, Population by Age and Sex, various issues, (Cat. No. 3235.4).

Table 3.3
Profile of the Provincial Cities

	NGR per Adult ($)	Ave Income per Adult ($)	Venues/ Sq km (No.)	EGMs/ 1000 Adults (No.)	Adult Unemp. Per cent	ATSI Per cent	Houses rented, Housing Trust Per cent
Berri Barmera	686.30	13,720.27	0.0135	19.7	6.7	2.25	11.42
Loxton Waikerie	372.52	13,566.50	0.0009	15.4	3.6	0.78	7.17
Renmark Paringa	525.53	13,526.58	0.0076	17.3	5.8	1.30	9.68
Mount Gambier & Grant	530.37	15,284.25	0.0073	18.3	5.2	0.94	12.26
Murray Bridge	493.85	11,692.44	0.0033	12.8	7.7	3.69	14.91
Port Augusta	560.24	12,833.11	0.0095	26.5	7.8	13.84	26.10
Port Lincoln	600.25	14,399.07	0.2635	23.3	6.5	4.50	18.35
Port Pirie	429.61	12,129.28	0.0024	18.1	8.5	1.56	14.91
Whyalla	474.73	13,195.45	0.0068	12.6	8.8	2.19	36.33
Provincial Cities Total	***512.47***	***13,493.16***	***0.0040***	***17.8***	***6.8***	***3.13***	***18.07***
Other Non-Metro	***311.01***	***12,140.33***	***0.0002***	***15.5***	***4.6***	***2.76***	***3.51***
Total Non-Metro	**394.18**	**12,698.81**	**0.0003**	**16.4**	**5.5**	**2.92**	**9.84**
Adelaide Metro	**438.10**	**14,780.62**	**0.0999**	**9.7**	**5.2**	**0.84**	**9.67**
Total SA	**427.80**	**14,292.20**	**0.0007**	**11.3**	**5.2**	**1.35**	**9.71**

Source: Liquor and Gaming Commission, ABS, ATO., calculations SACES.
Note: Unemployment is expressed as a proportion of the adult population rather than as a proportion of the labour force.

The accuracy of the model is further supported if the two Riverland councils of Berri-Barmera and Loxton Waikerie are compared. Although the two have almost identical income levels, Berri Barmera has higher values for both the two 'density' variables and for the three demographic variables. As a consequence of this, despite the almost identical income levels, the model predicts that Berri Barmera would have an expenditure level 1.6 times that of Loxton Waikerie, not too dissimilar from the actual difference of 1.8.

Regression analysis by Delfabbro found that while gaming machines did not appear to be consistently concentrated in areas of lower socio economic status as suggested by the Productivity Commissions analysis, his results did indicate "quite consistently that indicators of social and economic disadvantage are moderately associated with gambling-related losses, suggesting that people from less advantaged areas are more likely to spend more on EGMs".[20] Like the Centre, Delfabbro established that gaming losses were higher in areas where there was a relatively larger indigenous population and a greater number of housing trust properties. He also found that losses were higher where there is a higher proportion of young people and a larger number of people not in stable relationships (i.e., separated/divorced and never married). While certain demographic factors were associated with higher levels of net gaming expenditure, the density of gaming machines was found to be the most significant factor explaining differences in net gaming revenue between regions.

The identification of a link between higher gaming losses and certain demographic risk factors we believe also has important policy implications in terms of the management of gaming machine numbers. In terms of minimising gaming harm, one possible option is that for regions identified as being "at risk" based on their demographic profile, restrictions could be placed on machine numbers to reduce overall electronic gaming machine expenditure. If a preferred option was to implement some form of social impact assessment as used in other jurisdictions to determine whether the approval of an increase in gaming machines or the establishment of a new venue should proceed, then basing some component of the judgement on the demographic profile of the region should be an important element of such an assessment based on these results.

A regional approach based on demographic risk profiles could be used to guide policy measures designed to address problem gambling. Such an approach would rate regions/areas on a "susceptibility or at risk profile" based on the demographic profile of the area, region or town and ensure that an appropriate level of resources are provided to higher risk communities. It may also be associated with better technology solutions to facilitate higher levels of consumer protection.

3.3 Regional Differences in the Net Costs of Problem Gambling

From the Provincial Cities perspective, the need for a regional approach to minimising gaming harm through the management of EGM numbers is necessary because there is evidence that the negative impacts of problem gambling are regionally concentrated. For instance, the higher density of gaming machines in the Provincial Cities is suggestive of higher problem gambling in those regions. More significantly though, the Centre has

[20] IGA (2003), p 63.

estimated that there is a higher prevalence of problem gambling in the Provincial Cities and that the net benefits of gaming machines in these regions are strongly geared towards the negative.

In the absence of any regional surveys to estimate the incidence of problem gambling, the Centre devised a methodology whereby estimates of the incidence of problem gambling in a particular region could be produced from existing expenditure data. While one option for estimating the number of problem gamblers at the regional level was to apply national estimates of the incidence of problem gambling as derived by the Productivity Commission in its 1999 inquiry into Australia's Gambling Industries, the use of national prevalence estimates was dismissed as they would not properly reflect the diversity of regional experiences. Applying such estimates would necessitate the use of the unreasonable assumption that the proportion of problem gamblers is constant across regions.

The methodology adopted by the Centre used data from the Productivity Commission on average net gaming revenue per non-problem and problem gambler to calculate the average proportion of after tax income spent by each type of gambler. By making the assumption that these averages were constant between regions, average net gaming revenue estimates could be calculated for both types of gambler in each region. Combining this data with information on overall participation in gaming allowed an estimate of the number of problem gamblers to be calculated based on each of the city's expenditure levels. Full details of this methodology are available in the Centre's publication "The Impact of Gaming Machines on Small Regional Economies".[21]

The key results of this calculation are:

- the number of problem gamblers in the Provincial Cities is estimated at 3,097 (shown in Table 3.4); and
- the benefits and costs of electronic gaming machines for each region shown in Table 3.5, in the last two columns, are more strongly inclined towards the negative.

The estimated number of problem gamblers in the Provincial Cities equates to 2.81 per cent of the adult population. With the exception of Loxton Waikerie, all of the Provincial Cities have an above average proportion of problem gamblers in their population. Berri Barmera appears to have the worst problem, followed by Port Augusta, Murray Bridge and Port Lincoln.

In contrast to the Provincial Cities, estimated problem gambling for the rest of regional South Australia is well below the state average. Part of this lower preponderance of problem gambling is likely to be due to a lack of opportunity to gamble given the geographic spread of many of the state's rural and regional councils. However the Provincial Cities' higher population densities cannot be the only explanation, as the average estimated prevalence of problem gambling for the Adelaide metropolitan area is broadly in line with the state average. That is to say, the higher number of problem gamblers is not simply due to a higher population density in the respective cities or

[21] SACES (2001), "The Impact of Gaming Machines on Small Regional Economies". Available: http://www.adelaide.edu.au/saces/publications/other.html

towns. There are other factors at play here, and the Centre has noted that higher expenditure is related to other risk factors (see Section 3.2).

Table 3.4
Prevalence of Electronic Gaming Machine Related Problem Gambling
South Australian Provincial Cities: 1998/99

	Adult Pop.	After tax income Per Adult	Gamers	Non-Problem Gamers	Problem Gamblers		Ave. loss per NPG[3]	Ave. loss per PG[3]
	(No.)	($)	(No.)	(No.)	(No.)	(% of Adults)	($)	($)
Berri Barmera	8,422	13,720.27	3,453	3,059	394	4.68	685.19	9,343.23
Loxton Waikerie	9,200	13,566.50	3,450	3,323	127	1.38	677.51	9,238.51
Renmark Paringa	7,174	13,526.58	2,941	2,732	209	2.91	675.52	9,211.33
Mount Gambier & Grant[1]	22,858	15,284.25	9,372	8,856	515	2.25	763.29	10,408.27
Murray Bridge	12,477	11,692.44	5,115	4,685	430	3.45	583.92	7,962.31
Port Augusta	9,936	12,833.11	4,074	3,709	365	3.67	640.89	8,739.09
Port Lincoln	9,474	14,399.07	3,884	3,566	318	3.36	719.09	9,805.48
Port Pirie	13,365	12,129.28	5,480	5,163	317	2.37	605.74	8,259.80
Whyalla (C)	17,120	13,195.45	7,019	6,599	421	2.46	658.98	8,985.84
Prov City Total	**110,025**	**13,493.16**	**44,788**	**41,692**	**3,097**	**2.81**	**673.85**	**9,188.57**
Adelaide Metro	**869,498**	**14,780.62**	**326,062**	**308,286**	**17,858**	**2.06**	**652.35**	**10,065.30**
Other Non Metro SA[2]	**154,496**	**12,140.33**	**51,957**	**49,715**	**2,241**	**1.43**	**606.29**	**8,267.32**
Total SA[2]	**1,136,019**	**14,292.20**	**422,807**	**399,693**	**23,196**	**2.04**	**648.87**	**9,732.70**

Notes: [1] For the purposes of these calculations Mount Gambier and Grant are treated as one region, as Mount Gambier is a significant service point for residents of Grant and much of Grant DC's electronic gaming machine expenditure is likely to occur in Mount Gambier.
[2] Other Non-Metro SA and SA Total does not include the unincorporated sections of Flinders Ranges, Lincoln, Murray Mallee, Pirie, Riverland, Whyalla, Yorke and Western.
[3] NPG = Non-Problem Gambler, PG = Problem Gambler.
Source: Productivity Commission, Liquor and Gaming Commission, ATO, and ABS calculations SACES.

Table 3.5
Benefits and Costs to South Australia of Electronic Gaming Machines
South Australian Provincial Cities: 1998/99

	Social Cost		Social Benefit		Total Net Social Benefit	
	Lower bound ($'000)	Upper bound ($'000)	High elasticity ($'000)	Low elasticity ($'000)	Lower bound ($'000)	Upper bound ($'000)
Berri Barmera	-5,539.2	-10,011.8	3,078.2	3,736.2	-6,933.6	-1,803.0
Loxton Waikerie	-1,775.9	-3,219.8	2,079.0	2,669.4	-1,140.8	893.5
Renmark Paringa	-2,909.2	-5,278.7	2150.4	2,674.7	-3,128.3	-234.5
Mount Gambier + Grant	-7,747.0	-13,591.4	7,762.9	9,612.4	-5,828.6	1,865.5
Murray Bridge (RC)	-5,493.6	-10,373.8	3,859.9	4,661.0	-6,513.8	-832.6
Port Augusta (C)	-4,923.1	-9,063.2	3,235.2	3,940.1	-5,828.0	-983.0
Port Lincoln (C)	-4,610.1	-8,222.2	3,465.4	4,212.6	-4,756.8	-397.5
Port Pirie (C)	-4,128.4	-7,718.4	3,592.5	4,453.8	-4,125.9	325.3
Whyalla (C)	-5,768.4	-10,538.4	5,313.2	6,516.7	-5,225.2	748.3
Prov City Total	**-43,056.0**	**-78,178.7**	**34,538.7**	**42,483.4**	**-43,640.0**	**-572.6**
Adelaide Metro	**-264,547.0**	**-467,255.1**	**253,969.6**	**308,955.5**	**-213,285.5**	**44,408.5**
Other Non Metro SA	**-29,251.8**	**-54,674.7**	**30,546.9**	**38,568.4**	**-24,127.8**	**9,316.7**
Total SA	**-335,924.4**	**-599,212.3**	**319,033.0**	**389,959.9**	**-280,179.3**	**54,035.5**

Source: Productivity Commission, Liquor and Gaming Commission and ATO, calculations SACES.

The estimated social costs of gaming machines presented in Table 3.5 are based on the Productivity Commission's estimates of the social costs of problem gambling and an estimate of the excess loss of problem gamblers (i.e., the amount by which spending by problem gamblers exceeds the level it would have been had their spending been rational). The benefits of EGMs are based on the satisfaction derived by consumers from the consumption of gambling (measured by the economic concept of consumer surplus) and revenue derived from the taxation of net gaming revenue.

Based on the distribution of problem gamblers, all of the Provincial Cities except Loxton-Waikerie had substantial costs from problem gambling. If all the tax revenue were spent in the council from which they were collected, the benefits of this revenue would still be outweighed by the excess expenditure by problem gamblers alone.

Given the severity of problem gambling, for the Provincial Cities as a group, the range of net benefits to South Australia from electronic gaming machines estimated via our methodology extends from -$43.6 million to -$0.6 million. While non-problem gamblers enjoy substantial benefits from being able to gamble, these benefits are more than outweighed in five of the nine Provincial Cities by the scale of the costs of problem gambling. In Port Pirie and Whyalla the total net social benefit is almost entirely in the negative, while Mount Gambier and Grant (DC) trend more strongly to the negative. Only Loxton-Waikerie Council area seems as likely to benefit as to lose from gaming machines given the lower and upper estimates shown in Table 3.5.

These net benefit figures to the State as a whole are likely to be upper-bound estimates of the actual impact on the Provincial Cities themselves. This is because it is likely that the revenue from electronic gaming machines will be spent reasonably evenly throughout the State. As seven of the Provincial Cities have above average gaming expenditure it is likely that they receive less in net new spending enabled by taxation on gaming than is collected from their residents. The exception to this would be Loxton-Waikerie which has below average expenditure and hence probably receives more spending than is raised from its gamblers.

For other non-metropolitan areas the range of net benefits is more inclined towards costs than benefits but less strongly than in the case of the Provincial Cities, which reflects the more limited accessibility and reduced concentration of EGMs. For the State as a whole, while a net negative result is more likely, a net positive or neutral result is possible.

The pattern of negative impacts being regionally concentrated reinforces the idea that some form of regional restrictions may be desirable.

3.4 Recent Trends for the Provincial Cities

In a recent study[22] examining economic and social progress in the Provincial Cities, the Centre updated its analysis of trends in gaming machines, venues and expenditures in the cities. The update was partially undertaken with a view to determine whether the implementation by the previous State Government of several measures designed to curb the impact of gaming machines on problem gambling had had any visible impact on net

[22] SACES (2003), "A Review of Progress: Provincial Cities 1996 to 2001".

gaming expenditures in the Provincial Cities. The update is included at Appendix A for information purposes.

Probably the most interesting finding from the perspective of the Inquiry is that the implementation of the freeze on new gaming licenses from 7th December 2000 has had little impact on gaming expenditures within the Provincial Cities. The implementation of the freeze midway through 2000-01 led to a rush of applications for new licences and gaming machines which facilitated the largest year on year rise in gaming machine expenditure since 1995-96. For instance, the number of gaming machines in the Provincial Cities rose by 11.2 per cent in 2000-01, the largest rise since 1996-97, while total net gaming expenditure also rose by 11.2 per cent for the year. However, while the freeze on new licences did have an impact on growth in gaming machines the following year with the number rising by only 0.4 per cent in the Provincial Cities and 3.9 per cent in South Australia in 2001-02, gaming expenditure still rose very strongly for both regions, by 10.7 per cent for the Provincial Cities and 11.7 per cent for South Australia.

The strong rise in gaming expenditure in 2001-02 despite a freeze of new licenses is consistent with Delfabbro's finding that net gaming expenditure has shown no signs of slowing with there being no evidence of a ceiling effect. That the Provincial Cities experienced a rise in net gaming expenditure of similar magnitude to South Australia in 2001-02 despite having a much higher density of gaming machines (20.2 machines per 1,000 adults versus 12.2 machines for the state) is particularly supportive of this finding. While it does appear that the freeze on gaming licences has had little impact on growth in net gaming expenditure so far, it is probably too early to determine whether the freeze will ultimately have an impact in terms of slowing growth in net gaming expenditure.

It is too early because of the "announcement effects" of the way successive freezes have been introduced. The current freeze would need to assume the status of a ceiling or cap for a longer period of time to gauge its impacts.

Other possible explanations for the solid rise in net gaming expenditure include:

- economic conditions in the Provincial Cities have improved over recent years, facilitating an increase in spending on entertainment, including gambling;
- there has been a change in gambling patterns, such as a larger share of the population participating in gambling via gaming machines; and
- there has been an increase in problem gambling with the increased prevalence of gaming machines and venues.

Other interesting observations arising from the updated analysis include:

- the Provincial Cities continue to have a relatively higher spending on gaming machines relative to the state, with a gaming expenditure per adult of $597 in comparison with $472 per adult for South Australia in 2000-01; and
- in addition to a higher density of gaming machines, the Provincial Cities continue to have a higher prevalence of gaming venues relative to the state, with 1,307 persons per venue in 2000-01 compared with 1,962 persons per venue for South Australia.

4. Addressing a Historical Legacy

4.1 South Australian Gambling Environment

Each gambling environment in Australia is uniquely different in major respects. It is important to understand the differences across States as this impacts on the choice and credibility of policy options.

The IGA notes that a key feature of the South Australian legislation relating to the introduction of machines was that hotels and club licensees could purchase and operate (subject to licensure) up to 40 gaming machines (IGA: 2.2).

The result of this decision is that historical factors have largely determined the spatial distribution of gaming machines, principally whether the establishment had a liquor licence and where it was located. The effect of legislation is to create a spatial distributive system for EGM which may limit EGMs in some localities and concentrate them in others. Whether licensees take up the option to operate gaming machines and the building of any new hotel site further influence the distribution of machines. Amendments to legislation, such as the recent case involving the North Adelaide Football Club, impact on location. The upper limit of 40 machines influences the density pattern of machines.

The "system" in South Australia has tended to favour hotels over clubs for a variety of reasons, although clubs are treated equally in that they are eligible for a 40 machine limit as with hotels. In some other States, clubs are treated more favourably.

There is no policy basis other than need criterion for the granting of a liquor licence. While the Commissioner is stated as "not supporting the adoption of a 'need' criterion, on a standalone basis, to the granting of a gaming licence" a competitive market for EGMs potentially allows all currently licenced premises to obtain up to 40 machines. In the case of Port Augusta there are currently 13 venues with 317 EGMs. Four venues have the maximum of 40 machines. There are six potential venues in possession of a liquor licence that do not possess EGMs, but theoretically they could apply. If all venues had 40 machines the total number of EGMs would increase from 317 to 740 (increase of 423). There is currently no basis to impose a cap (which would benefit existing licensees at the expense of consumers, EGM manufacturers) and competitive neutrality could readily be argued by an applicant to increase or obtain EGMs. Theoretically, Port Augusta could reach 740 machines.

Even if we assume that there are significant limits to further increases in EGM numbers via greater take up by clubs, hotels remain a significant potential avenue for further increases. If the six hotels in Port Augusta and surrounds, currently below the maximum of 40 EGMs increased to the maximum, this would add a further 138 machines, in the order of 45 machines per 1,000 adults.

A similar argument could be applied for South Australia as a whole.

What is the potential maximum number in hotels alone? Currently, there are 481 hotels with 12,083 EGMs. If all 628 hotels sought 40 machines each, the potential maximum for hotels alone is 25,120 EGMs.

The Centre's estimate and that of the Liquor Licencing Commissioner contradicts Delfabbro's assertions for the Adelaide metropolitan area that the bulk of growth would have to come from new venues. Delfabbro concluded that additional growth in gaming machines was likely to arise from the addition of new venues as a majority had already installed close to the maximum number of 40 gaming machines allowed. However, if one looks at the number of gaming machines approved for the state as a whole, there appears significant scope for increases in gaming machines among existing licensed venues as the average number of machines per venue is approximately 25, significantly less than the maximum number of 40 machines allowed. This is further illustrated by Table 4.1, which provides a breakdown of licensed gaming venues by the number of gaming machines approved. It shows that almost half of all licensed gaming venues (47 per cent) in early 2003 had approval for 20 gaming machines or less.

Table 4.1
Venues With Gaming Licenses by Number of Gaming Machines Approved*

Machines Approved	Number	Per Cent
1-5	28	4.6
6-10	146	24.0
11-15	65	10.7
16-20	50	8.2
21-25	21	3.4
26-30	29	4.8
31-35	16	2.6
36-40	254	41.7
Total	609	100.0

Note: * Number approved as at 17th April 2003.
Source: Liquor and Gaming Commission, unpublished data.

We do not intend to "push this argument too far" because it would ignore resource constraints, some aspects of the current legislative environment and the impact of increased competition. However, it does illustrate that there is potential (or scope) for further increases in the number of EGMs.

This raises the question of the optimal number of EGMs. The argument that the present freeze is ineffective is obvious (due to the actual maximum increase in the number of EGMs). The debate concerning the freeze is irrelevant to the argument over a cap of some form. The debate concerning small venues (AHA: 5.1) is also irrelevant. The optimal number of EGMs should be independent of any small business. If the government wants to subsidise small venues it would be more effective to do so in cash (out of gaming revenue) than by granting additional licences.

The current freeze, including the announcement effect of the freezes is unsustainable and lacks policy credibility. Other options need to be proposed by the IGA and put out for public discussion.

Because the current system effectively **privatises profits and socialises losses,** the management of the number of the machines, their location and a basis for that locational pattern, and policy initiatives to distribute the surplus from gambling need to be addressed jointly.

4.2 Policy Environment in Other Jurisdictions

The following section provides a brief overview of the policy restrictions that apply to gaming machine numbers in South Australia other States and Territories.

Table 4.2 shows that only South Australia and Queensland have implemented a time-limited freeze. Regional caps have been implemented in Victoria and in the Northern Territory, the latter on the basis of national per capita data. South Australia has no effective statewide or regional policy to achieve any stated goal in regard to the location of EGMs — **this is principally because it has no stated goals.** In theory, all hotels and some undefined number of clubs could host EGMs.

Table 4.2
Status and Machine Number Management Process

	SA	NSW	VIC	QLD	TAS	NT	ACT	NZ
Freeze	✓	-	-	✓	-	-	-	-
Site Cap - Hotel	40	30	105	40	30	10	13	18
- Clubs	40	450[2]	105	280	40	45	No limit	18
Regional Cap	-	-[6]	✓	-	-	a[5]	-	
State-wide Cap	-	✓	✓	-	-	a[5]	✓	
CIS/SIA[3]	-[1]	✓	✓	✓	-	-	-	✓
Tradeable Right	-	✓	-	tbc[4]	-	-	-	
Removal/Balance[7]	-	✓	✓	tbc[4]	-	-	-	

1 Hotel to satisfy need criteria. No CIS.
2 Statewide cap for hotels and clubs. Clubs to reduce to maximum cap of 450.
3 Community Impact Statement, Social Impact Assessment.
4 TBC – to be considered. Subject to discussion paper.
5 a - Number of machines per capita not to exceed 55 per cent of national per capital number.
6 Restriction on transfers from rural areas.
7 Policy Intervention for removal or balancing factor through trading of blocs, sometimes requiring forfeited entitlement.

There is no mechanism (or view) about the relative balance between metropolitan and non-metropolitan areas.

There is no mechanism (or view) to achieve a relative balance between clubs and hotels, acknowledging the 40/40 rule or why this might be considered an important outcome.

There is no view on the maximum number of EGMs per capita or their location, nor how to establish this (e.g., adjust in sync with adjustment to electoral boundaries is one proposal).

There is no view as to the basis on which to establish a statewide cap.

The discussion on tradable rights needs to occur within the context of the above. Is the intention of tradeable rights to encourage redistribution to achieve maximum gaming revenue? To provide greater access for consumers? As a policy tool for the distribution of the surplus from gambling? To provide greater benefit for existing licensees? To support the establishment of new venues without the need to issue or sell new licences?

Reflecting on Table 4.2 it is important to note the emphasis, measured by site specific caps, that other jurisdictions place on clubs relative to privately owned hotels. While many clubs are commercial organisations it is also clear that many are not. The profits from gaming are intended to be "ploughed back" into the subsidised facilities within the club itself or for broader community benefit. The only concession clubs in South Australia have been provided is the concessional tax allowance for non-profit organisations (although the recent decision to allow the North Adelaide Football Club to operate gaming machines nearby/in a shopping centre, could be construed as a beneficial arrangement).

We note particularly the situation in New Zealand where gaming machines are operated by non-commercial societies including, *inter alia*, large charitable trusts or small local trusts. Clubs must be non-commercial societies while hotels act for other societies and machines must be operated for 'authorised purposes' including charitable, cultural, philanthropic and community purposes.

The historical introduction of gaming machines in South Australia has favoured the privately owned hotel and arguably, has now led to the trend to a concentration of hotels in a smaller number of private hands. The less developed 'club culture' and a range of other factors related to the location, structure, capital base, ownership and placement of clubs has tended to weaken the ability of clubs to access gaming machines.

In addition to this, it is clear unlike the situation in New Zealand that charitable organisations have suffered a loss of revenue following the introduction of gaming machines. The State Government acknowledges this through grants to such organisations, through large scale grants administered by FAYS and small scale grants to local helping agencies. The Office of Recreation and Sport administers five grant programs partly funded by gaming machine taxes to support recreation and sporting clubs. Analysis of expenditure switching from local fund raising activities (e.g., bingo, scratch cards, etc.), also reveals the potentially significant loss of revenue to a number of community helping agencies.

Arguably, and there are exceptions to this, the method and manner of the introduction of EGMs in South Australia has **privatised profits and socialised losses.** The only policy arm applied used to address this situation has been via the tax system through the concessional tax rate for clubs and differential tax rates applied to turnover rates (i.e., super tax).

4.2.1 New South Wales

Under the *Gaming Machines Act 2001*, a state-wide cap of 104,000 gaming machines in hotels and registered clubs has been established. In terms of venue type, a cap of 25,980 gaming machines applies to hotels, while clubs are restricted to a maximum of 78,020.

Individual hotels are restricted to a maximum of 30 machines per venue while clubs are limited to a maximum of 450 gaming machines per venue. There are no regional caps on the number of gaming machines, however there are regional dimensions to the trading arrangements governing the transfer of gaming machines. For example, a country hotel is permitted to transfer no more than one block of entitlements to a metropolitan hotel in any one year (one block represents three entitlements where one entitlement represents one machine). In general, for every two entitlements transferred, another must be forfeited into a forfeiture pool maintained by the Board.

4.2.2 Victoria

There is a state-wide cap on machines in hotels and clubs of 27,500 machines with each gaming machine operator – Tabcorp and Tattersall's – being limited to 13,750 each by Ministerial Direction. In addition, there is a defacto regional cap with the proportion of gaming machines located outside the Melbourne Statistical District permitted to be no less than 20 per cent of the total number of machines. Further restrictions include a maximum number of 105 machines allowed per venue with 50 per cent of machines required to be in hotels, with 50 per cent required to be in clubs.

In addition to the state-wide cap, the government has introduced caps on gaming machine numbers in vulnerable regions of the state. The criteria for setting regional caps are accessibility, player losses and socio economic status, reflecting that regions with relatively high accessibility, player losses and lower socio economic status are more likely to experience greater actual or potential harm from gaming machines. At the direction of the Minister for Gaming, accessibility of gaming machines in these regions should not be higher than the level in the lowest ninety per cent of municipalities, as at 30 June 2000, meaning that the number of gaming machines in most of these regions has to be phased down by April 2004. The affected regions are Maribyrnong Plus, Greater Dandenong Plus, Darebin Plus, City of La Trobe and Bass Coast Shire.

4.2.3 Queensland

A state-wide cap on the number of gaming machines in category 1 licensed venues (i.e., primarily hotels) was introduced by the Queensland Government on 8th May 2001. The cap does not apply to clubs. Restrictions on gaming machine number apply according to the type of venue with Category 1 licensed premises permitted a maximum of 40 machines and Category 2 licensed premises (i.e., clubs) a maximum of 280 machines. The transfer of gaming machines between venues is not permitted under the *Gaming Machines Act 1991*.

4.2.4 Tasmania

There are no state-wide or regional caps on gaming machine numbers in Tasmania. The maximum number of machines permitted in any one venue is set out in the Deed of Agreement between the Crown and the only operator, Federal Hotels. From 1 July 2002 to 30 June 2003, the maximum number of gaming machines permitted for a hotel is 30 machines while the maximum which applies to a club is 40 machines. The number of

gaming machines allowed after this date will be determined by agreement between the gaming operator and the Tasmanian Gaming Commission.

4.2.5 Northern Territory

The total number of gaming machines in hotels and clubs in the Northern Territory is not permitted to exceed 55 per cent of the national average in terms of gaming machines per capita. The maximum number of gaming machines permitted for hotels is 10 and for clubs 45, with the Licensing Commission having discretion for determining the number of machines allowed in a venue based upon the facility and size of the licensed venue.

The transfer of gaming machine between venues is permitted subject to the approval of the Director of Licensing.

4.2.6 Australian Capital Territory

Section 23B of the *Gaming Machine Act 1987* restricts the maximum number of gaming machines allowed territory-wide to 5,200 machines. The capping provision is currently set to expire on 30 June 2003. In terms of venue limits there are no limits on gaming machine numbers for clubs. General licence holders (hotels with more than 212 rooms for accommodation) are restricted to 10 Class B machines and 3 Class A gaming machines while on licence holders (taverns and hotels with less than 12 rooms) are restricted to 2 Class A gaming machines. The transfer of gaming machines is permitted subject to the approval of the ACT Gambling and Racing Commission. The transfer of a licence may only be approved for a premises to which a general or on licence applies to a person who is eligible for such a gaming licence, and from the premises of a club to another club that holds a gaming machine licence in relation to its premises.

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Appendix A

Update of Provincial Cities Gaming Data 2001-02

A.1 Gaming Machines

Concern over the potential negative effects of gaming machines in terms of problem gambling and loss of revenues/income from regions led the Provincial Cities to commission SACES to analyse the economic and social impacts of gaming machines on the Provincial Cities in 2001. The analysis found that the prevalence of gaming machines and gaming machine expenditures (i.e., player losses) were higher in the Provincial Cities relative to South Australia. This was a concern given that the Provincial Cities were estimated to have a higher prevalence of problem gambling than South Australia as a whole, and an increased prevalence of gaming machines may be an important factor, *inter alia*, that explains higher levels of problem gambling. The relatively higher expenditure was also a concern because it implied higher taxation revenues per adult for the Provincial Cities and therefore significant flows of taxation revenues out of the regions, which may not necessarily be returned to the regions through associated state government funding.

Around the time of the study the then State Government implemented several measures to help curb the impact of gaming machines on problem gambling. The measures include:

- a freeze on gaming licenses for a further two years, but not a cap on the number of machines;[23]
- a ban of autoplay facilities on all gaming machines;
- a ban of note acceptors on all gaming machines;
- the establishment of a daily limit on all cash withdrawals from ATMS and EFTPOS facilities at gaming venues;
- an increase in the minimum rate of return for new gaming machines from 85 to 87.6 per cent
- the establishment of a barring register to be administered by the Independent Gambling Authority; and
- mandatory codes of practice relating to advertising and promotional codes, the installation of clocks and a requirement to display gambling warning signs.

Given these changes and the availability of data for two more financial years since the original study, it is interesting to review how gambling patterns have continued to evolve. Since a majority of these changes were only implemented in late 2001 or from the beginning of 2002, any changes due to these measures will not be evident in the latest data. Any changes due to the freeze on gaming licences, which was originally instituted

[23] The freeze has been extended for a further year to enable the IGA to complete their inquiry and report to government.

on the 7th December 2000, may be evident in the data given the earlier implementation of this change and its larger significance. However, the nature of the freeze allowed applications to be made and approved up to the commencement of the general cap, meaning that there was a significant number of gaming machines waiting to be installed after the commencement of the cap on gaming machines. This has permitted further effects on gaming expenditure and taxation patterns due to increased prevalence of gaming machines.

A.2 Gaming Machine Expenditure

Gaming machine expenditure represents the total amount of money lost by gamblers, or in other words, the total amount wagered less the total amount won by gamblers. Updated gaming machine expenditures for the Provincial Cities and South Australia are presented in Table A.1.

Total gaming machine expenditures in the Provincial Cities was $56.2 million in 1999-2000. This expenditure has since increased by 21.4 per cent ($12.0 million) to a total gaming expenditure of $68.2 million in 2001-02. In comparison, South Australia total gambling expenditure has risen more strongly, rising by 24.9 per cent over the recent period, from $486 million in 1999-00 to $607 million in 2001-02.

Table A.1
Gaming Machine Expenditure ($million) and Annual Growth
Provincial Cities – 1995-96 to 2001-2002

LGA Area	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
Gaming Machine Expenditure - $m							
Mount Gambier	8.90	9.76	10.45	11.08	11.91	12.70	13.40
Murray Bridge	4.01	4.82	5.34	5.70	6.16	6.85	7.51
Port Augusta	4.24	4.46	5.01	5.20	5.57	6.15	7.26
Port Pirie	4.78	5.13	5.13	5.60	5.74	6.47	7.24
Whyalla	7.09	7.48	7.50	8.05	8.13	9.65	10.30
Port Lincoln	3.28	3.74	4.39	5.26	5.69	6.01	7.33
Riverland	10.03	11.16	11.28	12.13	12.98	13.88	15.11
Total Provincial Cities	42.33	46.55	49.10	53.02	56.17	61.70	68.16
South Australia	319.23	364.26	394.63	442.46	485.99	543.47	606.81
Annual Per Cent Change							
Mount Gambier	Na	9.6	7.1	6.0	7.5	6.7	5.5
Murray Bridge	Na	20.0	10.9	6.6	8.2	11.1	9.7
Port Augusta	Na	5.2	12.3	3.8	7.0	10.4	18.0
Port Pirie	Na	7.2	0.1	9.1	2.6	12.7	11.9
Whyalla	Na	5.5	0.3	7.3	0.9	18.7	6.8
Port Lincoln	Na	14.2	17.1	20.0	8.0	5.6	22.1
Riverland	Na	11.3	1.0	7.6	7.0	6.9	8.9
Total Provincial Cities	Na	10.0	5.5	8.0	5.9	9.9	10.5
South Australia	Na	14.1	8.3	12.1	9.8	11.8	11.7

Source: Office of the Liquor and Gambling Commissioner.

Despite the freeze on new gaming machine licences, gaming machine expenditures have continued to grow strongly. For example, although the freeze on new gaming machine licenses was instituted halfway through 2000-01, the Provincial Cities recorded a year on year rise in total gaming expenditures of 9.9 per cent for the financial year, which exceeds the growth in gaming expenditures for the previous 3 years. Furthermore, year on year growth in gaming expenditure in 2001-02 (10.5 per cent) was the highest annual rate of growth recorded for the Provincial Cities.

The continued strong rise in gaming expenditures can be explained by the fact that new gaming machines were still 'waiting in the pipeline' to be installed after the freeze on new licenses was instituted, while the announcement of the freeze briefly generated a rush of new applications. (As will be seen on the following section, the number of new gaming machines rose very strongly in the 2000-01 financial year.) Other explanations include that economic conditions in most areas have been buoyant over recent years, facilitating increased spending on entertainment, including gambling, while an increase in problem gambling could also explain increased expenditures.

The Provincial Cities share of state gaming machine expenditure, which fell from 13.3 per cent in 1995-96 to 11.6 per cent in 1999-00, continued to fall slowly over the latest two years, to 11.2 per cent in 2001-02. This fall is due to stronger growth in aggregate gaming expenditures at the state level.

Looking at growth rates in gaming expenditures for the individual cities over the latest two years of data, Port Augusta (30 per cent) and Port Lincoln (29 per cent) experienced the largest rises in gaming expenditure between 1999-00 and 2001-02; Whyalla (27 per cent) and Port Pirie (26 per cent) also experienced strong rises in gaming expenditure, and were followed by, in descending order, Murray Bridge (22 per cent), the Riverland (16 per cent) and Mount Gambier (13 per cent).

In aggregate terms, total gaming expenditure was clearly highest in the Riverland ($15.1 million) and Mount Gambier ($13.4 million), followed by Whyalla ($10.3 million), Murray Bridge ($7.5 million), Port Lincoln ($7.3 million), Port Augusta ($7.2 million) and Port Pirie ($7.2 million). The differences in aggregate expenditures between the Provincial Cities largely reflect differences in aggregate populations.

Information on the differences between the Provincial Cities in terms of their relative expenditure on gaming machines is provided in Table A.2, which shows gaming machine expenditure per adult for the Provincial Cities and South Australia. Unfortunately regional population data is presently not available to calculate per adult expenditures for 2001-02.[24] Based on known aggregate gaming expenditures for 2001-02 and trends in regional adult population growth, some forecasts on the likely path of per adult expenditures are made for the 2001-02 year further below.

The Centre's previous analysis found that gaming expenditures were higher in the Provincial Cities relative to the state, with gaming machine expenditure per adult of $539 compared to $425 for South Australia in 1999-00. Relative expenditures for both regions rose further in 2000-01, to $590 for the Provincial Cities and $472 for South Australia. In

[24] The Centre uses ABS estimates of regional populations as at the end of each financial year (30th of June) to calculate per adult estimates.

aggregate terms, the difference in per adult expenditures between the Provincial Cities and South Australia rose from $114 in 1999-00 to $118 in 2000-01. In percentage terms, the difference actually fell (by 1.8 per cent) since the rise in spending for South Australia was from a lower base. Gaming machine expenditure per adult was 25.1 per cent higher for the Provincial Cities relative to South Australia as a whole in 2000-01.

The higher relative expenditure in the Provincial Cities is almost certainly due to the fact that gaming machines are more prevalent in the Provincial Cities, which increases opportunities for gaming, coupled with the penetration of machines into the potential customer base. A stronger pub culture, due to more limited entertainment opportunities may also explain higher expenditure in the Provincial Cities. A greater prevalence of problem gambling, due to the density of machines and other important social and economic factors, would also explain higher expenditures in the Provincial Cities.

It is certain that per adult gaming expenditures rose further in the Provincial Cities and South Australia in 2001-02 given that aggregate gaming expenditures in both regions in the year grew at rates (10.5 and 11.7 per cent respectively) which substantially exceed the average annual adult population growth rates for both regions from 1996 to 2001 (0.2 and 0.7 per cent respectively). Based on these annual average adult population growth rates, it is likely that gaming expenditure rose to around $650 per adult for the Provincial Cities and to around $520 per adult for South Australia in 2001-02.

Mount Gambier continued to have the highest relative expenditure in 2000-01, with an average expenditure per adult of $732, which is 55 per cent higher than the State average. All other Provincial Cities with the exception of Port Pirie had relatively high expenditures per adult. Port Pirie ($493) had an expenditure per adult that was closest to the South Australian average.

Table A.2
Gaming Machine Expenditure Per Adult ($)
Provincial Cities – 1995-96 to 2000-01

LGA Area	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
Mount Gambier	532	582	621	654	700	732
Murray Bridge	330	395	434	456	489	541
Port Augusta	414	443	499	524	560	608
Port Pirie	359	384	382	419	431	493
Whyalla	404	430	434	470	481	594
Port Lincoln	355	404	467	556	591	595
Riverland	409	455	454	489	522	557
Total Provincial Cities	408	449	471	509	539	590
South Australia	286	324	349	389	425	472

Source: Office of the Liquor and Gambling Commissioner.

A.3 Gaming Machines and Venues

Table A.3 provides data on the number of gaming machines and the number of gaming machines per 1,000 adults for the Provincial Cities and South Australia. Although the freeze on new gaming licenses was implemented midway through 2000-01, the number of gaming machines for that year still rose by 9.0 per cent for the Provincial Cities and 10.7 per cent for South Australia – the highest annual rise in the number of gaming machines for both regions since 1996-97. This demonstrates there was a brief rush to obtain gaming machine licences before the deadline and that a significant number of gaming machines were still waiting to be installed following the initiation of the freeze. The substantial rise in gaming machines would largely account for the large rise in total gaming expenditures that was observed in 2000-01 for both the Provincial Cities (9.9 per cent) and South Australia (11.8 per cent).

Table A.3
Gaming Machines
Provincial Cities – 1995-96 to 2001-02

LGA Area	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
Number of Gaming Machines							
Mount Gambier	262	307	342	361	411	434	434
Murray Bridge	96	152	150	160	160	160	160
Port Augusta	165	177	231	260	263	315	305
Port Pirie	172	212	212	217	238	247	247
Whyalla	167	179	179	183	216	216	216
Port Lincoln	100	187	185	209	180	225	225
Riverland	353	385	397	422	432	474	492
Total Provincial Cities	1,315	1,599	1,696	1,812	1,900	2,071	2,079
South Australia	9,262	10,451	10,898	11,944	12,738	14,096	14,647
Gaming Machines per 1,000 Adult Population							
Mount Gambier	15.7	18.3	20.3	21.3	24.2	25.0	na*
Murray Bridge	7.9	12.5	12.2	12.8	12.7	12.6	na
Port Augusta	16.1	17.6	23.0	26.2	26.5	31.1	na
Port Pirie	12.9	15.9	15.8	16.2	17.9	18.8	na
Whyalla	9.5	10.3	10.3	10.7	12.8	13.3	na
Port Lincoln	10.8	20.2	19.7	22.1	18.7	22.3	na
Riverland	14.4	15.7	16.0	17.0	17.4	19.0	na
Total Provincial Cities	12.7	15.4	16.3	17.4	18.2	19.8	na
South Australia	8.3	9.3	9.6	10.5	11.1	12.2	na

Note: * na = not available. The Centre uses ABS estimates of the regional population as at 30th June of each financial year to estimate gaming machines per 1,000 adult population. However, population estimates for 30th June 2002 are currently unavailable and hence gaming machines per 1,000 adults cannot be calculated at this stage.

Source: Office of the Liquor and Gambling Commissioner, ABS, Population by Age and Sex, various issues, (Cat. No. 3235.4).

The freeze on gaming licenses did have a more pronounced effect on growth in the number of gaming machines in 2001-02 with the number of machines in the Provincial Cities rising by only 0.4 per cent (8 machines). Growth was stronger at the South Australian level, with the number of machines rising by 3.9 per cent. Although there was more subdued growth in 2001-02, aggregate gaming expenditures for the year still rose strongly for both the Provincial Cities (10.5 per cent) and South Australia (11.7 per cent). This suggests that the freeze on new gaming machines has had little impact (so

far) on gaming expenditures. It is possible that the strong rise in expenditures may be associated with gaming machines being installed towards the latter part of 2000-01, however the actual pattern of machine instalment is unknown. Other important factors may include improving economic conditions which have stimulated and supported stronger consumer spending on gambling, an increasing share of the population gambling via gaming machines, and growth in problem gambling. Nevertheless, it is still too early to determine whether the freeze on gaming licenses has had any impact on trends in gaming expenditure – further annual data will be needed before any firm conclusions can be drawn.

The Provincial Cities continue to have a significantly higher prevalence of gaming machines relative to South Australia. The number of gaming machines per 1,000 adults in the Provincial Cities rose from 18.2 in 1999-00 to 19.8 in 2000-01, while the number for South Australia rose from 11.1 to 12.2 between these years.

Of the individual Provincial Cities, Port Augusta (31.1 machines per 1,000 adults) and Mount Gambier (25.0) had the highest frequency of gaming machines in 2000-01 — substantially higher than the South Australian average of 12.2 machines. The incidence of gaming machines for Port Lincoln (22.3), the Riverland (19.0) and Port Pirie (18.8) in 2000-01 was around the provincial city average, while the frequency of gaming machines for Whyalla (13.3) and Murray Bridge (12.6) was closer to, but still above, the lower South Australian average.

Information on the number and incidence of gaming venues is presented in Table A.4 for the Provincial Cities and South Australia. The number of venues with gaming machines in the Provincial Cities rose by 1 venue in 2000-01 and then fell by 1 venue in 2001-02 to remain unchanged between 1999-00 and 2001-02. In comparison, the number of gaming venues for South Australia has risen by 4.8 per cent over this period.

With a substantially higher frequency of gaming machines, it is not surprising that the Provincial Cities also have a higher frequency of gaming venues in comparison with South Australia. On average, there were 1,413 persons for every gaming venue in the Provincial Cities in 2000-01 in comparison with 1,962 persons for every venue in South Australia. The prevalence of venues has steadily increased for both the Provincial Cities and South Australia since 1995-96. The higher frequency of venues for the Provincial Cities is a particular reason why gambling expenditures are higher, since there are many more opportunities to gamble on gaming machines.

The prevalence of gaming machines is highest for Port Augusta, where there were only 778 persons per gaming venue in 2000-01. The Riverland (1,187 persons per venue), Mount Gambier (1,335 persons), and Port Lincoln (1,442) all had high frequencies of gaming venues relative to the South Australian average. Port Pirie (1,876) had an incidence of gaming venues that is closer to the South Australian average, while Murray Bridge (2,111) and Whyalla (2,320) actually had a lower prevalence of gaming venues in comparison with South Australia.

Table A.4
Gaming Machine Venues and Adults per Gaming Venue
Provincial Cities – 1995-96 to 2001-02

LGA Area	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
Number of Gaming Machine Venues							
Mount Gambier	10	10	11	12	13	13	13
Murray Bridge	5	5	5	6	6	6	6
Port Augusta	8	9	11	11	11	13	12
Port Pirie	5	6	6	6	7	7	7
Whyalla	6	7	7	7	7	7	7
Port Lincoln	6	8	8	8	8	7	7
Riverland	17	20	21	21	21	21	21
Provincial Cities	57	65	69	71	73	74	73
South Australia	417	484	513	540	565	587	592
Adults per gaming venue							
Mount Gambier	1,672	1,677	1,531	1,412	1,308	1,335	Na
Murray Bridge	2,429	2,442	2,459	2,079	2,100	2,111	Na
Port Augusta	1,280	1,118	913	903	903	778	Na
Port Pirie	2,665	2,225	2,239	2,227	1,905	1,876	Na
Whyalla	2,925	2,484	2,472	2,446	2,411	2,320	na
Port Lincoln	1,541	1,160	1,174	1,184	1,203	1,442	na
Riverland	1,441	1,228	1,183	1,181	1,183	1,187	na
Provincial Cities	1,820	1,594	1,509	1,466	1,428	1,413	na
South Australia	2,674	2,320	2,205	2,107	2,025	1,962	na

Source: Office of the Liquor and Gambling Commissioner.

A.4 Gaming Machine Taxation Revenues

One of the more critical issues for the Provincial Cities is the extent to which local expenditures are being lost from the regions through state taxation of gaming machine expenditures. Although these funds may be returned to the regions through government spending on services and infrastructure projects, it is not certain that this has been the case, especially given the rapid extent with which gaming taxation revenues have risen. Unfortunately it is virtually impossible to determine whether there has been a commensurate increase in state government spending in the Provincial Cities in line with gaming tax revenues collected.

An important issue in understanding trends in gaming taxation revenues is that taxation rates for gaming machines were reduced from the beginning of 2000-01 to compensate for the introduction of the Goods and Services Tax. These "lost gaming taxation revenues" are being fully recovered through the GST revenue disbursements to the states. Hence, the states have not lost any of their aggregate revenues collected from taxation levied on gaming expenditures. However, direct state taxation revenues from gaming machines provided by the Office of the Liquor and Gambling Commissioner exhibit a fall in taxation revenues between 1999-00 and 2000-01 due to the altered tax collection arrangements. For example, direct state taxation revenues from the Provincial Cities fell by 12.3 per cent from $22.6 million in 1999-00 to $19.8 million in 2000-01. If the GST gaming revenues were also included, it would be clear that total gaming taxation

revenue collected from the Provincial Cities had actually risen in 2000-01. The Centre has therefore estimated the tax revenues collected from gaming machines via the GST for 2000-01 and 2001-02 in order to develop a picture of total tax revenues collected from gaming machines.[25] This data is presented for the Provincial Cities and South Australia in Table A.5.

Table A.5
Gaming Machine State Tax Revenue
(Includes Estimates of GST Gaming Revenue Receipts)
Provincial Cities – 1995-96 to 2001-02

LGA Area	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01*	2001-02*
Mount Gambier	3.07	3.58	4.19	4.56	4.89	5.23	5.55
Murray Bridge	1.38	1.79	2.17	2.37	2.68	3.04	3.34
Port Augusta	1.48	1.61	1.94	1.97	2.20	2.46	2.94
Port Pirie	1.64	1.84	2.00	2.29	2.29	2.64	2.99
Whyalla	2.44	2.78	3.08	3.54	3.50	4.26	4.55
Port Lincoln	1.14	1.34	1.67	2.16	2.36	2.58	3.23
Riverland	3.42	4.03	4.40	4.27	4.68	5.03	5.51
Total Provincial Cities	14.55	16.97	19.45	21.16	22.61	25.24	28.12
South Australia	110.11	134.50	160.68	191.26	211.79	239.32	268.23

Note: * Data for 2000-01 and 2001-02 includes SACES estimates of state tax revenues derived from GST on net gaming revenues/expenditures.
Source: Office of the Liquor and Gambling Commissioner.

Reflecting the strong rise in total gambling expenditures, total taxation collected from gaming machines expenditures (both directly and from GST receipts) in the Provincial Cities has risen strongly over recent years, from $22.6 million in 1999-00 to $28.1 million in 2001-02. This represents a rise of 24.3 per cent. In comparison, total gaming tax revenue for South Australia rose by 26.6 per cent over this period.

Looking at gaming tax revenues collected in 2001-02, the largest tax revenue was collected from Mount Gambier ($5.6 million), followed closely by the Riverland ($5.5 million). These cities were followed by, in descending order, Whyalla ($4.6 million), Murray Bridge ($3.3 million), Port Lincoln ($3.2 million) Port Pirie ($3.0 million), and Port Augusta ($2.9 million). The pattern of taxation revenues of course reflects the pattern of gaming expenditures, which is in turn determined by a number of factors, such as the prevalence of gaming machines and venues, various socio-economic factors (e.g., average incomes, unemployment), local gambling patterns (i.e., proportion of adults gambling), and the extent of problem gambling.

The brief review of gaming expenditures above found that spending on gaming machines is higher in the Provincial Cities relative to South Australia. This implies that taxation revenues collected from the Provincial Cities are also relatively higher, and this is demonstrated in Table A.6, which shows total taxation revenues collected per adult. In 2000-01, an average of $241 in government gaming taxation revenue was collected per adult from the Provincial Cities compared to $208 per adult for South Australia. With

[25] According to the 2000-2001 State Government Budget Statement, GST represents 9.09 per cent of net gambling revenue/expenditure. GST related taxation revenues are subsequently calculated by applying this rate to the net gambling expenditure estimates provided by the Office of the Liquor and Gambling Commissioner.

higher relative gaming expenditures, the Provincial Cities have consistently had higher taxation revenues per adult since 1995-96. This difference has declined over time from $42 in 1995-96 to $34 in 2000-01, though there have been some varying changes during the intervening years.

Table A.6
Gaming Machine State Tax Revenue Per Adult
(Includes Estimates of GST Gaming Revenue Receipts)
Provincial Cities – 1995-96 to 2000-01

LGA Area	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01*
Mount Gambier	183	214	249	269	287	302
Murray Bridge	114	146	177	190	213	240
Port Augusta	144	160	193	198	222	243
Port Pirie	123	138	149	171	172	201
Whyalla	139	160	178	207	207	262
Port Lincoln	123	145	177	227	246	256
Riverland	139	164	177	172	188	202
Total Provincial Cities	140	164	187	203	217	241
South Australia	99	120	142	168	185	208

Note: * Data for 2000-01 includes SACES estimates of state tax revenues derived from GST on net gaming revenues/expenditures.
Source: Office of the Liquor and Gambling Commissioner.

Mount Gambier ($302) had the higher taxation revenue collected per adult of any individual Provincial City in 2000-01. Mount Gambier was followed by, in descending order, Whyalla ($262), Port Lincoln ($256), Port Augusta ($243), Murray Bridge ($240), the Riverland ($202), and Port Pirie ($201). The Riverland and Port Pirie actually had taxation revenues collected per adult below the South Australian average.