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## 5. Analytical framework of the social impacts of gaming

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Presented in this section is the analytical framework for summarising and evaluating the social impacts of gaming. The section begins with a review of three existing gambling social impact models—with the aim of discussing their limitations and to show how the new framework extends current representations of the social impacts of gaming. A detailed description of the components of the new framework is contained in the remainder of this section.

### 5.1 Critical review of existing models of the social and economic impacts of gambling

Three conceptual models examining aspects of the social and economic impacts of gambling were identified as part of the literature search for this project, and were subsequently used as a basis for developing the analytical framework presented in this report. These three models were:

- Model 1 presented in *Summary of Findings 1996-97 Research Program* (Arthur Andersen, 1997);
- Model 2 presented in *Annual Gaming Report 1997-98* (Alcohol and Gaming Authority, 1998); and
- Model 3 presented in *Australia's Gambling Industries* (Productivity Commission, 1999).

Each of these models will be briefly discussed in terms of its purpose, key components and limitations in achieving a comprehensive and integrated picture of the social (and related economic) impacts of gambling.

**Model 1.** The first model was developed to summarise findings from the Authority's 1996-97 Research Program. In this model, the economic and social impacts of gaming and community perceptions of these impacts are considered separately as three discrete dimensions. Although this model adequately summarises the gaming impacts identified in the research projects from the Authority's 1996-97 Research Program, its use beyond this is limited by:

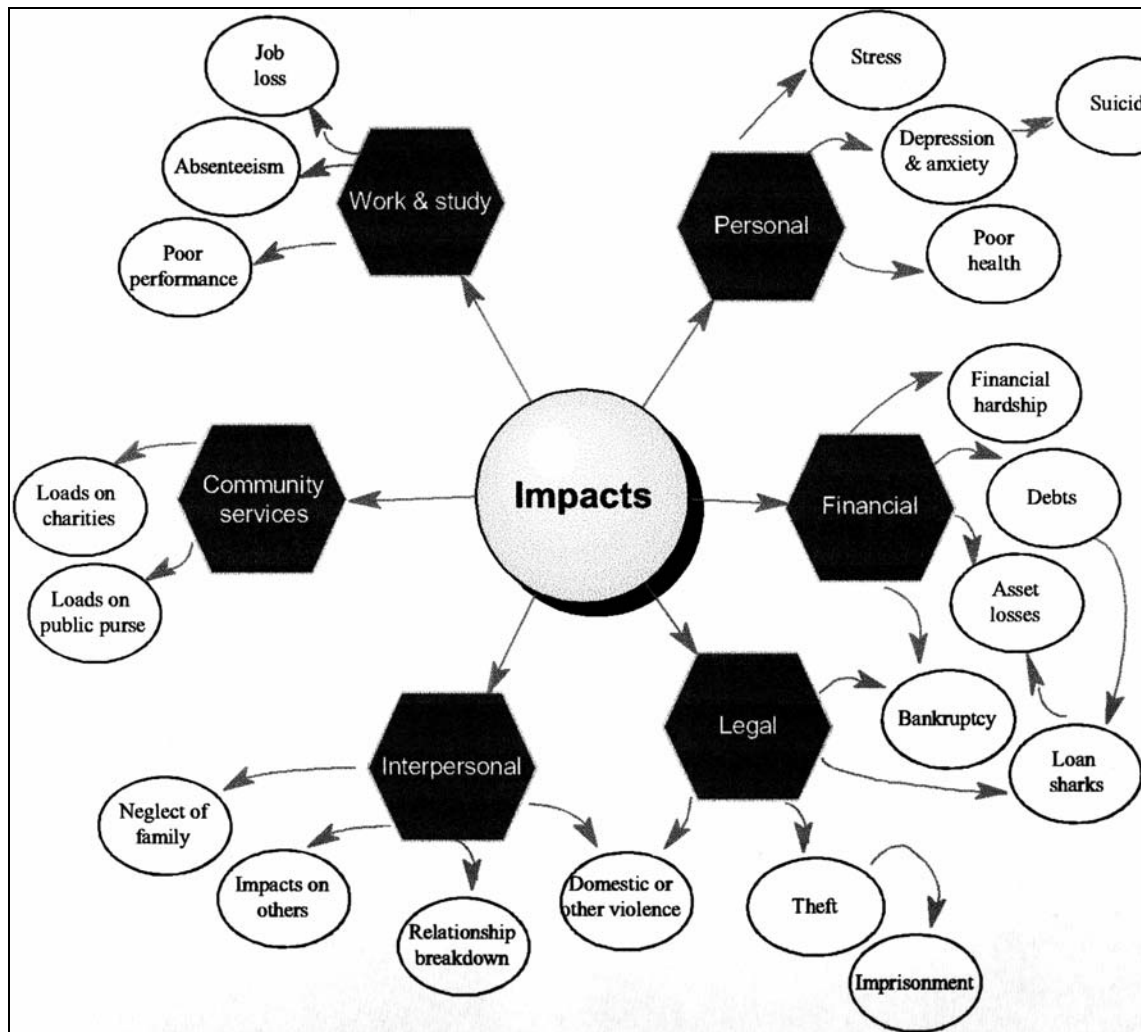
- The reliance on three separate summaries of gaming impacts (based on the economic, social, and community perception dimensions), in conjunction with using different units of analysis to summarise impacts across these dimensions, prevents the model from establishing linkages between economic, social, and community perception impact data.
- The use of broad impact dimensions (ie. economic, social, and community perceptions) provides limited specificity in the classification and evaluation of research findings.
- The nature and adequacy of indicators associated with gaming impacts presented.

**Model 2.** Based on the conclusion that a convenience model of gambling is the most suitable framework for understanding the social effects of gambling in Nova Scotia, Model 2 uses a five-element typology to summarise the results of Canadian and international gambling research. That is, the potential positive and negative effects of gambling on: (1) the family, (2) workplace, (3) community, (4) education, and (5) governance, are considered in the model. A major strength in the original application of the typology was a recognition of the influence of “types of gamblers” (ie. recreational, occasional, and problem) and “types of gambling situations” (ie. bingo, lotteries, video lottery terminals, casinos) in moderating the impacts of gambling. However:

- The model is predominantly descriptive, and does not compare the nature of gambling effects or differences in the effects of moderating variables across the five elements (ie. family, workplace, community, education, and governance) in the typology.
- The influence of variables such as gender, age, cultural group, and location (ie. metropolitan or rural) in moderating the outcomes of gambling are not explicitly considered in the typology, despite gambling research supporting their importance as moderators.
- As with Model 1, limited attention is given to assessing the availability and adequacy of indicators used to measure gambling impacts.

**Model 3.** This model (see Figure 5.1) was included in the report *Australia’s Gambling Industries* (Productivity Commission, 1999) to illustrate the adverse impacts of problem gambling and the connections between these impacts. Model 3 provides a comprehensive structure for organising Australian and international research at the level of the individual and family—however, examining gambling impacts across additional levels of analysis (eg. community, region) would allow a clearer understanding of the net impacts of gambling.

**Figure 5.1: Impacts of Problem Gambling.**



Source: Productivity Commission 1999, *Australia's Gambling Industries*, Report No. 10, Ausinfo, Canberra. p. 7-3

To summarise, the key deficiencies in existing gambling impact models were identified as:

- classification of research findings by impact area with limited consideration given to linkages across areas of impact or levels of data analysis;
- limited identification of the factors that influence the nature and scale of gambling impacts; and
- limited analysis of the availability and adequacy of indicators used to measure positive and negative gambling impacts.

The analytical framework of the social impacts of gaming outlined in the remainder of this section presents a conceptual structure for summarising and evaluating gaming research aimed at overcoming these deficiencies.

## **5.2 Components of the new analytical framework of the social impacts of gaming**

As noted in Section 3.1.1 of this report, the analytical framework developed for this project is represented by a two-dimensional matrix comprising twenty-eight cells (see Table 5.1). The horizontal axis of the framework shows the four “levels of analysis” at which gaming impacts are examined, with the vertical axis of the framework dividing these impacts into seven outcome areas or “dimensions of impact”. Detailed descriptions of the core components of the framework are provided below.

### **5.2.1 Levels of analysis**

Within the framework, “level of analysis” refers to the unit on which gaming impact data is collected and analysed. Four levels of analysis were identified in the development of the framework:

- individual and family;
- community;
- regional; and
- state.

***Individual and family.*** By “individual” we mean the person who undertakes the gaming activity and experiences its benefits and costs. The expression “family” includes those in the individual’s household or close relations or friends who will be affected by the outcomes of the individual’s gaming activities.

***Community.*** Although communities are generally accepted as a level of analysis at which the impact of gaming can be assessed, there is no commonly accepted definition of “community”. Researchers for the Nova Scotia study (Alcohol and Gaming Authority, 1998), for example, identified three approaches to defining community: (1) the local community, (2) social groups, and (3) social networks which are self-defined and are part of the world of gambling. These three approaches to defining community suggest the need to integrate both spatial and social elements to effectively define the term community.

Building on this view, the definition of “community” used here seeks to show that communities involve both spatial and social components and can be indicated by the following three groups:

- all residents in a relevant geographical area;
- social groups, which would include sporting clubs, service clubs, churches, and other voluntary groups including ethnic associations. Although some of these might be parties in commercial transactions, the predominant characteristic will be mutuality of interests; and
- social networks containing self-defined groups which form because of the common experience of frequenting places where gaming occurs.

**Regional.** Regions are most likely, however, to be initially defined by a spatial dimension. For the purpose of the framework, a “region” is taken to be: (1) a predominantly economic-based entity, and (2) the level at which private and government services are provided.

In developing this definition, it was acknowledged that several of the Authority’s research projects examining regional issues have encountered problems because regions are not self-contained and homogeneous entities. Within these projects, regions have often been defined in geographic terms or as a local government authority. Such definitions give little attention to whether or not there is a local economy that has a degree of self sufficiency in conjunction with a reasonable balance of transactions with other regions. Accordingly, in using such definitions of region it may be difficult to match economic and demographic data.

The difficulty of defining regions has been discussed in a number of the Authority’s research reports, particularly in *Social and Economic Effects of Electronic Gaming Machines on Non-Metropolitan Communities* (Deakin Human Services Australia & Melbourne Institute of Applied Economic and Social Research, 1997) and *Impact of Gaming Venues on Inner City Municipalities* (Melbourne Institute of Applied Economic and Social Research, Deakin Human Services Australia, & NIEIR, 1997).

In the first report above it was noted that the boundaries of the five regions examined did not encompass the population and economic activity of a homogenous unit, and to this extent the findings were affected<sup>1</sup>. The authors of the second report concluded that the regional boundaries applied in research are largely administrative artefacts and there is little justification for treating them as economic units.

For the purpose of the proposed framework, a “region” is defined as the area in which micro-economic impacts occur and in which private and government services are provided. Regions will generally be defined spatially. In this context, The Authority’s locality studies can be viewed as dealing with both communities and regions. The distinction will generally depend on whether the analysis is dealing with social or economic impacts respectively.

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<sup>1</sup> An example used was that a regional centre might depend on wages paid from outside the region.

**State.** “State” is intended to represent the impacts at the level of the State Government, for example as regulator and provider of some support services and the beneficiary of revenue from gaming licenses.

### 5.2.2 Dimensions of impact

As noted earlier, seven gaming outcome areas or “dimensions of impact” were identified in the development of the framework: These are:

- health and wellbeing;
- culture;
- recreation and tourism;
- employment and education;
- legal/justice;
- economic development; and
- financial.

**Health and wellbeing.** This dimension recognises the impacts that gaming can have on the physical, psychological and social health and wellbeing of the individual and household. Also included here are factors such as the costs to the community, region and the State in providing health and welfare services.

**Culture.** This dimension incorporates issues such as the development of social attitudes to gaming, for example, the degree of its acceptance as a “socially appropriate” activity.

**Recreation and tourism.** This dimension recognises issues such as the entertainment impacts that come from gaming venues. For example, impacts will occur when gaming facilities draw patronage away from live entertainment venues. A further impact concerns the social interaction at venues. A key issue is the differences that occur between gaming venues seen as part of the tourism industry and those drawing on a convenience activity for residents.

**Employment and education.** This dimension recognises the job creation potential that results from the construction and operation of gaming venues as well as the impact on the work and education of players.

**Legal/justice.** This dimension covers impacts that occur when gaming activity leads to an individual or members of a household coming into contact with the criminal justice system.

**Economic development.** This dimension is a macro-level indicator and takes into account the returns to the state from taxation of gaming, and returns from increased economic activity, for example increased payroll tax as a result of job creation.

**Financial.** This dimension reflects the financial state of the individual and household, and in particular, the potential for increased household debt and bankruptcy. Increased profits for hotels and clubs will also be included in this dimension.

### 5.3 The analytical framework

Table 5.1 shows the 28-cell matrix that represents the analytical framework developed for this project. Each cell within the analytical framework shown in Table 5.1 will be considered separately here with the aim of:

- providing a brief description of examples of positive and negative gaming impacts associated with each cell;
- identifying indicators of these impacts; and
- discussing the adequacy of indicators and availability of data for each cell.

**Table 5.1 Comprehensive analytical framework of the social (and related economic) impacts of gaming**

Dimension of impact	Level of analysis			
	Individuals and families	Communities	Regions	State
Health and Wellbeing	<p><i>Possible Positive impacts:</i></p> <ul style="list-style-type: none"> <li>• Forum for social interaction</li> <li>• Stress reduction</li> </ul> <p><i>Possible Negative impacts:</i></p> <ul style="list-style-type: none"> <li>• Additional dependencies/cross addiction</li> <li>• Stress, depression and anxiety</li> <li>• Social isolation</li> <li>• Marital breakdown</li> </ul>	<p><i>Positive impacts:</i></p> <ul style="list-style-type: none"> <li>• Development of community networks</li> </ul> <p><i>Negative impacts</i></p> <ul style="list-style-type: none"> <li>• Increased demand for community and related support services</li> </ul>		<p><i>Negative impacts:</i></p> <ul style="list-style-type: none"> <li>• Costs in providing support agencies</li> </ul>
Culture				
Recreation and Tourism	<p><i>Positive impacts</i></p> <ul style="list-style-type: none"> <li>• Entertainment</li> </ul>		<p><i>Positive impacts</i></p> <ul style="list-style-type: none"> <li>• Increased tourism</li> </ul>	

**Table 5.1 (cont.)**

Employment and education	<i>Negative impacts:</i> • Loss of work efficiency and productivity			<i>Positive impacts</i> • Increased state employment
Legal/justice	<i>Negative impacts:</i> • Bankruptcy • Domestic or other violence	<i>Negative impacts</i> • Increased crime	<i>Negative impacts</i> • Increased crime	
Economic development			<i>Positive impacts:</i> • Increased economic activity  <i>Negative impacts</i> • Adverse impact on local industries	<i>Positive impacts</i> • Increase in state economic activity  <i>Negative impacts:</i> • Decline in some sectors of the economy
Financial	<i>Positive impacts:</i> • Financial gain  <i>Negative impacts:</i> • Loss of assets	<i>Positive impacts:</i> • Increased profits for hotels and clubs  <i>Negative impacts:</i> • Reduction in donations to charities		<i>Positive impacts:</i> • Increased government tax revenue

### 5.3.1 Cell 1: Individuals and families x health and wellbeing

#### ***Positive impacts***

The positive impacts of gaming on individuals and families receive virtually no attention in the literature. Potential positive health and wellbeing impacts of gaming for individuals and families may include stress reduction and increased opportunities for social interaction. Positive impacts are generally assumed by researchers to be associated with the absence of problem gambling (Alcohol and Gaming Authority, 1998; Productivity Commission, 1999).

***Indicators.*** Indicators used to assess the positive impacts of gaming include:

- responses to self-report survey items and interview questions

#### ***Negative impacts***

The adverse effects of gaming on individuals and families are seen in the literature as primarily a function of problem gambling (however defined). For the individual, problem gambling has been associated with feelings of social isolation and

heightened levels of anxiety, depression, and in extreme cases suicide. Increased rates of substance abuse (eg. alcohol, illegal drugs) and poor physical health have also been found in samples of problem gamblers (eg. Jackson *et al.*, 1997; Lesieur, 1998). In addition, the partners of problem gamblers often report symptoms of poor physical health and levels of emotional distress. (Dickerson *et al.*, 1996; Lorenz *et al.*, 1990).

**Indicators.** Indicators of the negative impacts within this cell include:

- standardised psychometric instruments to measure problem gambling (eg. South Oaks Gambling Scale—SOGS);
- problem gambling prevalence and incidence rates estimated from general population surveys.

### ***Data availability, measurement issues and approaches***

Research addressing this cell focuses almost exclusively on negative outcomes of problem gambling behaviour. Only scant attention has been given to less “quantifiable” negative outcomes, such as the time that gambling takes away from family activities. In addition, caution is required in drawing causal conclusions about the role of problem gambling in producing negative health and wellbeing outcomes (eg. suicide, divorce).

There is no single approach to defining and measuring problem gambling. Despite its frequent use, the South Oaks Gambling Scale (SOGS) has been criticised on the basis of its validation sample and lack of cultural sensitivity. Further, the heavy use of self-report, *a priori* data from clinical samples and lack of verification measures built into research designs drawing conclusions about the nature and extent of impacts on individuals and families difficult.

## **5.3.2 Cell 2: Individuals and families x culture**

### ***Positive impacts***

At present, research has not focused on or identified positive cultural impacts at the level of the individual and family.

### ***Negative impacts***

Anecdotal evidence cited in the literature suggests that individuals from particular cultural groups may be more susceptible to problem gambling.

**Indicators.** Anecdotal responses as part of focus group discussions serve as the major indicator of negative impacts.

### ***Data availability, measurement issues and approaches***

Although demographic data on ethnic origin is available as part of counselling service databases, limited research attention has been given to both the cultural

impacts of gaming and the role of culture in moderating other gaming impacts (eg. impacts on health and wellbeing).

### **5.3.3 Cell 3: Individuals and families x recreation and tourism**

#### ***Positive impacts***

Research suggests that gaming activities provide consumers with a source of entertainment (eg. Roy Morgan Research, 1998).

#### ***Indicators.***

- indirect evidence based on inferences from gaming participation rates;
- self-report responses to survey items using general population samples; and
- anecdotal responses as part of focus group discussions.

#### ***Negative impacts***

At present research has not identified negative recreational impacts at the individual and family level.

#### ***Data availability, measurement issues and approaches***

There is currently a debate in the literature as to whether participation in gaming can be viewed as a sign of satisfaction with gaming as a recreational activity. This calls into question the use of gaming participation rates as an indicator of the positive recreational impacts of gaming.

### **5.3.4 Cell 4: Individuals and families x employment and education**

#### ***Positive impacts***

It has been suggested in the literature that the introduction and expansion of gaming provides increased opportunities for employment. Although this is generally explored at the regional or State level of analysis.

#### ***Negative impacts***

A key behavioural trait of problem gamblers is a pre-occupation with gambling, and this, in conjunction with periods spent away from the workplace while gambling and the impacts of gambling-related substance abuse, can have adverse impacts on a gambler's work performance. Lost time from work and/or study, reduced job performance (ie. quality and/or speed of work), job changes, and loss of employment have been identified by researchers as negative outcomes from gambling (eg. Dickerson *et al.*, 1995; Ladouceur *et al.*, 1994; Productivity Commission, 1999). Research indicates that, although these negative employment and education impacts are greater for problem gamblers when compared to non-problem gamblers, only moderate effects on work performance are found for most problem gamblers (Productivity Commission, 1999).

**Indicators.** Based on data derived from self-report survey items and interview questions, included in populations surveys and intake interviews for clinical populations (eg. problem gamblers) in counselling programs.

#### ***Data availability, measurement issues and approaches***

There is an absence of studies directly examining the employment and educational implications of gaming for samples of non-problem gamblers, although non-problem gamblers feature as comparison groups for problem gamblers in demonstrating differences in the degree of negative impacts.

It has been suggested in the literature (eg. Productivity Commission, 1999) that problem gamblers in counselling report higher levels of negative employment and educational impacts from gaming than do problem gamblers not receiving treatment and non-problem gamblers. It follows that caution should be taken when using self-report data from problem gamblers in counselling to estimate the overall degree of negative employment and educational impacts. Further, the general reliance on self-report data and an absence of verification measures (eg. employment records) built into research designs makes the interpretation and generalisation of findings difficult.

#### **5.3.5 Cell 5: Individuals and families x legal/justice**

##### ***Positive impacts***

To date, the positive crime/justice impacts of gaming on individuals and families has not been considered in the literature.

##### ***Negative impacts***

A number of criminal activities have been associated with problem gambling. These include: (1) fraudulently writing cheques, (2) borrowing money without permission; (3) theft, and (4) embezzlement.

**Indicators.** Indicators are largely drawn from self report to survey items using:

- general population samples;
- prison samples;
- problem gamblers seeking treatment; and

As well as police and court statistics on gambling-related crime is available.

#### ***Data availability, measurement issues and approaches***

There are currently no specific tracking mechanisms in place to monitor crimes which are motivated by gambling. A key problem in research in this area is the reliance on self-report data from problem gamblers. The use of and extrapolation

from such specific clinical samples may lead to imprecise general population estimates of crime/justice impacts.

### **5.3.6 Cell 6: Individuals and families x economic development**

Economic development is a macro-level concept and therefore not considered at the individual and family level of analysis.

### **5.3.7 Cell 7: Individuals and families x financial**

#### ***Positive impacts***

Financial gain as the result of an individual's gaming activities is a positive impact,

***Indicators.*** Indicators include:

- official statistics on consumer profits from gaming; and
- self-report of consumer profits from gaming.

#### ***Negative Impacts***

A critical aspect of the impact of problem gambling cited in the literature is the extent to which gambling expenditure represents a large or small share of total income—with ratios of gambling expenditure to income being very high among problem gambling households relative to those of recreational gamblers (Productivity Commission, 1999). For the bulk of gamblers, gambling remains a modest expenditure item.

***Indicators.*** Indicators include:

- estimates of average weekly, fortnightly, monthly and/or annual gaming expenditure (ie. losses);
- ratio of net gaming expenditure to household income (ie. affordability);
- level of gaming related debt;
- indirect evidence based on inferences from self-report of borrowing money to finance gaming.

#### ***Data availability, measurement issues and approaches***

A considerable amount of data is currently available on the financial impacts of gaming for individuals and families. In assessing the negative financial impacts of gaming, most research designs incorporate multiple indicators of these impacts (Productivity Commission, 1999).

### 5.3.8 Cell 8: Communities x health and wellbeing

#### ***Positive impacts***

The most significant community impact from the introduction of new gaming activities is the additional recreation options that are provided to community members.

The literature suggests that certain groups for example unaccompanied women, persons from different ethnic backgrounds and older citizens see venues as safe surroundings and they will use these where previously they would have stayed at home.

Venues, particularly clubs, which have cash surpluses will frequently use these in creating facilities that can be used for members and more generally.

Sponsorships for sporting teams also create a community benefit.

***Indicators.*** Wellbeing is a personal state experienced by community members and surveys are necessary to establish attitudes to community activities and the related positive outcomes experienced as a result of access to gaming venues. Surveys require well-developed scales and properly constructed sample designs. Here the key indicators are:

- survey results
- details of new and improved facilities and sponsorships that can be directly related to gaming.

#### ***Negative impacts***

The most significant negative impact will be the costs associated with problem gambling. These will result from increased calls on the services of community agencies, which provide support and advice for those experiencing gaming-related difficulties.

Communities will also suffer where clubs and hotels fail to gain EGMs resulting in a lower standard of facilities. The loss of EGMs could have a similar effect.

***Indicators.*** No indicators are presently available. They could be developed from:

- Survey results
- Details of demands on community agencies as a result of increased gaming activities

#### ***Data availability, measurement issues and approach***

The key data deficiency is the lack of information as to the dollar cost to agencies that assist those with gaming-related problems. There is a need for detailed record keeping to establish the real impact of gaming-related problems.

### 5.3.9 Cell 9: Communities x culture

#### ***Positive impacts***

Catering for a diverse clientele gaming venues provide entertainment and social facilities that are accepted in the community.

Specific groups such as the aged and women tend to be high frequency users of particular gaming venues which provide an additional choice of community based activity in a generally socially sanctioned environment.

***Indicators.*** The main indicators of impacts would be responses from target groups in well founded quantitative studies.

#### ***Negative impacts***

There are many groups in society, which see gambling as a moral problem. (Productivity Commission, 1999, p. 10.3). Tension can develop between these groups and those who promote gaming as just another economic product or a recreational activity.

***Indicators.*** The principal indicators are contained in reports that form part of the Authority's *Research Program* (Older People and Gambling: Roy Morgan Research 1997) and surveys conducted by the Productivity Commission (1999).

#### ***Data availability, measurement issues and approaches***

A number of studies focus on particular groups. The aged have received particular attention (Older People and Gambling, Roy Morgan Research 1997). Perception studies report c

### 5.3.10 Cell 10: Communities x recreation and tourism

#### ***Positive impacts***

From a recreational perspective the most significant benefit will be found in the availability of a new form of legitimate recreation. The use of gaming as a form of recreation including "recreational gambling".

National level sporting and cultural events are sponsored by major providers. In Victoria, the Community Support Fund is a significant source of funds for the provision of recreational sporting facilities for community use.

Casinos have the potential to be significant generators of overseas inward tourism and home intra-State visits.

Indicators are derived from surveys such as those reported in *Community Facilities Resulting from the Providers of Gaming in Victoria* (Hames Sharley Victoria, 1997a). Self report surveys of gamblers indicate levels of usage and motivation.

### ***Negative impacts***

A frequently cited negative impact is that gaming as a recreation “crowds out” traditional forms of entertainment such as live theatre. Sectors of the entertainment industry are affected.

In addition recreational and sporting facilities associated with non-gaming venues may experience revenue losses due to an inability to compete with gaming venues.

The spread of EGMs is unlikely to encourage intra-State tourism “across-border” visits to NSW venues may lessen due to the spread of EGMs within Victoria.

***Indicators.*** The most relevant indicators are those found in the report *Community Facilities Resulting from the Providers of Gaming in Victoria* (Hames Sharley Victoria, 1997). Details of disbursements from the Community Support Fund are also available and show the nature and distribution of projects that have been funded.

### ***Data availability, measurement issues and approaches***

The report *Community Facilities Resulting from the Providers of Gaming in Victoria* (Hames Sharley Victoria, 1997a).

Suggests that clubs and hotels make significant contributions to community groups (including sporting clubs), and that these contributions are increasing over time.

One general view on the impact of gaming on entertainment is contained in the report *Impact of Gaming Venues on Inner City Municipalities* (Melbourne Institute of Applied Economic and Social Research, Deakin Human Services Australia, & NIEIR, 1997). Here, the authors concluded:

“whether EGMs provide for a newly recruited audience or an audience substituting EGMs for other venues (such as non EGM hotels, art centres, adult education classes) is not clear. The *impression* is that it is largely a new audience, that is a previous “stay at home” audience is now a going out group. This appears especially so in the case of the unemployed, women, the newly retired and elderly, NESB migrants and the disabled”. (p. 168)

#### **5.3.11 Cell 11: Communities x employment and education**

No systematic data is available relevant to the cell in the framework.

#### **5.3.12 Cell 12: Communities x legal/justice**

### ***Positive impacts***

Regulated gaming provides an opportunity to gamble in a legally sanctioned environment. Those who might have gambled illegally in the past, can now do so without committing a criminal offence.

**Indicators.** A key indicator would be a reduction in illegal gambling as shown by a decline in court proceedings for this crime. As yet this data is not readily available.

The Productivity Commission (1999) concluded that trying to quantify benefits of the displacement of illegal gambling through liberalisation is difficult. The benefit of displacement is not the value of player losses but of the social costs of corruption associated with illegal gambling. From a community perspective, a reduction in corruption would be a significant benefit.

### ***Negative impacts***

Increasing community concerns that increased gaming opportunities would lead to increased levels of crime and the penetration of organised crime is a negative impact commonly identified.

**Indicators.** The Productivity Commission (1999) investigated the relationship between crime and gambling at some length. Four possible classes of indicators were identified:

1. petty crime in gaming venues;
2. street crime in the vicinity of venues;
3. money laundering; and
4. control by organised crime.

### ***Data availability, measurement issues and approaches***

There is a lack of relevant crime statistics. It also appears that, that which is available, is subject to significant under-reporting and therefore underestimates crime related to gaming. An additional confounding factor is that problem gamblers are inclined to commit crime at a higher rate than the general population.

Further research is necessary to establish:

- the actual level of gaming related crime and the trend over time; and
- the basis for community perceptions about the link between gaming and crime.

#### **5.3.13 Cells 13-16**

No work has been undertaken relevant to cells 13: Communities x economic development; 14: Communities x financial; 15: Regional x health and wellbeing; and 16: Regional x culture, that would allow positive and negative impacts to be identified.

### 5.3.14 Cell 17: Regional x recreation and tourism

#### ***Positive impacts***

The principal positive impact results from a flow of tourists into a region to use gaming venues. In addition to the growth in venues, impacts will be felt on related facilities such as accommodation, dining and shopping establishments. Job growth will also occur.

***Indicators.*** Indicators include:

- increased visits from overseas travellers;
- increased tourism-related employment;
- increased facilities available for entertainment, and other consumption related activities.

#### ***Negative impacts***

Expenditure leakage from towns without well developed gambling related facilities. Towns, which experience increased gaming-related tourism may also experience congestion costs.

***Indicators.*** Indicators of negative impacts include:

- experiences of non-gaming venues;
- decline in recreation opportunities in regions without gaming venues; and
- surveys of gamblers regarding choices of gaming locations.

#### ***Data availability, measurement issues and approaches***

There is a lack of official statistics that would allow a direct assessment of the gaming-related tourism impacts. This is exacerbated by the lack of detailed, current regional data for most relevant measures.

The trends in the performance of venues are often based on survey data with variable response rates and a lack of information on the characteristics of non-respondents.

### 5.3.15 Cell 18: Regional x employment and education

#### ***Positive impacts***

The introduction of regulated gaming to a region will increase employment in a number of ways:

- direct employment in the construction phase for new venues and refurbishment of upgraded venues;

- direct and indirect employment in the gaming venues;
- employment in firms that service the industry including gaming providers.

Research suggests that employment patterns emphasise part time work for younger females (NIEIR, 1997).

**Indicators.** Indicators include:

- positions created and their type;
- skills base of new employees;
- employment impact direct and indirect; and
- changes in these indicators over time.

### ***Negative impacts***

There are a number of ways in which negative employment impacts occur, these include:

- non-gaming venues experiencing a loss of activity
- jobs going to residents outside of a region; and
- redirection of expenditure away from local businesses leading to job loss.

**Indicators.** Indicators of negative impacts include:

- types of jobs lost;
- impact on unemployment level at regional and state levels.

### ***Data availability, measurement issues and approaches***

There is limited data available at the regional level. The research to date relies largely on surveys of venues and these give only partial coverage. The self-report aspect is also of concern. Non-gaming venues are likely to emphasise negative trends, while the reverse can occur with gaming venues. The experience of mainstream businesses is usually reported, through focus groups, which may not fully represent the situation.

While there is an obvious one off benefit for the construction industry when regulated gaming is introduced, refurbishment of venues, might suggest a longer term positive impact for the building and construction industry.

#### **5.3.16 Cell 19: Regional x legal/justice**

##### ***Positive impacts***

At present, research has not identified any positive regional impacts relevant to legal/justice issues.

### ***Negative impacts***

Possible negative impacts include losses to business (including venues) from gaming-related crime, particularly fraud or theft. Money laundering and loan sharking are potential negative impacts at casinos.

***Indicators.*** Indicators include crime statistics that identify gaming-related crime by region.

### ***Data availability, measurement issues and approaches***

The Productivity Commission (1999) notes that the incidence of gaming -related crime is low although it should be noted that detailed statistics are not available. There may be an under-reporting as crimes committed by problem gamblers are not always prosecuted.

## **5.3.17 Cell 20: Regional x economic development**

### ***Positive impacts***

Growth in employment retail sales and construction activity are seen as positive impacts.

As well, businesses that service the gaming industry, such as cleaners or food providers, will see increased activity. Regions, which host firms that produce gaming equipment, will also benefit.

Expenditures sourced from the Community Support Fund will provide benefits to economic activity in some regions.

***Indicators.*** Indicators of positive impacts include:

- expenditure on gaming related construction that is carried out by local firms;
- increased activity by firms that service venues (for example providers of cleaning services); and
- Community Support Fund projects within regions related to contributions to the fund from that region.

### ***Negative impacts***

The NIEIR (1997a) reported that:

While at the state level there is little evidence to suggest that increased gambling expenditure adversely affected the retail industry generally, on a geographical basis some areas and industries in Melbourne and Victoria have probably been affected.” (p. ii)

A targeting of low income and socially disadvantaged communities by gambling businesses, as indicated by the high proportion of gaming machines in these areas,

suggests a potential for disadvantaged communities to suffer more adverse social problems from exposure to gambling (The Productivity Commission, p. 10.48).

Regions that lack gaming venues will suffer adverse impacts if residents gamble elsewhere. There will be lost expenditure on entertainment and retail purchases through shopping while visiting gaming venues.

**Indicators.** Indicators of negative impacts include:

- Community Support Fund expenditure by regional contribution;
- regional data on businesses closures;
- surveys of industry participants; and
- density of EGMs relative to social disadvantage.

***Data availability, measurement issues and approaches***

There is a lack of data examining both the positive and negative regional impacts of gaming. Conclusions about the nature and extent of impacts often have to be indirectly inferred from aggregate data, surveys or qualitative studies.

**5.3.18 Cell 21: Regional x financial**

***Positive impacts***

At present, research has not identified positive impacts.

***Negative impacts***

Businesses could experience losses from bad debts and bankruptcy of customers who experience severe gaming losses.

***Data availability, measurement issues and approaches***

Bankruptcy statistics are not available on a regional basis. Also, as there are penalties exist under the legislation when bankruptcy is the result of gambling, it is usually not declared as a cause.

**5.3.19 Cell 22: State x health and wellbeing**

***Positive impacts***

Increased revenue collected as a result of regulated gaming has been directed to health services in Victoria. In 1996-97 \$921.1 million was applied to two funds-- \$866 million to the Hospitals and Charities Fund and \$54.4 million to the Mental Hospitals Fund. The total rose to \$1008.5 million in 1997-98.

Community Support Fund are earmarked for gaming support services such as Breakeven and G-Line and will finance statewide projects that will improve amenities for many residents.

**Indicators.** Indicators of positive impacts include:

- Government accounts recording receipts related to gaming;
- ABS publications dealing with gambling related collections; and
- details of Community Support Fund Payments.

***Negative impacts***

The cost of public health and community support services required to assist problem gamblers will fall to a significant extent on the public sector. Frequent calls for increased services reduces the opportunity to implement other projects.

**Indicators.** An indicator of negative impacts is the level of payments directed to providing problem gambling support services.

***Data availability, measurement issues and approaches***

There are difficulties in identifying the extent to which negative impacts are funded by gaming revenues because health and community support service clients will not always admit to gambling problems.

The concept of health and wellbeing introduced in the framework is not dealt with in existing state-level research and so there is no body of research findings. This suggests a possible topic for a future research agenda.

**5.3.20 Cell 23: State x culture**

***Positive impacts***

At present, research has not identified positive impacts.

***Negative impacts***

Community concern about government reliance on gaming related revenue in the context of the harm gambling is seen as generating is a consistent survey finding.

**Indicators.** Results of perception surveys serve as a primary indicator within this cell.

***Data availability, measurement issues and approaches***

Surveys of attitudes to government raising and using gaming revenues need consideration.

### 5.3.21 Cell 24: State x recreation and tourism

#### ***Positive impacts***

The establishment of Casinos as a State initiative have become an important tourist destination as well as a major venue for residents seeking recreation and revenue generator. Any increase in tourism is likely to have flow- on effects to accommodation providers and other suppliers.

The Community Support Fund is a resource for Government uses to promote arts and tourism in Victoria on a generic basis.

***Indicators.*** Indicators of positive impacts include:

- tourism data on variables such as international visitor numbers and details of their spending; and
- details of expenditure from the Community Support Funds for recreation and tourism related projects.

#### ***Negative impacts***

The availability of casinos has the potential to distract visitors from tourist attractions in non-metropolitan regions.

***Indicators.*** Indicators of negative impacts include:

- time series data on visitor numbers to various attractions; and
- visitor surveys as to choices of attraction.

#### ***Data availability, measurement issues and approaches***

A range of statistics are available, for example length of stay and expenditure on day trips. There is a need for further surveys of overseas visitors to determine their motivation for their trip to Victoria and the role that gaming plays in such decisions.

### 5.3.22 Cell 25: State x employment and education

#### ***Positive impacts***

Research by the Authority shows that regulated gaming leads to overall growth in employment and reduces the level of statewide unemployment by approximately one percent. Increased taxation revenue will provide government with additional opportunities for expenditure on education and related areas.

***Indicators.*** Indicators of positive impacts cell include:

- employment statistics for gaming and gaming-related industries; and
- results of studies on gaming impacts concentrating on employment changes.

***Negative impacts***

Increased levels of unemployment may be likely in retail and entertainment because of the redirection of expenditure.

***Indicators.*** The same indicators as for positive impacts (see above).

***Data availability, measurement issues and approaches***

Macro-level economic data is available to assist in determining the positive and negative employment and education impact of gaming—but there is a lack of regional data that would assist government planning.

**5.3.23 Cell 26: State x legal/justice*****Positive impacts***

Reduced policing and court costs associated with illegal gambling may occur if the participants choose to switch to legalised gaming.

***Indicators.*** Detailed crime and court statistics would assist in determining the level of this positive impact.

***Negative impacts***

The Productivity Commission (1999) noted that the introduction of legalised gaming has not had a significant impact on crime. However, any additional crime will increase police and court costs.

***Indicators.*** Detailed crime and court statistics would assist in determining the level of this negative impact.

***Data availability, measurement issues and approaches***

Detailed statistics are not available. Gambling is not always recorded or in fact revealed as the motivator for crime, and often small problem gambling-related crimes are not reported to the police.

**5.3.24 Cell 27: State x economic development*****Positive impacts***

The major state-level impact of gaming is the increased revenue that accrues to the State Government. During the five and a half year period to December 1997, weekly net revenue derived from gaming venues at any point of time was greater than the equivalent figure in respect of all previous weeks (Auditor General of Victoria, Special Report No 54:11 VICAG 1998). This growing revenue stream provides an opportunity for additional government spending or for the reduction of other taxes.

Increased employment and other activity will also increase revenue for example in payroll tax collections.

**Indicators.** Economic development indicators of positive impacts include:

- measures of state product;
- ABS statistics on gambling related collections; and
- labour force figures.

### ***Negative impacts***

Costs in regulating the gaming industry; while many of these will be funded from the revenue collected their magnitude needs to be considered.

### ***Data availability, measurement issues and approaches***

Gross data is readily available. However, detailed and skilled analysis is necessary to ensure that an understanding of the inter-relationships between trends and the isolation of causes in observed correlations is achieved.

#### **5.3.25 Cell 28: State x financial**

Based on definitions used in the framework, there will be no gaming impacts within this cell.

### **5.4 Conclusion**

This brings to a conclusion our discussion of the proposed analytic framework in which the social impacts of gaming can be located. We have seen that data is more readily available for some cells of the framework than for others. In the remainder of this report we will address this matter in further detail.