Insert Map 1

Insert Map 2

Insert Map 3

Insert Map 4

9. Summary of the impacts of gambling in New South Wales

The economic impact of legal gambling in New South Wales is positive. As compared to a hypothetical state in which there is no gambling, it provides approximately $1 billion worth of additional income to the households of New South Wales per year, at an average rate of $8.47 per household per week when the impacts are measured over a five year period.

As with all allocative decisions in the economy, consumer spending on gambling in the clubs and hotels of the state results in a reduction in incomes and employment in industries dependent on alternative forms of demand, in this case the retail, financial services and construction industries directly, and indirectly many other industries. On the other hand the gambling revenue provides strong increases in income resulting from the operation of clubs and hotels, the casino and lotteries sector along with the TAB, bookmakers and racing (through higher prize money).

Table 9.1 lists the components.

Table 9.1 Combined impact in NSW, $millions over five years

Impact of gambling expenditures applied	
Club revenue applied	12,223
Pub revenue applied	4,791
Lotteries and casino	2,871
TAB and racing	4,910
Government spending	7,441
Total activity generated	**32,236**
Opportunity cost of activities foregone	
Flows from wealth foregone	1,634
Debt finance cost	2,283
Retail sales foregone impact	2,398
Retail goods not produced	5,676
Net federal tax	303
Construction VA lost	11,889
Problem gambler cost	2,880
Total opportunity cost	**27,063**
Net impact 5 yrs	**5,173**
Impact per year	1,035
Per household per wk (2001 households)	8.47

Our estimate of the positive impact of legal gambling as compared to a case in which there is no legal gambling is conservative, in that we make no allowance for the enforcement costs which would be incurred if gambling were prohibited. Past experience has taught us that these costs can be considerable, comprising not only budgeted police costs but the costs of police, business and political corruption related to the supervision of gambling. However, this does not imply that our estimate of overall benefits necessarily applies to marginal changes in the availability of gambling outlets. There may be cases where the closure of a gambling

outlet or the withdrawal of a gambling mode has net benefits, even after taking enforcement costs into account; there may likewise be cases where the addition of outlets or the provision of new modes may have net benefits, even after taking problem gamblers and other indirect costs into account.

In assessing the net positive impact of gambling in New South Wales, it is important to remember the following.

- The assessment is at market value. No allowance is made for the notion that consumers may derive pleasure from consumption that they value more highly than the amount they pay – the notion of consumer's surplus. Similarly there is no allowance for consumers' regret at money subsequently considered to be mis-spent. More prosaically, the values are market-generated, and interpreting them as measures of benefit and cost assumes that the relevant markets are competitive.

- The assessment makes no allowance for distributional effects. If losses to the poor were regarded as more serious than their dollar value, and gains to the rich as less, the overall estimate would have to be revised.

- The net impact is the difference between two much larger numbers, and hence is sensitive to re-estimation of components of these larger numbers. The same is true for the impact of all consumer demands: if there were less restaurants, more would be spent on other retail goods and services. This is inherent in the principle of opportunity cost. The existence of second-best alternatives means that, when an activity is foregone, new benefits are substituted for the old, with the net result that the net level of benefit does not fall by the complete amount of benefit from the foregone activity.

- An important assumption on the cost side is that debt finance cost and interest on wealth foregone adequately measure the macroeconomic cost of the decline in the household savings rate. Overall this assumption is considered defensible in current Australian circumstances, but it may not be so in individual cases, as where gambling makes the difference between building up a self-employment business and business failure. It is also fair to point out that any macroeconomic costs of low savings rates are due to consumption as a whole, and not necessarily to gambling.

9.1 Conclusion

This study does not purport to be the last word in the assessment of the economic impact of gambling in NSW. Other approaches are possible. We could have concentrated on the effect of a small change in gambling facilities rather than our heroic comparison between NSW as it is and NSW as it would be in the absence of gambling but without any other changes in consumer preferences. Even within our approach there is plentiful scope for different assumptions; for example, different assumptions on the economic benefits and costs of low household savings rates and different assumptions on the costs of problem gambling. Even so, we believe that we have taken into account as wide a range of direct and indirect effects as possible, and that our assumptions are appropriate for the current NSW economy.

At the state level, gambling generates more income than would be generated by the expenditures foregone in order to finance it. This net benefit remains even after allowance for the economic costs of problem gambling, but is sensitive to the assumption that savings foregone would not be used to finance additional investment.

Within the state, the pattern is more complex. Some shires do well, particularly those on the Victorian border which used the 'pokie bus' era to build up tourist industry assets. However, the main conclusion is that Sydney benefits more than the bush, mainly because it receives incomes from gambling profits, administration and gambling-related manufacturing.

As a final speculation, these patterns of expenditure and net benefit are probably not much different from those in other recreational service industries.

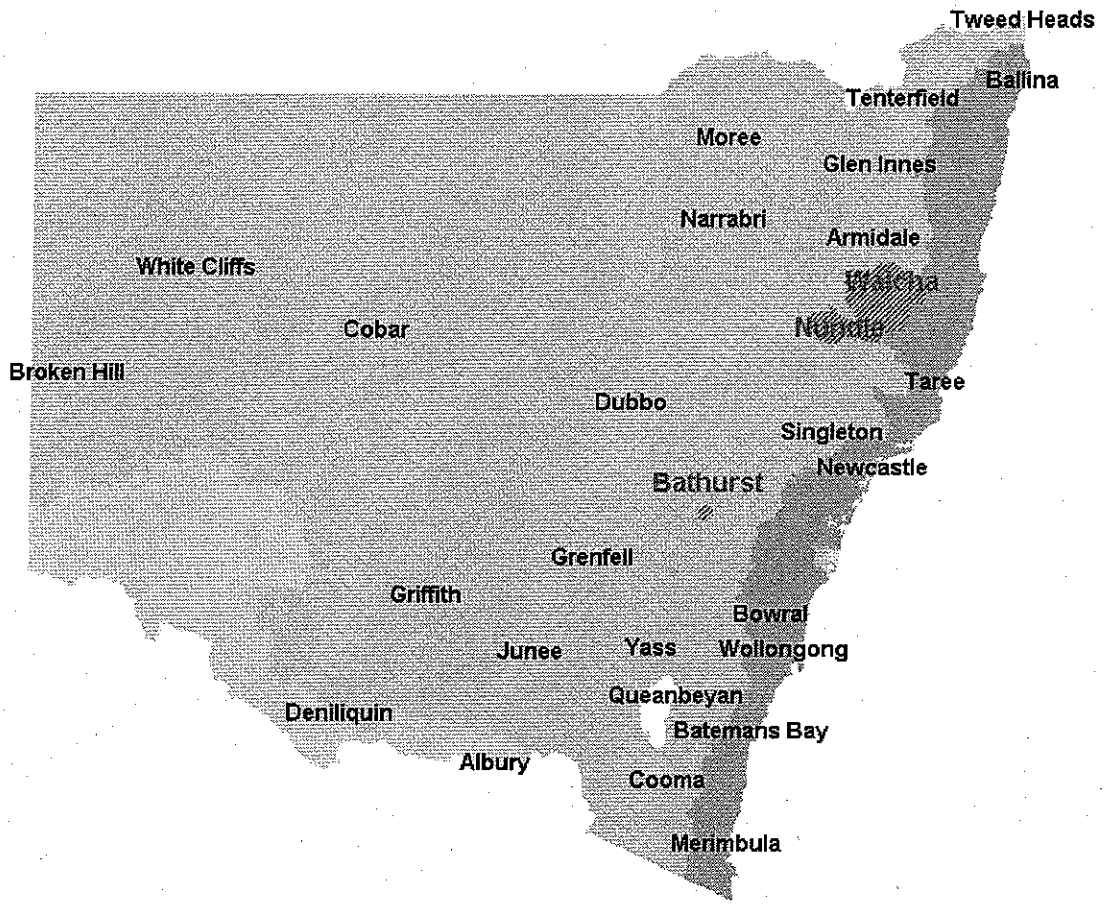
Appendix 1 Fully worked example of flows in five LGAs

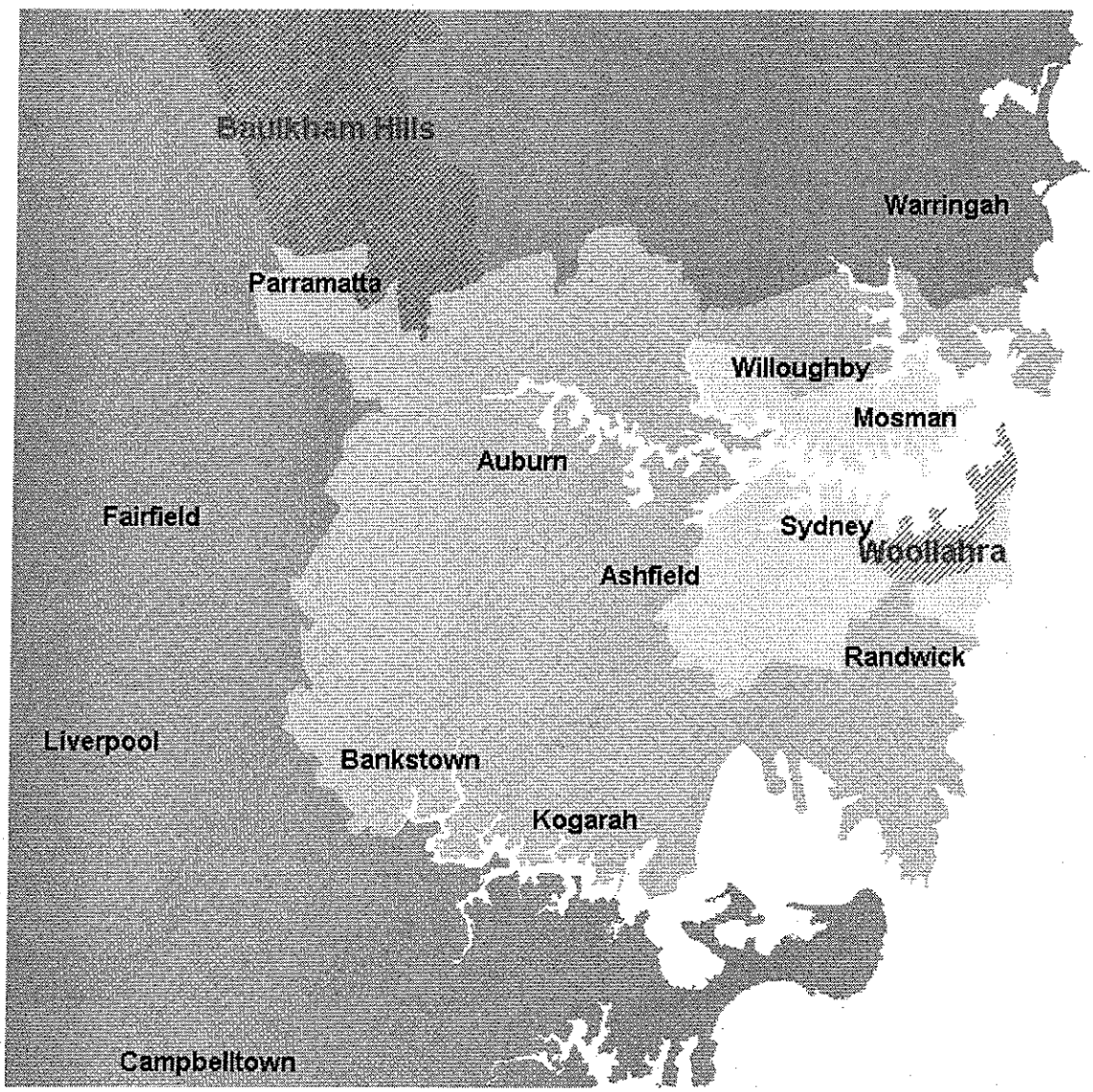
A1.1 Introduction

To provide a context for the calculations at the local area level, five LGAs are presented in a fully exposited example. The five local government areas chosen are representative across New South Wales, including one inland city, Bathurst, two small poor rural LGAs, Nundle and Walcha (one has machines and the other does not), the outer northern suburb of Baulkham Hills and the wealthy suburb of Woollahra in Sydney's eastern suburbs.

The appendix proceeds through a series of tables documenting the calculations or background for the calculations for each of the local government areas. Dot points are presented for reference with each table.

The following two maps show the five LGAs.





A1.2 Example of flows

Background, Tables A1.1, A1.2:

- Baulkham Hills is a very large local government area whilst Walcha and Nundle are amongst the smallest in the state
- Walcha being a declining timber industry town suffers from a low level of effective savings through low incomes and depreciating wealth.
- Woollahra has a significant level of savings and will be unlikely to require significant debt financing, whereas Walcha and Nundle have very low savings rates and are likely to require debt financing.

Table A1.1 Example Step 1: demographics

Local government area	HH, 2001	Pop, 2001	Pop, 2001 18 +	Savings Rates
Baulkham Hills	43,999	146,644	108,335	2.40%
Woollahra	22,725	54,631	45,390	9.30%
Walcha	1,234	3,306	2,454	-6.00%
Bathurst	10,622	30,755	22,347	-0.20%
Nundle	520	1,337	1,032	-8.40%
NSW Total	**2,343,229**	**6,608,056**	**4,985,419**	**0.68%**

- There are significant differences in the levels of income between the five regions, Woollahra has an average household income approaching $100,000 whilst the regional communities including Bathurst have averages near or less than $40,000.
- These differences provide income relativity measures that also highlight the differences. Note the effect of the bounded distribution of income relativities, the extremely high level of income in Woollahra is replaced by the bounded maximum 1.7 times average.

Table A1.2 Example Step 2: demographics

Local government area	NIEIR exertion income	Income Relativity	Bounded Income Relativity	Third Root Income Relativity
Baulkham Hills	74,260	1.671	1.671	1.156
Woollahra	94,531	2.127	1.700	1.217
Walcha	35,624	0.802	0.802	0.921
Bathurst	40,085	0.902	0.902	0.986
Nundle	39,060	0.879	0.879	0.958
NSW Total	**44,400**	**1.000**	**1.000**	**1.000**

Distribution of machines and problem gambling, Tables A1.3, A1.4 & A1.5

- Nundle has no gaming machines.
- Baulkham Hills has a high proportion of total machines in clubs, compared to Woollahra, which has significantly more hotel machines than average.

Table A1.3 Example Step 3: distribution of machines

Local government area	No Club Machines	No Pub Machines	Total Machines	Club Share of Revenue
Baulkham Hills	506	90	596	0.840
Woollahra	240	312	552	0.292
Walcha	32	23	55	0.423
Bathurst	291	121	412	0.753
Nundle	-	-	-	-
NSW Total	**75,161**	**25,269**	**100,430**	**0.715**

- The lack of gaming machines in Nundle and the long distances to the nearest alternatives, results in the minimum level of problem gamblers related to machine density. Instead of 15 adults, which would be expected from a fixed rate of problem gambling, only 3 are estimated.

- One the other hand the high density of machines in Walcha result in a higher than average number of problem gamblers (42 to 35). However when the income of the region is considered there are only 34 units of problem gambling costs considered.

- Woollahra also has a higher density of machines resulting a higher level of problem gambling modelled along with an even higher number of cost units.

- Baulkham Hills has a low level of gaming machine density and despite the increase in costs related to higher incomes the cost of problem gambling is less that the fixed rate would imply.

Table A1.4 Example Step 4: determination of problem gambling prevalence

Local government area	EGM density	EGM PG relativity	No. of PG density related	No. of PG fixed	Income adjust density related	Income adjust fixed
Baulkham Hills	1.434	0.124	1,151	1,558	1,498	1,880
Woollahra	2.862	0.208	811	653	1,176	851
Walcha	2.736	0.200	42	35	34	30
Bathurst	2.183	0.168	322	321	301	306
Nundle	-	0.039	3	15	3	14
NSW Total	**2.231**	**0.171**	**72,783**	**71,708**	**70,452**	**70,740**

Table A1.5 Example: costs of problem gambling

** cost per problem gambler $7,700*

Local government area	Income adjust DR	Income adjust Fixed	Community cost DR	Community cost Fixed
Baulkham Hills	1,498	1,880	61.2	76.9
Woollahra	1,176	851	48.1	34.8
Walcha	34	30	1.4	1.2
Bathurst	301	306	12.3	12.5
Nundle	3	14	0.1	0.6
NSW Total	**70,452**	**70,740**	**2,880**	**2,892**

Table A1.6 Example Step 5: estimated spending per household (hh), 2000-01

Local government area	Machine spend per hh non-problem, home	Machine spend per hh, exports	Density related, PG spend per hh	Total PG + home + exports	Casinos, lotteries& TAB per hh	Total inc. casinos, lotteries & TAB per hh
Baulkham Hills	19.93	0.88	16.67	37.48	12.82	50.30
Woollahra	14.29	1.05	18.36	33.69	10.93	44.62
Walcha	17.58	0.40	14.88	32.87	9.61	42.47
Bathurst	16.24	0.46	15.13	31.84	9.81	41.65
Nundle	15.79	0.41	8.41	24.61	10.73	35.34
Total NSW	**19.33**	**0.60**	**16.12**	**36.05**	**12.22**	**48.21**

- The average responsible gambling on gaming machines is low compared to relative income in Woollahra and Baulkham Hills, however when the impact of problem gambling and casinos etc is applied the total spending is higher.
- Exports refer to spending that occurs outside the region.

Table A1.7 Example Step 6: estimated spending by each region in total

Local government area	Non problem gambler total spend $m/year	Problem gaming $m/year	Total all gambling $m/year
Baulkham Hills	77.17	38.23	115.40
Woollahra	31.12	21.75	52.88
Walcha	1.78	0.96	2.73
Bathurst	14.69	8.38	23.07
Nundle	0.73	0.23	0.96
NSW Total	**3,928**	**1,969**	**5,897**

Economic impact of applied expenditures, Tables A1.8, A1.9

Table A1.8 Example Step 7: summary of local impact of clubs, pubs, TAB, lotteries and casino $m over 5 yrs

Local government area	Clubs	Pubs	TAB / Lotteries casino	Total
Baulkham Hills	249.8	102.6	196.4	548.8
Woollahra	124.6	115.3	174.6	414.5
Walcha	4.3	3.4	2.1	9.8
Bathurst	42.9	13.7	27.5	84.1
Nundle	1.1	0.3	0.6	2
NSW Total	**12,223**	**4,791**	**7,781**	**24,795**

- The benefits of the activity in the TAB, racing, casinos and lotteries is skewed towards the Sydney region resulting in a relatively high impact in Woollahra and Baulkham Hills

- Although Nundle did not have clubs or pubs with machines they do receive benefits of income flows to the regions in the form of wages of employees directly employed in other areas as well as all the indirect income generated.

- The way in which the flows in the 'top-down', 'bottom-up' modelling are applied is demonstrated for the government spending.

Table A1.9 Example Step 8: estimating the impacts of government spending

Local government area	Allocate government spending on population share, $m per yr	Direct local income effects, $m per yr	Indirect local income effects, $m per yr	Allocate remaining state value-added income effects, $m per yr	Total income effects of government spending, $m 5 yrs
Baulkham Hills	24.86	16.90	10.43	9.81	185.66
Woollahra	9.26	6.30	3.68	4.54	72.56
Walcha	0.56	0.38	0.22	0.15	3.73
Bathurst	5.21	3.54	1.36	1.48	31.91
Nundle	0.23	0.15	0.08	0.05	1.45
NSW Total	**1,120**	**762**	**375**	**352**	**7,441**

- The distribution of government expenditure on the basis of population results in a reasonable uniform distribution of economic activity. A municipality such as Baulkham Hills can capture slightly more of the indirect and remaining state based value-adding due to a highly skilled workforce and strong connections with much of Sydney.

- The assumption of a population-based spread of government funding is a strong one and impacts heavily on the final result as it is a key source which allows the revenue to flow back to the community in a direct manner. State governments are quite good at providing such an even distribution after the impacts of centralisation of bureaucratic infrastructure are accounted for. So, whilst the analysis may overstate the impact in communities with the administrative infrastructure directly, the communities that lack such infrastructure tend to be more likely to receive other forms of policy directed support, such as community services and assistance grants.

Retail sales foregone, Tables A1.10, A1.11, A1.12, A1.13

- 38 per cent of gambling expenditure in Walcha, Nundle and Bathurst is assumed to be diverted from retail sales. Due to the relatively higher level of current consumption and income, the retail sales foregone in Woollahra and Baulkham Hills is considered minimal.

Table A1.10 Example Step 9: estimating retail sales foregone

Local government area	Total spending, $ per hh per week	Gambling % of total spend	Retail impulse	Retail sales foregone, $m per year
Baulkham Hills	1,590	3.13%	0.05	5.75
Woollahra	1,962	1.80%	0.05	2.64
Walcha	940	5.43%	0.38	1.03
Bathurst	1,123	4.28%	0.25	5.70
Nundle	943	3.62%	0.38	0.36
NSW Total	**1,186**	**4.75%**	**0.23**	**1,318**

- Table A1.11 highlights the role of a local retail infrastructure in the determination of the impact of gambling. Baulkham Hills which has one of Australia's largest shopping centres within its boundaries, and a significant proportion of its workforce in the retail industry loses a lot despite the fact that spending foregone from local residents was minimal.

- Baulkham Hills has local sales foregone of $5.75 million of which $3.30 million would have been spent locally. However retail sales foregone by other regions results in an additional $6.64 million in sales lost locally, which in turn produces further income losses of $5.35 and remaining state value-adding of $3.36 million. Hence, from an initial loss of $5.575 million in local sales, local incomes actually fall by $11.57 million. By contrast, Bathurst, which has $5.70 million of retail sales foregone, only loses a total of $2.44 million income from the reduction in retail sales locally and state-wide. This reflects the low capture-rate of benefit from sales which is typical of country areas.

- In circumstances where an LGA has a very strong local club, which provides local employment and distributes profits locally, the diversion from general retail expenditure actually provides local economic stimulus.

Table A1.11 Example Step 10: estimating impact of retail trade activity foregone

Local government area	Local sales foregone	Direct and indirect income effects of local sales	Other local sales lost not originating in LGA	Direct and indirect Income effects of other sales	Allocate remaining state VA income effects	Total impact
Baulkham Hills	3.30	2.85	6.64	5.35	3.36	11.57
Woollahra	1.76	0.64	1.39	0.83	2.40	3.88
Walcha	0.61	0.13	0.02	0.03	0.05	0.21
Bathurst	2.80	0.59	5.53	1.36	0.48	2.44
Nundle	0.20	0.05	0.01	0.04	0.02	0.11
NSW Total	**728**	**164**	**605**	**195**	**119**	**479**

- The comparison between the original reductions in spending by households in the area with the net impact on the region due to the reduction in spending state-wide is shown in Table A1.12.

Table A1.12 Example Step 11: estimating retail sales foregone

Local government area	Retail sales foregone, $m per year	Total impact of retail sales forgone on income
Baulkham Hills	5.75	11.57
Woollahra	2.64	3.88
Walcha	1.03	0.21
Bathurst	5.70	2.44
Nundle	0.36	0.11
NSW Total	**1,318**	**479**

- The income effects of manufacturing activity foregone are very strongly biased towards the Sydney region with Baulkham Hills losing $33 million of income over five years.
- For its size Woollahra losses substantial income from manufactured good production foregone primarily due to the strong ownership of capital used in such industries.
- In the small communities of Nundle and Walcha with a predominantly primary industry and small tourism focus, the impact is minimal.

Table A1.13 Example Step 12: estimating the impact of manufactured goods not produced

Local government area	Manufactured good not produced in LGA	Income effects of activity in local area	Remaining state VA income effects	Total impact
Baulkham Hills	11.88	21.486	11.72	33.21
Woollahra	5.29	7.505	14.04	21.55
Walcha	0.19	0.210	0.21	0.42
Bathurst	5.54	4.533	1.50	6.04
Nundle	0.10	0.132	0.06	0.20
NSW Total	**733**	**731**	**404**	**1,135**

Table A1.14 Example Step 13: estimating debt financing cost

Local government area	Savings Rates	Estimated cash savings per week - depreciation	Debt impulse	Debt raised over 5 years	Debt finance cost
Baulkham Hills	2.40%	39.10	0.04	21.16	12.25
Woollahra	9.30%	201.22	0.03	7.93	4.45
Walcha	-6.00%	(53.19)	0.34	4.61	3.09
Bathurst	-0.20%	(2.24)	0.11	12.44	7.95
Nundle	-8.40%	(73.06)	0.51	2.41	1.57
NSW Total	**0.68%**	**17.15**	**0.14**	**3,506**	**2,283**

- Table A1.14 shows that due to low levels of savings in Nundle 51 per cent of gambling is assumed to be debt financed. With a very low level of cash savings per week, which involves assuming that significant depreciation of assets occurs and hence adds to consumption, it is likely that gambling will be heavily financed from debt reduction not undertaken.

- The high level of savings in Woollahra results in a low level of debt financing, as it is unlikely that much direct sourcing of debt is required.

Table A1.15 Example Step 14: estimating impact of financial asset accumulation foregone, 5 yr impact

Local government area	Wealth creation impulse	Cost of future income foregone in financial assets	Income lost in financial services sector, direct	Indirect income lost due to restricted financial sector	Total loss of income from financial assets foregone
Baulkham Hills	0.84	20.68	9.70	17.08	47.46
Woollahra	0.85	9.55	6.06	7.90	23.51
Walcha	0.21	0.12	0.02	0.26	0.40
Bathurst	0.57	2.82	0.49	2.57	5.88
Nundle	0.05	0.01	0.02	0.09	0.12
NSW Total	**0.59**	**Error! Not a valid link.**	**Error! Not a valid link.**	**Error! Not a valid link.**	**Error! Not a valid link.**
% allocated to financial assets		**Error! Not a valid link.**	Income rate on funds		**Error! Not a valid link.**

- In Woollahra and Baulkham Hill the majority of gambling expenditure would otherwise be allocated to wealth creation. Combining this with both regions having high employment in financial services, a high level of income is foregone from the financial sector.

Table A1.16 Example Step 15: estimating impact of construction activity foregone

Local government area	Wealth creation impulse	Value of construction not undertaken by households	Net construction not undertaken in region	Direct wages impact	Total income effects
Baulkham Hills	0.84	50.33	46.45	13.19	75.48
Woollahra	0.85	23.25	17.53	4.98	27.67
Walcha	0.21	0.30	0.11	0.03	0.61
Bathurst	0.58	6.85	8.38	2.38	10.04
Nundle	0.04	0.02	0.29	0.08	0.41
NSW Total	**0.59**	**1,790**	**1,598Error! Not a valid link.**	**454Error ! Not a valid link.**	**2,378Error! Not a valid link.**
% allocated to construction		**Error! Not a valid link.**	Depreciation - assets		**Error! Not a valid link.**

- The strong employment and activity in the construction sector in Baulkham Hills results in a high level of income foregone from construction.

Combined positive and negative effects

Table A1.17 Combining effects, positive, 5 year impacts

Local government area	Clubs, Pubs, Lotteries, TAB	Gov't spending	Total positive impacts
Baulkham Hills	547	185.7	732.7
Woollahra	413	72.5	485.5
Walcha	10	3.7	13.7
Bathurst	83.5	31.9	115.4
Nundle	2	1.5	3.5
NSW Total	**24,795**	**7,445**	**32,235**

Table A1.18 Combining effects, negative economic, 5 year impacts

Local government area	Debt finance cost	Retail sales foregone	Construction	Manufactured goods	Federal taxation foregone	Financial assets activity
Baulkham Hills	12.2	57.8	377.4	166.1	6.7	47.5
Woollahra	4.4	19.4	138.3	107.7	2.5	23.5
Walcha	3.1	1.1	3.1	2.1	0.2	0.4
Bathurst	7.9	12.2	50.2	30.2	1.4	5.9
Nundle	1.8	0.5	2.1	1.0	0.1	0.1
NSW Total	**2,283**	**2,395**	**11,889**	**5,675**	**303**	Error! Not a valid link.

- When the combined positive, negative and problem gambling costs are considered, the small rural community of Nundle is worse off with gambling despite the state having an overall positive result. The reason is that they export all of their gambling and receive little income from it but keep a lot of the costs of its problems.

- The similarly small community of Walcha is better off than Nundle because it at least gets the benefits of the spending.

- The overall trends whereby the flows of incomes continue to concentrate in the wealthiest suburbs are shown in the net outcome for Woollahra. With an average spend of $44.62, much of which comes from problem gambling, the region on average benefits by $23.90 per household result, with a net or long run opportunity cost of gambling of only $21.70. (Opportunity cost is the cost of alternative spending foregone.)

Table A1.19 Combining effects, positive, 5 year impacts

Local government area	Total positive impacts	Total negative impacts	Net economic impacts	Less cost of problem gambling	Net impact of gambling
Baulkham Hills	732.7	667.7	65	61.2	3.7
Woollahra	485.5	296.0	189.5	48.1	141.1
Walcha	13.7	9.8	3.9	1.4	2.5
Bathurst	115.4	107.8	7.6	12.3	-4.7
Nundle	3.5	5.4	-1.9	0.1	-2.0
NSW Total	**36,930**	**24,180**	**12,750**	**2,880**	**5,173**

Table A1.20 Combining effects, positive, 5 year impacts

Local government area	Total gambling spend, $ per household per week	Net impact, $ per household per week 5 yrs	Long run opportunity cost of gambling spending
Baulkham Hills	50.30	0.30	50.00
Woollahra	44.62	23.90	21.70
Walcha	42.47	7.00	35.47
Bathurst	41.65	-1.50	43.15
Nundle	35.34	-14.60	49.94
NSW Total	**48.21**	**8.47**	**39.74**

Appendix 2 *SpendInfo 2001* description

SpendInfo 2001 provides estimates of the amount and composition of household expenditure for all LGAs in Australia.

The amount that an average household spends in any area is the result of many factors. Of course income will be one determinant, but other issues such as the type of households in the area will also be important. Imagine the difference in spending on baby goods between a retirement area such as Victor Harbor in SA and a new young family growth area like Cranbourne in Victoria. Geographic differences also play a part in the determination of spending patterns; in general you don't need to spend as much on clothing in Darwin, or sunglasses in Hobart. Other important trends in spending patterns in Australia included lower levels of smoking amongst higher-educated households.

In fact, for as many different regions, for as many different household types and for as many different expenditure types, peculiar differences in spending patterns exist. The art of combining those trends is left to the cutting edge statistical tools developed especially for *SpendInfo 2001*. Finally, the computing power caught up with the theory of estimating such as model, and it still took over 400 hours to estimate in computing time alone.

The raw data on which these estimates are based is found in an Australian Bureau of Statistics survey called the Household Expenditure Survey (HES). This survey released in early 2001 followed the spending characteristics of over 6800 households. Along with their spending behaviour, a significant number of socio-demographic variables on each household were collected. The survey period stretched from a fortnight to a year. For everyday items such as groceries, the survey followed a fortnight's expenditure whilst for items purchased less frequently, the amount spent were collected over longer periods.

SpendInfo 2001 takes the information contained in this survey to model the likely spending behaviour in smaller areas. The modelling process does not rely on the very small number of people that are likely to have been surveyed in any given area, but rather exploits the similarities between households contained in the HES and those on the ground that we are interested in. For instance, assume that an area has many households with unmarried 25-year-old plumbers who rent. When modelling their spending patterns, we may find that there are no households in the HES that are a perfect match. Instead we take information from other plumbers, other unmarried people, other people that rent, other people that are around 25 years old, other people who earn similar amounts of money and other people that live in similar areas. From the amalgamation of these people an estimate is derived. Of course, determining how to select which people in the HES correspond and how much weight to place on each, is the difficult task. The process that does this is called micro-simulation, and in this case utilises what is technically termed the modified simulated annealing estimation of a pseudo maximum likelihood function.

SpendInfo 2001 estimates the spending characteristics for over 30,000 individual areas in Australia, called CCDs or Census Collector Districts, and the results are aggregated into broader areas, such as LGAs. Within each of the 30,000 CCDs, spending characteristics are modelled with respect to the approximately 200 households contained within each. Put simply, the micro-simulation process is one of matching; we need to match these 200 households as closely as possible with those contained in the HES. This match is based on over 70 characteristics of these households such as income, age distribution, and educational attainment along within information about the region in which the area is situated.

From a technical viewpoint, a number of additional processes are applied to the raw estimates from *SpendInfo 2001*. National Economics believes that most accurate figures are obtained if they can be benchmarked to ABS National Accounts estimates, and to income relativities that can be obtained from Australian Taxation Office (ATO). As such, a significant amount of post processing is applied to the estimates so that practitioners can be confident that the National Economics *SpendInfo 2001* estimates match as closely as possible in aggregate with the nation or state-wide estimates made by the ABS. As noted in Chapter 4, these adjustments are significant for gambling expenditures.

Although over 450 expenditure types ranging from nuts to hosiery are detailed in the HES and estimated in *SpendInfo 2001*, broader aggregates or categories of spending types are presented in the general National Economics product. These broader categories are designed to reflect groupings relevant to the retail sector.

Reiterating, *SpendInfo 2001* answers the question; how much can you expect the households in the region to spend on various products and it does this by considering who lives where.

Appendix 3 Regional definitions

Table A3.1 Classification of regions for summary statistics

Inland NSW	Gundagai (A)	Tallaganda (A)
Armidale Dumaresq (A)	Gunnedah (A)	Tamworth (C)
Barraba (A)	Gunning (A)	Temora (A)
Bathurst (C)	Guyra (A)	Tenterfield (A)
Bingara (A)	Harden (A)	Tumbarumba (A)
Bland (A)	Hay (A)	Tumut (A)
Blayney (A)	Holbrook (A)	Uralla (A)
Bogan (A)	Inverell (A)	Urana (A)
Bombala (A)	Jerilderie (A)	Wagga Wagga (C)
Boorowa (A)	Junee (A)	Walcha (A)
Bourke (A)	Kyogle (A)	Walgett (A)
Brewarrina (A)	Lachlan (A)	Warren (A)
Broken Hill (C)	Leeton (A)	Weddin (A)
Cabonne (A)	Lockhart (A)	Wellington (A)
Carrathool (A)	Manilla (A)	Windouran (A)
Central Darling (A)	Merriwa (A)	Yallaroi (A)
Cobar (A)	Moree Plains (A)	Yarrowlumla (A)
Conargo (A)	Mudgee (A)	Yass (A)
Coolah (A)	Mulwaree (A)	Young (A)
Coolamon (A)	Murrumbidgee (A)	**VIC / QLD border regions**
Cooma-Monaro (A)	Murrurundi (A)	Albury (C)
Coonabarabran (A)	Muswellbrook (A)	Balranald (A)
Coonamble (A)	Narrabri (A)	Berrigan (A)
Cootamundra (A)	Narrandera (A)	Corowa (A)
Cowra (A)	Narromine (A)	Deniliquin (A)
Crookwell (A)	Nundle (A)	Hume (A)
Culcairn (A)	Oberon (A)	Murray (A)
Dubbo (C)	Orange (C)	Tweed (A)
Dungog (A)	Parkes (A)	Wakool (A)
Evans (A)	Parry (A)	Wentworth (A)
Forbes (A)	Queanbeyan (C)	**Northern Coastal**
Gilgandra (A)	Quirindi (A)	Ballina (A)
Glen Innes (A)	Rylstone (A)	Bellingen (A)
Gloucester (A)	Scone (A)	Byron (A)
Goulburn (C)	Severn (A)	Cessnock (C)
Greater Lithgow (C)	Singleton (A)	Coffs Harbour (C)
Griffith (C)	Snowy River (A)	Copmanhurst (A)

Table A3.1 Classification of regions for summary statistics (continued)

Northern coastal (cont.)	**Inner Sydney**	Randwick (C)
Gosford (C)	Lane Cove (A)	Rockdale (C)
Grafton (C)	Leichhardt (A)	Ryde (C)
Great Lakes (A)	Marrickville (A)	Strathfield (A)
Greater Taree (C)	Mosman (A)	Willoughby (C)
Hastings (A)	North Sydney (A)	**Outer Sydney suburbs**
Kempsey (A)	South Sydney (C)	Baulkham Hills (A)
Lake Macquarie (C)	Sydney (C)	Blacktown (C)
Lismore (C)	Waverley (A)	Blue Mountains (C)
Maclean (A)	Woollahra (A)	Camden (A)
Maitland (C)	**Established Sydney**	Campbelltown (C) (NSW)
Nambucca (A)	Ashfield (A)	Fairfield (C)
Newcastle (C)	Auburn (A)	Hawkesbury (C)
Pristine Waters (A)	Bankstown (C)	Holroyd (C)
Port Stephens (A)	Botany Bay (C)	Hornsby (A)
Richmond Valley (A)	Burwood (A)	Ku-ring-gai (A)
Wyong (A)	Canterbury (C)	Liverpool (C)
Southern Coastal	Concord (A) +	Penrith (C)
Bega Valley (A)	Drummoyne (A)	Pittwater (A)
Eurobodalla (A)	= *Canada Bay (A)*[1]	Sutherland Shire (A)
Kiama (A)	Hunter's Hill (A)	Warringah (A)
Shellharbour (C)	Hurstville (C)	Wollondilly (A)
Shoalhaven (C)	Kogarah (A)	
Wingecarribee (A)	Manly (A)	
Wollongong (C)	Parramatta (C)	

1 Recent amalgamation: both regions are reported separately

Appendix 4 Regional impact tables

Table A4.1 Economic activity generated by gambling by region, 5 year total $2001m

Local government area	Income Effects of Club Revenue	Income Effects of Pub Revenue	Income Effects of TAB Revenue	Net Impact of Gov't Spending	Casino and Lotteries	Total positive impacts
Albury (C)	118.9	28.3	31.2	48.9	12.4	239.8
Armidale Dumaresq (A)	26.5	12.0	11.8	27.7	6.2	84.1
Ashfield (A)	94.0	38.1	37.8	46.0	21.9	237.8
Auburn (A)	98.3	42.6	48.1	68.9	16.7	274.5
Ballina (A)	55.3	20.1	20.9	42.7	9.1	148.0
Balranald (A)	9.9	4.2	2.5	2.6	0.5	19.6
Bankstown (C)	348.9	124.0	117.5	186.1	68.0	844.5
Barraba (A)	2.8	1.7	1.0	2.4	0.2	8.0
Bathurst (C)	42.7	13.7	18.9	31.9	8.7	115.9
Baulkham Hills (A)	248.0	102.6	115.2	185.7	81.2	732.7
Bega Valley (A)	68.2	15.1	13.2	31.9	6.5	135.0
Bellingen (A)	19.2	5.2	3.2	13.6	1.7	42.9
Berrigan (A)	31.0	2.9	4.9	7.9	1.8	48.4
Bingara (A)	2.8	1.4	0.9	2.2	0.7	8.0
Blacktown (C)	463.1	172.2	173.2	309.4	94.2	1212.1
Bland (A)	8.6	7.6	1.7	6.6	1.1	25.5
Blayney (A)	5.8	2.9	2.4	6.9	1.0	19.1
Blue Mountains (C)	111.9	51.8	43.3	83.7	27.3	317.9
Bogan (A)	4.7	2.8	0.8	2.8	0.6	11.7
Bombala (A)	3.2	2.8	1.5	2.8	0.6	10.9
Boorowa (A)	3.0	2.4	0.8	2.5	0.8	9.5
Botany Bay (C)	55.5	31.0	34.7	42.4	16.9	180.4
Bourke (A)	5.0	2.5	2.6	3.4	0.4	13.9
Brewarrina (A)	1.6	2.1	0.5	2.0	0.3	6.4
Broken Hill (C)	33.4	8.5	9.6	19.8	4.4	75.7
Burwood (A)	68.6	33.1	26.6	33.7	15.9	177.9
Byron (A)	34.1	20.3	10.4	32.3	5.1	102.2
Cabonne (A)	12.3	5.5	5.1	13.3	2.4	38.6
Camden (A)	78.6	35.1	29.5	50.8	17.7	211.7
Campbelltown (C) (NSW)	282.8	105.6	91.0	159.2	51.2	689.7
Canterbury (C)	291.9	119.9	105.7	143.3	52.1	712.9
Carrathool (A)	2.8	3.0	0.9	3.4	0.5	10.7
Cessnock (C)	69.0	17.0	20.7	50.0	9.0	165.8
Central Darling (A)	2.6	3.0	0.5	2.1	0.3	8.5
Cobar (A)	7.0	2.8	1.6	4.9	1.3	17.5

Table A4.1 Economic activity generated by gambling by region, 5 year total $2001m (cont.)

Local government area	Income	Income	Income	Net Impact	Casino and	Total

	Effects of Club Revenue	Effects of Pub Revenue	Effects of TAB Revenue	of Gov't Spending	Lotteries	positive impacts
Coffs Harbour (c)	99.3	27.4	40.8	67.9	11.7	247.2
Conargo (A)	2.4	0.6	0.5	1.4	0.3	5.3
Concord (A)	45.6	24.6	23.2	33.0	15.3	141.7
Coolah (A)	3.9	2.4	1.0	4.1	0.9	12.4
Coolamon (A)	4.5	1.9	2.1	4.4	1.2	14.1
Cooma-Monaro (A)	12.2	5.5	4.4	10.6	1.9	34.7
Coonabarabran (A)	6.1	3.6	1.6	6.4	1.0	18.7
Coonamble (A)	6.9	2.5	3.2	5.0	1.4	19.0
Cootamundra (A)	7.6	5.2	2.5	7.4	2.1	24.8
Copmanhurst (A)	3.9	1.8	1.9	4.9	0.9	13.4
Corowa (A)	58.9	4.7	13.8	9.4	2.9	89.7
Cowra (A)	15.1	6.0	5.6	13.6	2.7	43.0
Crookwell (A)	5.1	1.8	1.1	4.5	0.6	13.2
Culcairn (A)	5.5	3.3	1.1	4.5	1.2	15.5
Deniliquin (A)	18.4	4.7	4.6	8.2	1.6	37.7
Drummoyne (A)	78.9	34.8	33.1	42.4	28.4	217.5
Dubbo (c)	50.9	24.5	19.6	40.7	9.2	144.9
Dungog (A)	10.1	3.0	3.1	9.0	1.3	26.4
Eurobodalla (A)	87.7	15.8	19.5	35.7	8.2	167.1
Evans (A)	4.7	1.6	3.3	5.6	1.0	16.2
Fairfield (c)	430.2	134.8	111.0	216.3	61.1	953.3
Forbes (A)	11.9	6.3	5.6	10.1	2.2	36.0
Gilgandra (A)	5.8	2.4	1.6	5.0	1.2	16.0
Glen Innes (A)	8.5	2.4	5.0	6.1	0.8	22.8
Gloucester (A)	6.3	1.8	1.4	4.9	0.9	15.3
Gosford (c)	306.0	88.5	109.8	179.4	62.5	746.1
Goulburn (c)	34.1	9.9	10.8	23.3	3.6	81.6
Grafton (c)	24.3	11.2	12.1	19.0	3.5	70.1
Great Lakes (A)	60.1	13.7	16.1	35.7	7.2	132.9
Greater Lithgow (c)	28.3	9.6	10.6	20.0	4.3	72.6
Greater Taree (c)	59.5	17.7	22.6	47.8	8.4	156.1
Griffith (c)	42.3	11.4	10.8	25.0	5.8	95.3
Gundagai (A)	5.5	1.7	2.4	4.1	0.6	14.3
Gunnedah (A)	15.2	7.3	4.2	13.6	2.2	42.4
Gunning (A)	2.5	2.0	1.8	2.6	0.4	9.3
Guyra (A)	4.9	2.9	1.1	4.9	0.7	14.5
Harden (A)	4.1	2.5	1.2	3.9	0.9	12.6

Table A4.1 Economic activity generated by gambling by region, 5 year total $2001m (cont.)

Local government area	Income Effects of Club Revenue	Income Effects of Pub Revenue	Income Effects of TAB Revenue	Net Impact of Gov't Spending	Casino and Lotteries	Total positive impacts

Hastings (A)	113.8	26.4	30.9	70.7	15.3	257.1
Hawkesbury (C)	109.0	39.1	53.8	68.3	20.7	290.9
Hay (A)	5.2	2.9	2.8	3.5	0.8	15.2
Holbrook (A)	1.7	0.8	0.8	2.8	0.7	6.8
Holroyd (C)	194.3	70.9	81.6	106.0	33.2	486.0
Hornsby (A)	264.7	112.6	112.3	189.6	91.6	770.9
Hume (A)	18.3	4.5	3.3	7.8	2.9	36.9
Hunter's Hill (A)	22.3	17.4	13.2	15.7	16.0	84.6
Hurstville (C)	150.1	72.7	59.2	82.0	38.9	403.0
Inverell (A)	13.7	6.9	3.9	15.1	2.4	42.0
Jerilderie (A)	3.5	2.0	2.3	1.8	0.4	10.0
Junee (A)	6.9	3.2	2.1	6.1	0.8	19.1
Kempsey (A)	38.7	14.2	11.3	29.3	4.7	98.1
Kiama (A)	41.1	11.4	9.7	21.3	6.5	90.1
Kogarah (A)	88.0	49.0	45.3	59.3	31.7	273.3
Ku-ring-gai (A)	162.6	117.0	92.1	131.8	121.8	625.4
Kyogle (A)	6.4	4.7	7.8	10.3	1.3	30.6
Lachlan (A)	8.3	4.5	3.8	7.2	1.7	25.5
Lake Macquarie (C)	339.3	90.2	97.4	205.4	53.3	785.7
Lane Cove (A)	49.5	32.0	37.2	41.1	31.5	191.3
Leeton (A)	16.8	5.4	3.6	12.3	1.7	39.7
Leichhardt (A)	122.3	87.1	79.7	91.9	57.2	438.2
Lismore (C)	50.1	19.1	18.4	47.3	7.6	142.5
Liverpool (C)	340.5	125.3	114.3	171.9	53.6	805.5
Lockhart (A)	4.4	1.9	1.0	4.0	0.6	11.9
Maclean (A)	26.3	5.8	4.7	18.4	2.1	57.3
Maitland (C)	112.6	32.1	30.9	61.5	15.5	252.7
Manilla (A)	4.6	1.6	0.8	3.5	0.3	10.7
Manly (A)	78.7	39.4	35.3	48.9	30.1	232.5
Marrickville (A)	148.5	97.4	70.4	88.0	41.1	445.4
Merriwa (A)	4.6	2.0	1.3	2.3	0.9	11.2
Moree Plains (A)	23.0	11.2	8.1	15.7	4.0	62.1
Mosman (A)	59.3	47.1	32.8	38.4	50.8	228.5
Mudgee (A)	21.6	10.2	11.2	19.8	4.4	67.2
Mulwaree (A)	6.6	2.3	3.3	6.8	2.4	21.4
Murray (A)	38.1	4.7	4.9	6.1	2.1	55.8
Murrumbidgee (A)	5.2	2.8	0.9	2.8	0.6	12.3

Table A4.1 Economic activity generated by gambling by region, 5 year total $2001m (cont.)

Local government area	Income Effects of Club Revenue	Income Effects of Pub Revenue	Income Effects of TAB Revenue	Net Impact of Gov't Spending	Casino and Lotteries	Total positive impacts
Murrurundi (A)	1.5	0.7	3.4	2.3	0.5	8.4
Muswellbrook (A)	20.0	7.5	10.0	15.3	4.1	57.0

Nambucca (A)	27.0	7.7	9.1	19.1	3.0	65.9
Narrabri (A)	18.3	8.0	4.1	14.3	3.3	48.0
Narrandera (A)	10.7	4.3	4.7	7.2	0.9	27.9
Narromine (A)	9.6	3.1	1.9	7.1	1.1	22.8
Newcastle ©	251.9	76.9	105.4	155.1	43.6	632.9
North Sydney (A)	134.7	85.0	76.4	84.5	69.4	450.0
Nundle (A)	1.0	0.3	0.4	1.4	0.2	3.5
Oberon (A)	5.6	2.5	1.3	5.1	1.3	16.0
Orange ©	45.5	22.3	15.9	39.9	7.9	131.5
Parkes (A)	20.5	7.5	6.4	15.5	2.2	52.2
Parramatta ©	269.2	103.5	189.6	181.1	62.0	805.4
Parry (A)	14.8	5.9	6.1	13.2	3.1	43.1
Penrith ©	436.8	127.2	136.5	207.3	69.3	977.1
Pittwater (A)	83.1	44.4	43.1	65.6	45.7	281.8
Port Stephens (A)	87.1	25.9	30.4	62.7	12.7	218.8
Pristine Waters (A)	10.8	5.5	6.1	11.8	1.6	35.9
Queanbeyan ©	72.6	12.0	18.7	37.7	9.6	150.7
Quirindi (A)	6.1	3.9	2.2	5.4	1.7	19.4
Randwick ©	274.0	137.3	177.1	152.0	89.3	829.8
Richmond Valley (A)	25.4	8.9	9.2	22.6	7.2	73.3
Rockdale ©	201.7	87.7	73.8	98.1	46.8	508.2
Ryde ©	177.1	72.8	89.7	126.9	54.3	520.8
Rylstone (A)	4.0	1.3	1.0	3.7	1.1	11.2
Scone (A)	13.3	5.3	6.8	10.6	2.1	38.2
Severn (A)	2.4	2.3	1.1	2.9	1.3	10.1
Shellharbour ©	159.4	27.7	29.6	61.5	13.1	291.3
Shoalhaven ©	157.0	31.7	40.2	85.7	17.6	332.3
Singleton (A)	27.7	10.8	12.6	21.6	5.3	78.0
Snowy River (A)	8.3	4.3	2.3	7.7	1.3	23.8
South Sydney ©	156.2	127.7	128.6	127.3	65.2	605.0
Strathfield (A)	50.0	31.1	26.4	34.7	17.2	159.4
Sutherland Shire (A)	413.3	168.1	159.8	242.6	131.2	1115.0
Sydney ©	80.1	61.2	165.2	43.0	35.0	384.4
Tallaganda (A)	3.9	2.2	0.8	3.0	0.4	10.3
Tamworth ©	51.9	18.3	23.3	40.6	9.1	143.1

Table A4.1 Economic activity generated by gambling by region, 5 year total $2001m (cont.)

Local government area	Income Effects of Club Revenue	Income Effects of Pub Revenue	Income Effects of TAB Revenue	Net Impact of Gov't Spending	Casino and Lotteries	Total positive impacts
Temora (A)	6.6	3.0	2.9	5.9	0.9	19.3
Tenterfield (A)	7.6	2.4	1.7	6.8	0.8	19.3
Tumbarumba (A)	3.6	2.7	1.4	4.1	0.6	12.4
Tumut (A)	16.4	8.1	3.6	12.6	1.8	42.5

Tweed (A)	211.0	28.6	38.5	82.1	23.6	383.9
Uralla (A)	6.9	4.9	3.7	6.7	2.1	24.3
Urana (A)	3.3	3.3	0.9	1.5	0.2	9.4
Wagga Wagga (C)	70.3	40.3	33.7	61.8	14.7	220.8
Wakool (A)	28.9	2.2	3.5	4.7	1.3	40.5
Walcha (A)	4.3	3.4	1.0	3.7	1.0	13.5
Walgett (A)	17.0	5.3	3.7	7.6	1.9	35.5
Warren (A)	5.9	3.1	1.0	3.5	0.6	14.1
Warringah (A)	301.3	103.8	102.8	161.3	83.2	752.3
Waverley (A)	160.0	90.4	69.7	79.6	53.7	453.3
Weddin (A)	4.2	2.4	1.0	3.7	0.6	11.9
Wellington (A)	11.0	4.5	3.0	9.3	1.3	29.1
Wentworth (A)	18.3	4.0	4.8	6.7	2.0	35.9
Willoughby (C)	106.3	64.2	60.0	80.8	52.1	363.4
Windouran (A)	1.0	0.2	0.2	0.4	0.1	1.8
Wingecarribee (A)	60.6	26.4	22.7	43.6	18.5	171.8
Wollondilly (A)	56.9	25.7	26.1	40.6	8.8	158.1
Wollongong (C)	326.2	94.4	121.2	198.8	64.2	804.9
Woollahra (A)	123.1	115.3	74.5	72.6	99.8	485.2
Wyong (A)	310.4	54.8	94.1	139.1	37.1	635.5
Yallaroi (A)	2.6	2.4	0.8	3.2	0.6	9.6
Yarrowlumla (A)	12.1	5.1	4.8	12.5	3.4	37.9
Yass (A)	13.3	5.9	8.1	11.3	2.6	41.3
Young (A)	11.4	8.0	5.3	11.6	2.7	38.9

Table A4.2 Economic activity foregone by region, 5 year total $2001m

Local government area	Net impact on Federal Income Taxation	Debt Finance Cost	Total Cost of Wealth Creation foregone	Total Income Effects of Retail Sales Lost	Cost of Manu Goods not produced	Net Constructi on Effect	Total negative impacts
Albury (C)	-2.0	-18.6	-9.6	-26.5	-37.5	-71.2	-165.3
Armidale Dumaresq (A)	-1.1	-10.7	-3.8	-9.6	-15.3	-32.5	-73.1
Ashfield (A)	-1.9	-3.9	-13.3	-12.6	-38.5	-76.5	-146.6
Auburn (A)	-2.7	-17.3	-11.7	-15.1	-37.4	-117.1	-201.3
Ballina (A)	-1.8	-16.7	-6.4	-27.2	-29.6	-60.6	-142.1
Balranald (A)	-0.1	-1.7	-0.4	-0.9	-1.5	-2.0	-6.6
Bankstown (C)	-7.9	-46.5	-45.7	-69.1	-128.8	-285.9	-584.0
Barraba (A)	-0.1	-2.1	-0.3	-0.6	-0.9	-1.5	-5.5
Bathurst (C)	-1.4	-8.0	-5.9	-12.2	-30.2	-50.2	-107.8
Baulkham Hills (A)	-6.7	-12.2	-47.5	-57.8	-166.0	-377.4	-667.7
Bega Valley (A)	-1.4	-22.7	-4.0	-8.6	-26.9	-38.0	-101.6
Bellingen (A)	-0.6	-9.1	-1.3	-4.9	-8.1	-16.0	-40.0
Berrigan (A)	-0.4	-6.1	-1.0	-2.5	-6.3	-7.9	-24.1
Bingara (A)	-0.1	-2.2	-0.2	-0.5	-0.9	-1.7	-5.7
Blacktown (C)	-12.2	-164.2	-60.1	-100.7	-212.4	-490.2	-1039.8
Bland (A)	-0.3	-5.6	-0.8	-2.1	-4.4	-5.7	-18.9
Blayney (A)	-0.3	-3.0	-1.0	-2.0	-7.9	-8.8	-23.0
Blue Mountains (C)	-3.5	-22.4	-17.0	-27.1	-64.0	-142.9	-276.9
Bogan (A)	-0.1	-2.1	-0.5	-1.0	-1.7	-2.6	-8.0
Bombala (A)	-0.1	-1.7	-0.4	-0.7	-2.0	-2.4	-7.3
Boorowa (A)	-0.1	-1.4	-0.4	-0.7	-1.6	-2.4	-6.6
Botany Bay (C)	-1.7	-6.1	-9.9	-8.6	-29.3	-73.2	-128.7
Bourke (A)	-0.2	-0.4	-0.6	-0.9	-2.5	-3.0	-7.5
Brewarrina (A)	-0.1	-0.2	-0.3	-0.4	-1.2	-1.4	-3.5
Broken Hill (C)	-1.0	-2.6	-3.6	-6.4	-11.2	-21.4	-46.1
Burwood (A)	-1.4	-2.7	-9.0	-9.1	-26.7	-50.7	-99.6
Byron (A)	-1.4	-28.6	-3.3	-14.8	-21.3	-40.4	-109.8
Cabonne (A)	-0.6	-7.9	-1.5	-4.3	-12.5	-15.1	-41.9
Camden (A)	-2.1	-39.9	-9.3	-19.7	-37.4	-93.3	-201.8
Campbelltown (C) (NSW)	-6.9	-95.1	-32.3	-60.0	-108.5	-227.5	-530.2
Canterbury (C)	-6.3	-40.1	-31.0	-43.4	-97.6	-190.4	-408.8
Carrathool (A)	-0.2	-2.1	-0.5	-1.0	-2.5	-3.3	-9.6
Central Darling (A)	-0.1	-1.9	-0.3	-0.5	-1.1	-2.3	-6.2
Cessnock (C)	-2.2	-12.3	-8.0	-14.3	-25.8	-53.7	-116.4
Cobar (A)	-0.2	-0.4	-1.1	-1.9	-2.9	-7.0	-13.6
Coffs Harbour (C)	-2.8	-28.8	-7.6	-32.6	-39.5	-87.7	-199.1

Table A4.2 Economic activity foregone by region, 5 year total $2001m (cont.)

Local government area	Net impact on Federal	Debt Finance	Total Cost of Wealth	Total Income	Cost of Manu	Net Constructi	Total negative

	Income Taxation	Cost	Creation foregone	Effects of Retail Sales Lost	Goods not produced	on Effect	impacts
Conargo (A)	-0.1	-2.3	-0.1	-0.7	-1.6	-1.5	-6.2
Concord (A)	-1.3	-2.5	-9.8	-8.9	-29.8	-67.4	-119.6
Coolah (A)	-0.2	-4.5	-0.4	-1.3	-2.3	-4.2	-12.9
Coolamon (A)	-0.2	-3.3	-0.5	-1.6	-3.2	-4.3	-13.1
Cooma-Monaro (A)	-0.4	-2.7	-1.4	-2.5	-8.8	-14.7	-30.5
Coonabarabran (A)	-0.3	-4.1	-0.7	-1.6	-3.6	-5.8	-16.2
Coonamble (A)	-0.2	-2.4	-0.7	-1.5	-3.0	-5.1	-12.8
Cootamundra (A)	-0.4	-3.5	-1.3	-2.5	-6.0	-9.0	-22.6
Copmanhurst (A)	-0.2	-4.6	-0.5	-2.0	-2.9	-4.8	-15.0
Corowa (A)	-0.4	-5.6	-1.6	-3.3	-8.8	-8.1	-27.8
Cowra (A)	-0.6	-5.4	-1.8	-4.1	-10.0	-14.9	-36.8
Crookwell (A)	-0.2	-3.5	-0.6	-1.4	-2.9	-5.8	-14.4
Culcairn (A)	-0.2	-3.6	-0.5	-1.5	-3.0	-3.6	-12.3
Deniliquin (A)	-0.4	-3.7	-1.7	-3.2	-5.2	-9.3	-23.6
Drummoyne (A)	-1.6	-3.6	-14.8	-11.7	-40.0	-81.6	-153.4
Dubbo (C)	-1.8	-13.4	-6.4	-17.8	-27.2	-62.9	-129.5
Dungog (A)	-0.4	-4.6	-1.1	-2.4	-5.2	-13.0	-26.6
Eurobodalla (A)	-1.6	-19.3	-5.1	-13.2	-19.2	-45.1	-103.5
Evans (A)	-0.3	-3.9	-0.5	-1.9	-6.4	-8.1	-21.1
Fairfield (C)	-8.7	-115.1	-38.0	-75.3	-132.6	-285.3	-655.0
Forbes (A)	-0.5	-6.8	-1.5	-3.1	-7.9	-13.0	-32.8
Gilgandra (A)	-0.2	-3.7	-0.6	-1.8	-2.9	-5.5	-14.8
Glen Innes (A)	-0.3	-2.5	-0.9	-2.0	-3.1	-7.1	-15.8
Gloucester (A)	-0.2	-3.4	-0.7	-1.3	-2.6	-5.5	-13.7
Gosford (C)	-7.4	-53.4	-39.0	-61.8	-124.0	-284.3	-570.0
Goulburn (C)	-1.0	-3.6	-4.2	-8.4	-15.9	-30.2	-63.3
Grafton (C)	-0.8	-6.2	-2.8	-7.4	-9.6	-23.0	-49.9
Great Lakes (A)	-1.5	-10.8	-4.2	-9.7	-19.5	-43.1	-88.7
Greater Lithgow (C)	-0.9	-2.7	-4.2	-4.8	-18.6	-25.7	-56.8
Greater Taree (C)	-2.1	-23.0	-5.6	-14.0	-34.4	-55.5	-134.4
Griffith (C)	-1.1	-5.7	-5.0	-9.8	-18.7	-36.0	-76.3
Gundagai (A)	-0.2	-2.1	-0.5	-1.3	-2.5	-5.1	-11.8
Gunnedah (A)	-0.6	-7.0	-2.1	-5.6	-11.7	-13.3	-40.3
Gunning (A)	-0.1	-2.2	-0.3	-0.8	-1.8	-3.5	-8.7
Guyra (A)	-0.2	-3.6	-0.5	-1.5	-2.7	-4.6	-13.1
Harden (A)	-0.2	-3.3	-0.5	-1.1	-2.9	-3.9	-11.9

Table A4.2 Economic activity foregone by region, 5 year total $2001m (cont.)

Local government area	Net impact on Federal Income Taxation	Debt Finance Cost	Total Cost of Wealth Creation foregone	Total Income Effects of Retail Sales Lost	Cost of Manu Goods not produced	Net Constructi on Effect	Total negative impacts

Hastings (A)	-3.0	-28.2	-9.4	-20.0	-38.9	-101.0	-200.5
Hawkesbury (C)	-2.9	-45.6	-12.5	-21.0	-50.8	-137.1	-269.9
Hay (A)	-0.2	-1.7	-0.6	-1.5	-2.2	-4.6	-10.7
Holbrook (A)	-0.1	-2.5	-0.3	-0.9	-1.8	-4.4	-10.0
Holroyd (C)	-4.1	-17.6	-25.1	-35.6	-79.4	-166.2	-328.0
Hornsby (A)	-7.1	-9.6	-49.0	-52.1	-167.5	-361.2	-646.5
Hume (A)	-0.4	-11.4	-1.0	-4.4	-7.7	-10.9	-35.8
Hunter's Hill (A)	-0.6	-0.9	-4.5	-4.2	-18.9	-30.0	-59.1
Hurstville (C)	-3.4	-7.1	-24.2	-26.8	-66.0	-130.0	-257.5
Inverell (A)	-0.7	-7.1	-1.9	-4.4	-9.1	-17.4	-40.5
Jerilderie (A)	-0.1	-1.6	-0.3	-0.6	-1.9	-1.7	-6.1
Junee (A)	-0.3	-3.0	-0.8	-2.1	-4.1	-7.2	-17.4
Kempsey (A)	-1.3	-16.5	-3.4	-9.5	-17.7	-35.1	-83.5
Kiama (A)	-0.9	-6.6	-4.3	-7.2	-13.9	-37.1	-70.0
Kogarah (A)	-2.4	-4.6	-17.8	-17.2	-50.9	-92.7	-185.5
Ku-ring-gai (A)	-5.0	-6.7	-37.2	-33.7	-148.0	-234.6	-465.2
Kyogle (A)	-0.4	-7.7	-0.8	-2.4	-5.0	-11.0	-27.4
Lachlan (A)	-0.3	-5.4	-1.0	-1.9	-4.2	-6.6	-19.5
Lake Macquarie (C)	-8.6	-69.2	-42.3	-89.7	-129.3	-319.3	-658.5
Lane Cove (A)	-1.5	-2.5	-13.0	-9.3	-44.1	-84.8	-155.2
Leeton (A)	-0.6	-4.2	-2.1	-6.1	-9.8	-14.2	-37.0
Leichhardt (A)	-3.0	-6.2	-27.4	-20.7	-81.3	-174.4	-313.0
Lismore (C)	-2.0	-24.7	-5.8	-26.6	-30.7	-61.0	-150.8
Liverpool (C)	-7.3	-92.4	-36.4	-65.4	-121.9	-277.7	-601.1
Lockhart (A)	-0.2	-3.4	-0.4	-1.4	-2.8	-4.8	-12.9
Maclean (A)	-0.8	-5.3	-2.4	-6.2	-12.9	-23.0	-50.5
Maitland (C)	-2.6	-21.4	-12.5	-22.1	-37.8	-91.8	-188.2
Manilla (A)	-0.2	-4.1	-0.3	-1.3	-1.9	-3.1	-10.8
Manly (A)	-1.8	-3.3	-16.0	-10.3	-48.4	-87.6	-167.5
Marrickville (A)	-3.6	-9.8	-24.7	-23.5	-79.9	-154.0	-295.4
Merriwa (A)	-0.1	-1.5	-0.3	-0.7	-1.6	-2.1	-6.3
Moree Plains (A)	-0.7	-3.1	-3.1	-5.3	-13.3	-19.8	-45.4
Mosman (A)	-1.3	-2.4	-13.2	-9.3	-52.3	-73.6	-152.0
Mudgee (A)	-0.8	-8.0	-2.5	-4.7	-12.6	-24.7	-53.2
Mulwaree (A)	-0.3	-7.9	-0.8	-2.3	-5.3	-8.9	-25.5
Murray (A)	-0.3	-4.9	-0.7	-1.8	-4.7	-5.4	-17.8

Table A4.2 Economic activity foregone by region, 5 year total $2001m (cont.)

Local government area	Net impact on Federal Income Taxation	Debt Finance Cost	Total Cost of Wealth Creation foregone	Total Income Effects of Retail Sales Lost	Cost of Manu Goods not produced	Net Constructi on Effect	Total negative impacts
Murrumbidgee (A)	-0.1	-0.8	-0.5	-0.9	-2.1	-3.2	-7.6
Murrurundi (A)	-0.1	-1.1	-0.2	-0.6	-1.7	-2.6	-6.4

Muswellbrook (A)	-0.7	-1.3	-3.5	-2.8	-12.9	-22.0	-43.2
Nambucca (A)	-0.8	-11.4	-2.2	-6.2	-10.5	-20.5	-51.7
Narrabri (A)	-0.7	-4.7	-2.3	-4.6	-12.6	-18.5	-43.4
Narrandera (A)	-0.3	-2.9	-1.1	-2.8	-5.3	-7.3	-19.6
Narromine (A)	-0.3	-5.6	-0.8	-2.3	-4.3	-7.5	-20.9
Newcastle (C)	-6.6	-17.6	-34.2	-61.0	-105.9	-249.4	-474.7
North Sydney (A)	-2.7	-5.7	-31.1	-19.0	-96.1	-183.2	-337.8
Nundle (A)	-0.1	-1.6	-0.1	-0.5	-1.0	-2.1	-5.3
Oberon (A)	-0.2	-2.6	-0.8	-1.1	-3.0	-8.1	-15.9
Orange (C)	-1.7	-9.1	-7.3	-15.1	-37.8	-54.2	-125.3
Parkes (A)	-0.7	-5.3	-2.3	-4.5	-8.8	-16.4	-38.1
Parramatta (C)	-6.8	-17.7	-41.9	-52.2	-132.2	-303.0	-553.8
Parry (A)	-0.6	-13.7	-1.3	-9.0	-12.4	-17.7	-54.6
Penrith (C)	-8.2	-151.1	-43.6	-74.1	-150.7	-359.0	-786.7
Pittwater (A)	-2.6	-4.2	-17.2	-14.8	-68.1	-157.5	-264.3
Port Stephens (A)	-2.7	-20.1	-9.1	-16.1	-33.2	-94.4	-175.5
Pristine Waters (A)	-0.5	-11.3	-0.7	-4.7	-7.7	-13.6	-38.4
Queanbeyan (C)	-1.5	-6.3	-7.4	-11.9	-21.4	-71.0	-119.4
Quirindi (A)	-0.2	-3.7	-0.7	-1.8	-3.8	-6.8	-17.0
Randwick (C)	-5.8	-12.4	-44.1	-34.2	-124.0	-224.7	-445.2
Richmond Valley (A)	-1.0	-9.7	-2.8	-8.7	-16.9	-25.3	-64.4
Rockdale (C)	-4.3	-9.3	-26.7	-28.2	-77.5	-148.5	-294.5
Ryde (C)	-4.6	-8.4	-33.3	-30.6	-99.5	-218.7	-395.0
Rylstone (A)	-0.2	-1.0	-0.6	-0.9	-2.2	-3.8	-8.8
Scone (A)	-0.5	-2.2	-2.0	-2.5	-9.8	-13.8	-30.7
Severn (A)	-0.1	-4.4	-0.2	-1.0	-1.7	-2.9	-10.3
Shellharbour (C)	-2.8	-45.0	-11.2	-23.2	-35.5	-90.0	-207.6
Shoalhaven (C)	-4.0	-47.7	-12.6	-28.1	-49.4	-112.6	-254.5
Singleton (A)	-1.0	-1.4	-5.1	-4.1	-15.6	-34.5	-61.6
Snowy River (A)	-0.3	-0.4	-1.1	-1.4	-6.1	-11.0	-20.5
South Sydney (C)	-4.1	-9.6	-34.2	-25.2	-106.8	-235.0	-414.9
Strathfield (A)	-1.4	-2.3	-8.7	-9.3	-27.4	-64.7	-113.7
Sutherland Shire (A)	-9.8	-23.7	-71.1	-84.9	-233.9	-448.5	-871.9
Sydney (C)	-1.5	-2.9	-11.3	-6.2	-28.6	-158.7	-209.1

Table A4.2 Economic activity foregone by region, 5 year total $2001m (cont.)

Local government area	Net impact on Federal Income Taxation	Debt Finance Cost	Total Cost of Wealth Creation foregone	Total Income Effects of Retail Sales Lost	Cost of Manu Goods not produced	Net Constructi on Effect	Total negative impacts
Tallaganda (A)	-0.1	-3.1	-0.3	-0.9	-1.8	-3.9	-10.2
Tamworth (C)	-1.7	-9.0	-6.8	-19.9	-27.6	-51.4	-116.4
Temora (A)	-0.3	-4.0	-0.9	-1.8	-3.4	-6.0	-16.3
Tenterfield (A)	-0.3	-6.2	-0.7	-2.0	-3.5	-7.1	-19.9

Tumbarumba (A)	-0.2	-3.0	-0.4	-1.1	-3.0	-3.2	-10.9
Tumut (A)	-0.5	-3.7	-2.0	-3.2	-10.0	-15.1	-34.6
Tweed (A)	-3.4	-46.0	-12.0	-29.9	-44.3	-98.7	-234.4
Uralla (A)	-0.3	-5.3	-0.8	-2.3	-4.5	-9.7	-22.9
Urana (A)	-0.1	-1.3	-0.2	-0.5	-1.0	-0.9	-3.9
Wagga Wagga (C)	-2.6	-17.8	-11.0	-34.8	-46.2	-90.5	-202.9
Wakool (A)	-0.2	-4.8	-0.5	-1.3	-3.0	-3.8	-13.6
Walcha (A)	-0.2	-3.1	-0.4	-1.0	-2.1	-3.1	-9.8
Walgett (A)	-0.4	-4.2	-1.2	-2.3	-4.6	-6.3	-19.0
Warren (A)	-0.2	-2.4	-0.5	-1.2	-2.5	-3.0	-9.8
Warringah (A)	-6.3	-12.8	-51.1	-36.1	-146.5	-309.8	-562.6
Waverley (A)	-2.9	-6.0	-25.0	-18.5	-78.9	-132.6	-263.9
Weddin (A)	-0.2	-3.7	-0.5	-1.0	-2.3	-3.5	-11.2
Wellington (A)	-0.4	-3.4	-0.9	-2.6	-5.4	-9.6	-22.2
Wentworth (A)	-0.3	-5.1	-0.8	-3.0	-4.3	-5.5	-19.1
Willoughby (C)	-2.9	-4.8	-24.8	-18.0	-79.4	-165.1	-295.1
Windouran (A)	0.0	-0.4	-0.1	-0.2	-0.4	-0.4	-1.5
Wingecarribee (A)	-2.0	-19.8	-7.7	-12.1	-33.2	-70.6	-145.3
Wollondilly (A)	-1.8	-41.4	-6.0	-14.3	-30.2	-68.3	-162.0
Wollongong (C)	-8.8	-30.9	-44.0	-65.5	-129.4	-322.8	-601.3
Woollahra (A)	-2.5	-4.5	-23.5	-19.4	-107.8	-138.3	-295.9
Wyong (A)	-6.2	-81.9	-24.8	-54.2	-86.6	-194.7	-448.5
Yallaroi (A)	-0.2	-3.5	-0.3	-0.9	-2.5	-2.5	-9.9
Yarrowlumla (A)	-0.5	-4.8	-2.2	-3.5	-8.9	-23.6	-43.5
Yass (A)	-0.5	-3.6	-1.8	-3.0	-8.2	-19.7	-36.8
Young (A)	-0.5	-7.8	-1.7	-3.4	-7.9	-12.8	-34.1

Table A4.3 Problem gambling cost and net regional economic impact, 5 year total

Local government area	Total positive impacts, Table A3.1	Total negative impacts, Table A3.2	Net economic impact	Cost of problem gambling, density based rates	Net impact of gambling in region, 5 yr total
Albury (C)	239.8	-165.3	74.5	-25.6	48.9
Armidale Dumaresq (A)	84.1	-73.1	11.0	-8.1	2.9
Ashfield (A)	237.8	-146.6	91.2	-25.4	65.8
Auburn (A)	274.5	-201.3	73.2	-24.0	49.2
Ballina (A)	148.0	-142.1	5.8	-12.2	-6.4
Balranald (A)	19.6	-6.6	13.0	-1.5	11.5

Bankstown (C)	844.5	-584.0	260.6	-80.2	180.4
Barraba (A)	8.0	-5.5	2.5	-1.2	1.3
Bathurst (C)	115.9	-107.8	8.1	-12.3	-4.2
Baulkham Hills (A)	732.7	-667.7	65.0	-61.2	3.7
Bega Valley (A)	135.0	-101.6	33.4	-11.5	21.9
Bellingen (A)	42.9	-40.0	2.8	-4.1	-1.2
Berrigan (A)	48.4	-24.1	24.3	-3.1	21.2
Bingara (A)	8.0	-5.7	2.3	-0.7	1.6
Blacktown (C)	1212.1	-1039.8	172.3	-101.1	71.2
Bland (A)	25.5	-18.9	6.5	-2.1	4.5
Blayney (A)	19.1	-23.0	-4.0	-2.3	-6.3
Blue Mountains (C)	317.9	-276.9	41.0	-11.1	29.9
Bogan (A)	11.7	-8.0	3.7	-2.8	0.8
Bombala (A)	10.9	-7.3	3.7	-1.1	2.6
Boorowa (A)	9.5	-6.6	3.0	-1.0	1.9
Botany Bay (C)	180.4	-128.7	51.7	-18.9	32.8
Bourke (A)	13.9	-7.5	6.4	-1.6	4.8
Brewarrina (A)	6.4	-3.5	2.9	-0.8	2.1
Broken Hill (C)	75.7	-46.1	29.6	-9.1	20.5
Burwood (A)	177.9	-99.6	78.2	-16.1	62.2
Byron (A)	102.2	-109.8	-7.6	-8.8	-16.4
Cabonne (A)	38.6	-41.9	-3.3	-3.7	-7.0
Camden (A)	211.7	-201.8	10.0	-13.9	-4.0
Campbelltown (C) (NSW)	689.7	-530.2	159.5	-59.4	100.1
Canterbury (C)	712.9	-408.8	304.1	-60.5	243.5
Carrathool (A)	10.7	-9.6	1.1	-1.0	0.1
Central Darling (A)	8.5	-6.2	2.3	-1.3	1.0
Cessnock (C)	165.8	-116.4	49.4	-17.8	31.6
Cobar (A)	17.5	-13.6	3.9	-2.1	1.8

Table A4.3 Problem gambling cost and net regional economic impact, 5 year total (cont.)

Local government area	Total positive impacts, Table A3.1	Total negative impacts, Table A3.2	Net economic impact	Cost of problem gambling, density based rates	Net impact of gambling in region, 5 yr total
Coffs Harbour (C)	247.2	-199.1	48.0	-11.7	36.3
Conargo (A)	5.3	-6.2	-0.9	-0.1	-1.0
Concord (A)	141.7	-119.6	22.2	-15.1	7.0
Coolah (A)	12.4	-12.9	-0.5	-1.6	-2.0
Coolamon (A)	14.1	-13.1	1.0	-1.2	-0.3
Cooma-Monaro (A)	34.7	-30.5	4.2	-1.9	2.3
Coonabarabran (A)	18.7	-16.2	2.6	-1.7	0.9
Coonamble (A)	19.0	-12.8	6.2	-2.7	3.5

Cootamundra (A)	24.8	-22.6	2.1	-3.5	-1.4
Copmanhurst (A)	13.4	-15.0	-1.6	-2.2	-3.8
Corowa (A)	89.7	-27.8	61.9	-5.1	56.8
Cowra (A)	43.0	-36.8	6.1	-4.4	1.7
Crookwell (A)	13.2	-14.4	-1.2	-1.7	-2.9
Culcairn (A)	15.5	-12.3	3.2	-1.7	1.5
Deniliquin (A)	37.7	-23.6	14.1	-7.3	6.8
Drummoyne (A)	217.5	-153.4	64.2	-25.0	39.2
Dubbo (C)	144.9	-129.5	15.5	-10.5	5.0
Dungog (A)	26.4	-26.6	-0.2	-2.3	-2.5
Eurobodalla (A)	167.1	-103.5	63.6	-14.2	49.4
Evans (A)	16.2	-21.1	-5.0	-0.5	-5.5
Fairfield (C)	953.3	-655.0	298.4	-85.5	212.9
Forbes (A)	36.0	-32.8	3.2	-4.5	-1.3
Gilgandra (A)	16.0	-14.8	1.2	-2.0	-0.8
Glen Innes (A)	22.8	-15.8	7.0	-2.3	4.7
Gloucester (A)	15.3	-13.7	1.6	-1.6	0.0
Gosford (C)	746.1	-570.0	176.2	-65.0	111.2
Goulburn (C)	81.6	-63.3	18.4	-8.2	10.2
Grafton (C)	70.1	-49.9	20.2	-7.6	12.6
Great Lakes (A)	132.9	-88.7	44.2	-7.5	36.7
Greater Lithgow (C)	72.6	-56.8	15.8	-9.0	6.8
Greater Taree (C)	156.1	-134.4	21.6	-13.9	7.8
Griffith (C)	95.3	-76.3	19.0	-12.6	6.4
Gundagai (A)	14.3	-11.8	2.5	-1.5	1.1
Gunnedah (A)	42.4	-40.3	2.2	-6.0	-3.8
Gunning (A)	9.3	-8.7	0.6	-0.5	0.1
Guyra (A)	14.5	-13.1	1.4	-1.3	0.1

Table A4.3 Problem gambling cost and net regional economic impact, 5 year total (cont.)

Local government area	Total positive impacts, Table A3.1	Total negative impacts, Table A3.2	Net economic impact	Cost of problem gambling, density based rates	Net impact of gambling in region, 5 yr total
Harden (A)	12.6	-11.9	0.7	-1.5	-0.8
Hastings (A)	257.1	-200.5	56.6	-18.0	38.6
Hawkesbury ©	290.9	-269.9	21.0	-25.9	-4.9
Hay (A)	15.2	-10.7	4.5	-2.7	1.8
Holbrook (A)	6.8	-10.0	-3.2	-0.2	-3.4
Holroyd ©	486.0	-328.0	158.1	-38.0	120.1
Hornsby (A)	770.9	-646.5	124.4	-47.3	77.1
Hume (A)	36.9	-35.8	1.1	-5.0	-3.9
Hunter's Hill (A)	84.6	-59.1	25.5	-10.6	14.9
Hurstville ©	403.0	-257.5	145.5	-40.1	105.4

Inverell (A)	42.0	-40.5	1.5	-4.3	-2.8
Jerilderie (A)	10.0	-6.1	3.8	-1.2	2.7
Junee (A)	19.1	-17.4	1.7	-2.5	-0.8
Kempsey (A)	98.1	-83.5	14.7	-10.3	4.4
Kiama (A)	90.1	-70.0	20.1	-7.9	12.2
Kogarah (A)	273.3	-185.5	87.7	-27.7	60.1
Ku-ring-gai (A)	625.4	-465.2	160.2	-43.6	116.5
Kyogle (A)	30.6	-27.4	3.3	-1.9	1.4
Lachlan (A)	25.5	-19.5	6.0	-3.8	2.3
Lake Macquarie ©	785.7	-658.5	127.2	-92.6	34.6
Lane Cove (A)	191.3	-155.2	36.1	-28.6	7.4
Leeton (A)	39.7	-37.0	2.8	-5.4	-2.6
Leichhardt (A)	438.2	-313.0	125.2	-43.4	81.8
Lismore ©	142.5	-150.8	-8.3	-14.7	-23.0
Liverpool ©	805.5	-601.1	204.4	-67.4	137.1
Lockhart (A)	11.9	-12.9	-1.0	-1.3	-2.3
Maclean (A)	57.3	-50.5	6.8	-5.9	0.9
Maitland ©	252.7	-188.2	64.5	-32.6	31.9
Manilla (A)	10.7	-10.8	-0.1	-1.2	-1.3
Manly (A)	232.5	-167.5	65.0	-22.8	42.2
Marrickville (A)	445.4	-295.4	150.0	-44.0	105.9
Merriwa (A)	11.2	-6.3	4.8	-1.4	3.5
Moree Plains (A)	62.1	-45.4	16.7	-7.0	9.7
Mosman (A)	228.5	-152.0	76.4	-17.7	58.8
Mudgee (A)	67.2	-53.2	14.0	-4.9	9.1
Mulwaree (A)	21.4	-25.5	-4.1	-2.4	-6.5

Table A4.3 Problem gambling cost and net regional economic impact, 5 year total (cont.)

Local government area	Total positive impacts, Table A3.1	Total negative impacts, Table A3.2	Net economic impact	Cost of problem gambling, density based rates	Net impact of gambling in region, 5 yr total
Murray (A)	55.8	-17.8	38.0	-0.6	37.4
Murrumbidgee (A)	12.3	-7.6	4.7	-1.9	2.8
Murrurundi (A)	8.4	-6.4	2.0	-0.2	1.9
Muswellbrook (A)	57.0	-43.2	13.7	-8.0	5.7
Nambucca (A)	65.9	-51.7	14.2	-7.1	7.2
Narrabri (A)	48.0	-43.4	4.5	-6.4	-1.9
Narrandera (A)	27.9	-19.6	8.3	-2.8	5.4
Narromine (A)	22.8	-20.9	1.9	-3.1	-1.2
Newcastle (C)	632.9	-474.7	158.2	-77.6	80.5
North Sydney (A)	450.0	-337.8	112.2	-49.9	62.3
Nundle (A)	3.5	-5.3	-1.9	-0.1	-2.0
Oberon (A)	16.0	-15.9	0.1	-1.9	-1.8

Orange (C)	131.5	-125.3	6.3	-13.9	-7.7
Parkes (A)	52.2	-38.1	14.2	-5.6	8.6
Parramatta (C)	805.4	-553.8	251.6	-65.5	186.1
Parry (A)	43.1	-54.6	-11.5	-4.7	-16.2
Penrith (C)	977.1	-786.7	190.5	-92.1	98.4
Pittwater (A)	281.8	-264.3	17.5	-8.4	9.0
Port Stephens (A)	218.8	-175.5	43.3	-13.3	29.9
Pristine Waters (A)	35.9	-38.4	-2.5	-1.5	-4.0
Queanbeyan (C)	150.7	-119.4	31.3	-12.4	18.8
Quirindi (A)	19.4	-17.0	2.4	-2.4	0.0
Randwick (C)	829.8	-445.2	384.6	-74.3	310.3
Richmond Valley (A)	73.3	-64.4	8.9	-8.4	0.5
Rockdale (C)	508.2	-294.5	213.7	-39.4	174.3
Ryde (C)	520.8	-395.0	125.8	-45.7	80.1
Rylstone (A)	11.2	-8.8	2.4	-1.2	1.2
Scone (A)	38.2	-30.7	7.5	-5.9	1.6
Severn (A)	10.1	-10.3	-0.3	-1.1	-1.4
Shellharbour (C)	291.3	-207.6	83.7	-30.0	53.7
Shoalhaven (C)	332.3	-254.5	77.8	-31.6	46.2
Singleton (A)	78.0	-61.6	16.4	-9.9	6.5
Snowy River (A)	23.8	-20.5	3.3	-1.1	2.2
South Sydney (C)	605.0	-414.9	190.1	-52.2	137.9
Strathfield (A)	159.4	-113.7	45.7	-16.1	29.6
Sutherland Shire (A)	1115.0	-871.9	243.1	-77.0	166.1

Table A4.3 Problem gambling cost and net regional economic impact, 5 year total (cont.)

Local government area	Total positive impacts, Table A3.1	Total negative impacts, Table A3.2	Net economic impact	Cost of problem gambling, density based rates	Net impact of gambling in region, 5 yr total
Sydney (C)	384.4	-209.1	175.3	-10.9	164.4
Tallaganda (A)	10.3	-10.2	0.1	-1.0	-0.9
Tamworth (C)	143.1	-116.4	26.7	-13.6	13.2
Temora (A)	19.3	-16.3	3.0	-2.5	0.5
Tenterfield (A)	19.3	-19.9	-0.6	-2.7	-3.2
Tumbarumba (A)	12.4	-10.9	1.5	-1.3	0.2
Tumut (A)	42.5	-34.6	7.8	-5.3	2.5
Tweed (A)	383.9	-234.4	149.5	-34.0	115.5
Uralla (A)	24.3	-22.9	1.4	-1.8	-0.4
Urana (A)	9.4	-3.9	5.5	-1.4	4.1
Wagga Wagga (C)	220.8	-202.9	17.9	-23.9	-6.0
Wakool (A)	40.5	-13.6	26.9	-1.1	25.8
Walcha (A)	13.5	-9.8	3.6	-1.4	2.2
Walgett (A)	35.5	-19.0	16.5	-5.4	11.2

Warren (A)	14.1	-9.8	4.3	-2.1	2.3
Warringah (A)	752.3	-562.6	189.7	-79.8	109.9
Waverley (A)	453.3	-263.9	189.3	-39.4	150.0
Weddin (A)	11.9	-11.2	0.7	-1.8	-1.1
Wellington (A)	29.1	-22.2	6.9	-1.6	5.3
Wentworth (A)	35.9	-19.1	16.8	-2.9	13.9
Willoughby (C)	363.4	-295.1	68.3	-33.5	34.8
Windouran (A)	1.8	-1.5	0.3	0.0	0.3
Wingecarribee (A)	171.8	-145.3	26.5	-11.0	15.5
Wollondilly (A)	158.1	-162.0	-3.8	-9.9	-13.7
Wollongong (C)	804.9	-601.3	203.6	-70.0	133.6
Woollahra (A)	485.2	-295.9	189.2	-48.1	141.1
Wyong (A)	635.5	-448.5	187.0	-54.7	132.3
Yallaroi (A)	9.6	-9.9	-0.3	-0.8	-1.1
Yarrowlumla (A)	37.9	-43.5	-5.5	-1.5	-7.1
Yass (A)	41.3	-36.8	4.5	-2.2	2.3
Young (A)	38.9	-34.1	4.8	-4.8	0.0

Table A4.4 Impacts per household per week

Local government area	Total gambling expenditure $ per household per week	Net economic impact $ per household per week	Opportunity cost of gambling, $ per week over 5 years
	A	B	A-B
Albury (C)	52.5	11.2	41.3
Armidale Dumaresq (A)	35.2	1.3	33.9
Ashfield (A)	51.7	16.4	35.3
Auburn (A)	55.9	11.0	44.9
Ballina (A)	38.8	-1.7	40.5
Balranald (A)	50.0	44.7	5.3
Bankstown (C)	65.0	12.6	52.4
Barraba (A)	56.1	5.6	50.5
Bathurst (C)	41.7	-1.5	43.2
Baulkham Hills (A)	50.3	0.3	50.0
Bega Valley (A)	38.1	6.9	31.2
Bellingen (A)	31.8	-1.0	32.8
Berrigan (A)	38.9	26.5	12.4
Bingara (A)	40.5	6.9	33.6
Blacktown (C)	57.2	3.3	53.9
Bland (A)	40.3	7.0	33.3
Blayney (A)	38.6	-10.7	49.2
Blue Mountains (C)	37.3	4.1	33.2
Bogan (A)	51.6	2.8	48.8
Bombala (A)	43.8	9.8	34.1
Boorowa (A)	44.5	8.0	36.4
Botany Bay (C)	57.9	9.6	48.3
Bourke (A)	44.2	14.6	29.6
Brewarrina (A)	41.6	12.0	29.6
Broken Hill (C)	39.3	9.3	30.0
Burwood (A)	53.2	22.7	30.6
Byron (A)	37.5	-5.4	42.9
Cabonne (A)	31.3	-6.1	37.4
Camden (A)	46.1	-1.1	47.2
Campbelltown (C) (NSW)	53.7	8.2	45.5
Canterbury (C)	54.7	20.4	34.3
Carrathool (A)	38.6	0.3	38.4
Central Darling (A)	45.2	4.2	41.1
Cessnock (C)	40.9	7.4	33.5
Cobar (A)	42.3	3.6	38.7
Coffs Harbour (C)	26.0	5.9	20.1
Conargo (A)	35.4	-7.5	43.0

Table A4.4 Impacts per household per week (cont.)

Local government area	Total gambling	Net economic impact	Opportunity cost of

	expenditure per household per week	per household per week	gambling, $ per week over 5 years
Concord (A)	54.8	2.9	51.9
Coolah (A)	44.8	-5.4	50.2
Coolamon (A)	42.3	-0.7	43.0
Cooma-Monaro (A)	26.1	2.5	23.6
Coonabarabran (A)	29.2	1.3	28.0
Coonamble (A)	46.9	7.8	39.1
Cootamundra (A)	47.5	-1.8	49.3
Copmanhurst (A)	46.1	-9.2	55.3
Corowa (A)	55.9	65.1	-9.2
Cowra (A)	37.2	1.4	35.8
Crookwell (A)	45.5	-6.9	52.4
Culcairn (A)	45.3	4.0	41.3
Deniliquin (A)	54.8	8.3	46.5
Drummoyne (A)	54.3	10.8	43.6
Dubbo (C)	32.3	1.4	30.8
Dungog (A)	34.1	-3.2	37.3
Eurobodalla (A)	45.3	13.8	31.5
Evans (A)	23.7	-11.5	35.2
Fairfield (C)	67.6	14.9	52.8
Forbes (A)	45.4	-1.3	46.8
Gilgandra (A)	44.3	-1.8	46.1
Glen Innes (A)	42.6	7.7	34.9
Gloucester (A)	43.4	0.1	43.3
Gosford (C)	48.5	7.1	41.3
Goulburn (C)	44.7	5.0	39.7
Grafton (C)	44.6	7.6	37.0
Great Lakes (A)	30.5	10.5	19.9
Greater Lithgow (C)	45.3	3.6	41.8
Greater Taree (C)	33.8	1.8	32.0
Griffith (C)	47.7	2.9	44.8
Gundagai (A)	44.0	2.9	41.1
Gunnedah (A)	45.7	-3.2	48.9
Gunning (A)	35.9	0.3	35.5
Guyra (A)	41.5	0.1	41.4
Harden (A)	45.0	-2.1	47.1
Hastings (A)	33.4	5.7	27.6
Hawkesbury (C)	48.3	-0.9	49.2
Hay (A)	50.0	5.3	44.7

Table A4.4 Impacts per household per week (cont.)

Local government area	Total gambling expenditure per household per week	Net economic impact per household per week	Opportunity cost of gambling, $ per week over 5 years

Holbrook (A)	39.6	-14.1	53.7
Holroyd (C)	56.4	15.0	41.3
Hornsby (A)	43.0	6.0	37.1
Hume (A)	51.1	-5.8	56.9
Hunter's Hill (A)	49.2	13.5	35.7
Hurstville (C)	56.2	15.5	40.7
Inverell (A)	29.9	-1.9	31.7
Jerilderie (A)	51.1	15.0	36.1
Junee (A)	48.3	-1.8	50.1
Kempsey (A)	40.6	1.6	39.0
Kiama (A)	42.4	6.7	35.7
Kogarah (A)	53.3	12.7	40.6
Ku-ring-gai (A)	45.0	13.3	31.7
Kyogle (A)	28.8	1.5	27.3
Lachlan (A)	46.3	3.2	43.1
Lake Macquarie (C)	51.9	2.0	49.9
Lane Cove (A)	46.9	2.4	44.5
Leeton (A)	46.3	-2.5	48.8
Leichhardt (A)	47.0	11.3	35.7
Lismore (C)	36.4	-5.6	42.0
Liverpool (C)	61.4	10.9	50.5
Lockhart (A)	44.4	-7.2	51.6
Maclean (A)	36.0	0.5	35.6
Maitland (C)	52.8	6.3	46.5
Manilla (A)	44.6	-3.9	48.5
Manly (A)	48.3	10.5	37.9
Marrickville (A)	51.0	13.6	37.4
Merriwa (A)	48.1	14.4	33.8
Moree Plains (A)	43.0	6.6	36.4
Mosman (A)	47.5	20.0	27.4
Mudgee (A)	30.7	5.2	25.5
Mulwaree (A)	35.0	-9.6	44.7
Murray (A)	34.8	62.6	-27.8
Murrumbidgee (A)	49.3	11.3	38.0
Murrurundi (A)	29.7	8.4	21.4
Muswellbrook (A)	44.8	4.1	40.7
Nambucca (A)	37.2	3.8	33.4
Narrabri (A)	38.3	-1.4	39.8

Table A4.4 Impacts per household per week (cont.)

Local government area	Total gambling expenditure per household per week	Net economic impact per household per week	Opportunity cost of gambling, $ per week over 5 years
Narrandera (A)	46.4	8.5	37.9
Narromine (A)	39.7	-1.8	41.5

Newcastle (C)	48.7	5.5	43.2
North Sydney (A)	44.4	8.4	36.0
Nundle (A)	35.3	-14.6	50.0
Oberon (A)	45.0	-4.0	49.0
Orange (C)	40.7	-2.3	42.9
Parkes (A)	37.6	6.0	31.6
Parramatta (C)	52.1	13.9	38.2
Parry (A)	32.5	-14.0	46.5
Penrith (C)	63.2	6.6	56.6
Pittwater (A)	41.8	1.8	40.1
Port Stephens (A)	30.8	5.3	25.5
Pristine Waters (A)	24.1	-3.8	27.9
Queanbeyan (C)	43.3	6.0	37.3
Quirindi (A)	46.5	0.0	46.5
Randwick (C)	54.1	24.9	29.2
Richmond Valley (A)	38.5	0.2	38.2
Rockdale (C)	53.3	20.2	33.1
Ryde (C)	47.5	8.4	39.2
Rylstone (A)	38.3	3.0	35.4
Scone (A)	41.8	1.7	40.1
Severn (A)	43.1	-4.9	48.0
Shellharbour (C)	53.7	10.4	43.4
Shoalhaven (C)	40.5	5.3	35.2
Singleton (A)	43.0	3.6	39.4
Snowy River (A)	22.2	2.4	19.7
South Sydney (C)	43.7	12.3	31.4
Strathfield (A)	51.8	12.1	39.7
Sutherland Shire (A)	49.6	8.7	40.9
Sydney (C)	39.2	44.7	-5.5
Tallaganda (A)	40.8	-3.1	43.9
Tamworth (C)	39.0	3.8	35.2
Temora (A)	44.0	0.8	43.3
Tenterfield (A)	45.0	-4.8	49.8
Tumbarumba (A)	41.8	0.6	41.2
Tumut (A)	45.1	2.3	42.8
Tweed (A)	47.4	14.7	32.7

Table A4.4 Impacts per household per week (cont.)

Local government area	Total gambling expenditure per household per week	Net economic impact per household per week	Opportunity cost of gambling, $ per week over 5 years
Uralla (A)	38.9	-0.7	39.5
Urana (A)	53.1	30.5	22.6
Wagga Wagga (C)	43.1	-1.2	44.3
Wakool (A)	35.6	56.2	-20.6

Walcha (A)	42.5	7.0	35.5
Walgett (A)	49.6	12.4	37.2
Warren (A)	50.4	7.0	43.5
Warringah (A)	57.8	8.7	49.1
Waverley (A)	48.7	21.5	27.2
Weddin (A)	46.1	-2.9	49.0
Wellington (A)	26.7	6.3	20.3
Wentworth (A)	37.5	20.1	17.4
Willoughby (C)	47.9	5.9	42.0
Windouran (A)	38.5	7.8	30.7
Wingecarribee (A)	37.9	3.9	34.0
Wollondilly (A)	44.0	-4.3	48.3
Wollongong (C)	45.0	7.5	37.6
Woollahra (A)	44.6	23.9	20.7
Wyong (A)	49.7	10.0	39.7
Yallaroi (A)	36.4	-3.3	39.8
Yarrowlumla (A)	32.6	-7.7	40.4
Yass (A)	28.3	2.4	25.9
Young (A)	44.1	0.0	44.1

Appendix 5 Gambling market shares by type and state

Table A5.1 Australian market share of real gambling expenditure 1975-76 to 2000-01

Year	Racing	Gaming machines	Casino	Other
1975-76	42.9	40.9	0.7	15.4
1980-81	36.9	38.6	1.1	23.4
1985-86	37.1	29.4	5.9	27.6
1990-91	30.6	32.6	10.5	26.4
1995-96	17.1	48.1	18.8	16.0
2000-01	12.7	58.0	17.7	11.5

Table A5.2 NSW market share of real gambling expenditure 1975-76 to 2000-01

Year	Racing	Gaming machines	Casino	Other
1975-76	26.1	66.1	0.0	7.9
1980-81	25.2	63.0	0.0	11.7
1985-86	29.2	55.3	0.0	15.5
1990-91	26.8	63.4	0.0	9.9
1995-96	17.3	63.8	7.4	11.5
2000-01	11.8	70.0	9.0	9.2

Table A5.3 VIC market share of real gambling expenditure 1975-76 to 2000-01

Year	Racing	Gaming machines	Casino	Other
1975-76	67.9	0.0	0.0	32.1
1980-81	51.4	0.0	0.0	48.6
1985-86	51.0	0.0	0.0	49.0
1990-91	46.6	1.0	0.0	52.4
1995-96	16.8	49.0	19.3	14.8
2000-01	12.6	56.6	22.6	8.1

Table A5.4 QLD market share of real gambling expenditure 1975-76 to 2000-01

Year	Racing	Gaming machines	Casino	Other
1975-76	80.4	0.0	0.0	19.6
1980-81	74.4	0.0	0.0	25.6
1985-86	49.9	0.0	15.9	34.2
1990-91	31.8	0.0	24.6	43.6
1995-96	17.5	34.7	24.8	23.1
2000-01	11.3	46.8	25.1	16.8

Table A5.5	SA market share of real gambling expenditure 1975-76 to 2000-01			
Year	Racing	Gaming machines	Casino	Other
1975-76	59.0	0.0	0.0	41.0
1980-81	42.2	0.0	0.0	57.8
1985-86	33.7	0.0	19.4	46.8
1990-91	30.1	0.0	27.1	42.9
1995-96	15.2	53.9	12.9	18.0
2000-01	13.0	64.4	9.6	13.0

Table A5.6	WA market share of real gambling expenditure 1975-76 to 2000-01			
Year	Racing	Gaming machines	Casino	Other
1975-76	80.6	0.0	0.0	19.4
1980-81	79.7	0.0	0.0	20.3
1985-86	49.4	0.0	23.0	27.6
1990-91	23.9	0.0	43.9	32.1
1995-96	18.2	0.0	57.0	24.8
2000-01	25.0	0.0	42.8	32.2

Table A5.7	Tasmania market share of real gambling expenditure 1975-76 to 2000-01			
Year	Racing	Gaming machines	Casino	Other
1975-76	46.7	0.0	44.2	9.1
1980-81	30.8	0.0	29.1	40.2
1985-86	26.5	0.0	37.2	36.3
1990-91	28.3	0.0	40.6	31.1
1995-96	23.8	0.0	42.1	34.1
2000-01	12.5	35.0	32.9	19.6

Table A5.8	ACT market share of real gambling expenditure 1975-76 to 2000-01			
Year	Racing	Gaming machines	Casino	Other
1975-76	100.0	0.0	0.0	0.0
1980-81	26.2	54.1	0.0	19.7
1985-86	23.5	59.1	0.0	17.5
1990-91	16.7	71.3	0.0	12.0
1995-96	10.0	65.1	16.2	8.7
2000-01	10.2	74.0	8.1	7.7

Table A5.9 NT market share of real gambling expenditure 1975-76 to 2000-01

Year	Racing	Gaming machines	Casino	Other
1975-76	N/A	N/A	N/A	N/A
1980-81	23.9	0.0	51.8	24.2
1985-86	16.2	0.0	62.5	21.3
1990-91	19.5	0.4	63.4	16.7
1995-96	16.5	6.7	61.4	15.3
2000-01	16.5	18.6	45.8	19.2

Appendix 6 Using the modelling for evaluating policy settings

A6.1 Introduction

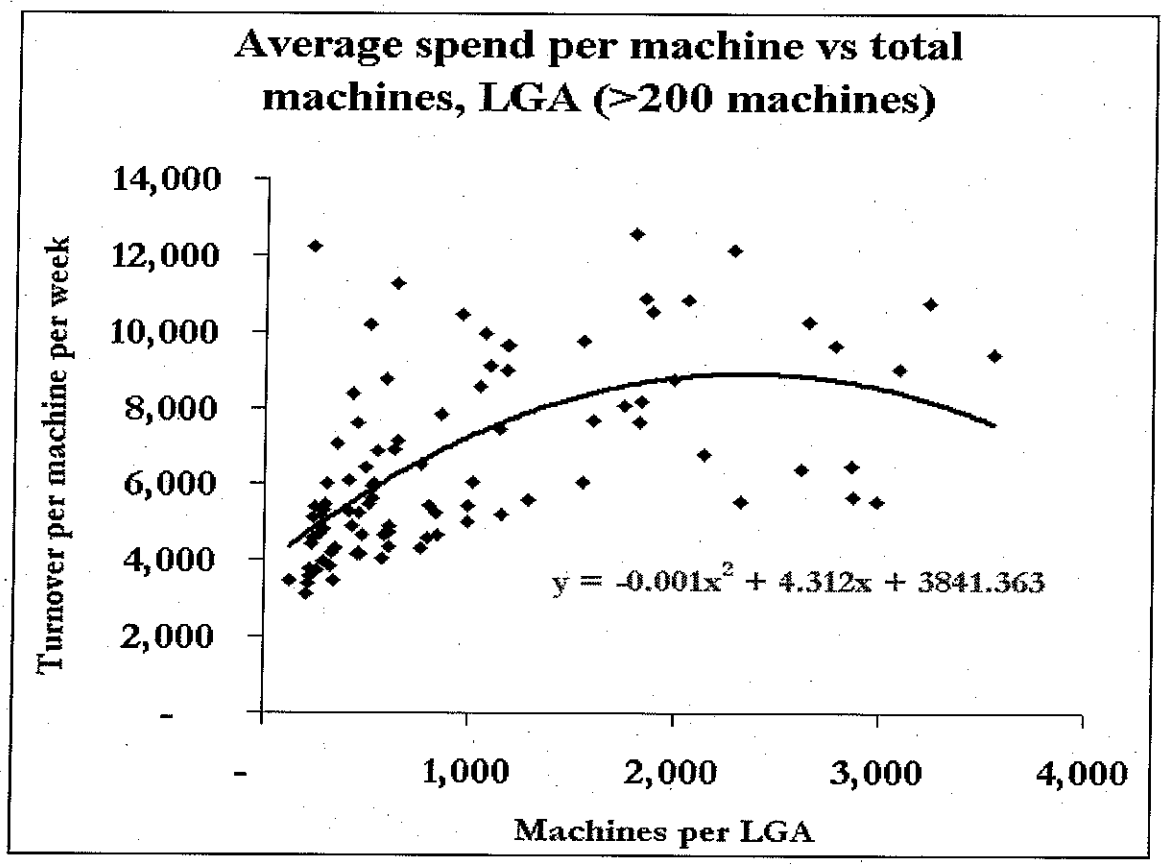
One of the outcomes of the modelling that NIEIR has undertaken, is the presentation of a website in which the user can vary the amount of gambling or the number of machines in the region and estimate the impact on the net economic impact that this change will have.

The website address is http:/www.nieir.info/nswgambling/

The modelling presented in the report is internally consistent with regard to such changes and has the capacity to adapt the distribution of supply and demand to reflect these changes. However, in order to make such a feature functional we nee to know how the increase or decrease of gaming machines within an area changes the amount of money that could be expected to be spent. That is we need to know the elasticity of revenue per machine with respect to the total supply of machines within a given catchment area.

A6.2 Relationship between supply of machines and turnover per machine

Consider the following relationship that exists in NSW.



Ostensibly the graph above indicates that until considerable scale is achieved in a particular region there is increasing returns available. That is for a local government areas with less than 1000 machines it appears that an increase in machines will result in an increase in the amount of spending per machine. Justification for such behaviour would include the requirements for sufficient scale to being to return the level of service and complimentary activities required to illicit further expenditure.

Such a relationship would usually be considered a non-equilibrium outcome as machines should move away from areas in which the fitted curve is turning downwards to areas in which more profits can be made.

However when we recalculate the graph using the number of machines per 10,000 households in the catchment area that we defined in Chapter 3 we get the following result. There is a reasonably uniform reduction in turnover per machine as the density of machines increases. This is the relationship that has been used to adjust the spending when the number of machines is adjusted.