

EXECUTIVE SUMMARY

INTRODUCTION

- There is no question that gambling is a major industry in the State of Louisiana. Louisiana has more forms of legalized gambling than any other state, save Nevada, with a land-based casino, riverboat casinos, horse-racing tracks, off-track betting, video poker in a large number of locations, Indian reservation casinos, and lotteries. With the exception of horse tracks and off-track betting, all of the other forms of gambling have been introduced into the State's economy over the past ten years.
- In 1998, total revenues for the State's gambling industry were \$2.178 billion. In contrast, 1990 total revenues for the State's gambling industry were \$192.1 million. Clearly, the gambling industry has been a growth industry in the State in the 1990s. Unlike other industries, especially growth industries, the gambling industry has faced a great deal of criticism by business, government, and religious leaders. In the face of this explosive growth in the industry and the constant questions posed about the industry, the Louisiana Legislature in the Fiscal Session of 1998 added \$600,000 to the budget of the Louisiana Gaming Control Board **for the purpose of studying the impact of gambling on the Louisiana economy**.
- Among the questions that the Gaming Control Board and the Legislature wanted addressed are:
 1. Who provides the billions of dollars spent on gambling in the State?
 2. To what extent do the various gambling venues bring in dollars and people from outside the State to gamble in Louisiana? Do those visitors spend money in other businesses in the State while they are here to gamble?
 3. Are the gambling dollars spent by Louisiana residents dollars that would have been spent out of state or are they dollars that would have been spent on other forms of local spending?
 4. Do the gambling businesses spend their money in Louisiana with local businesses or do the dollars flow out of state?
 5. Does gambling cause additional crime in the State?
 6. Does gambling create additional social problems in the State?

OVERALL CONCLUSIONS

- **Based on the analysis presented in this study, it is clear that the overall measurable benefit/cost ratio for the three forms of gambling studied in this report in the State of Louisiana is positive.** In order to reach that conclusion, the following definitions must be made. The costs of gambling are defined to include the regulatory costs to the state government and the measurable external or social costs that are generated by problem gamblers. The benefits of gambling are defined to be the new dollars generated by the gambling industry to pay for the costs. Thus, the benefits of gambling are equal to the new earnings created for Louisiana residents by the industry plus the new direct state and local tax revenues generated by the industry. New earnings and new tax revenues are the measure of the annual increase in the wealth of Louisiana's citizens created by the gambling industry. The reason why only direct tax revenues are included in the benefits is that indirect tax revenues are paid out of earnings and their inclusion would constitute double counting since we are already counting 100% of new earnings in the benefit calculation. Table S-1 presents a summary of the benefit/cost figures.

TABLE S-1
1998 GAMBLING BENEFIT/COST ANALYSIS
(DOLLAR FIGURES IN MILLIONS)

<u>Category</u>	<u>Amount</u>
BENEFITS:	
New Earnings	\$660.36
New Direct Tax Revenues	\$447.12
TOTAL BENEFITS	\$1,107.48
COSTS:	
Regulatory Costs	\$50.02
Measurable Social Costs	\$481.45
TOTAL COSTS	\$531.47
<u>BENEFIT/COST RATIO</u>	<u>2.08</u>

Source: Tables 4-15, 4-16, 4-17, 4-18, 4-21, 4-23, 5-1, 5-5, 5-6 and text.

- Thus, the net benefit created by gambling in the State is \$1,107.48 million. The net costs are \$531.47 million. The benefit/cost ratio is slightly above 2. In addition, gambling has created 39,082 new jobs in the Louisiana economy. Thus, purely on the basis of measurable economic costs and benefits, the benefits outweigh the costs.

Clearly, the unmeasurable costs and benefits should be considered by anyone making a public or private decision about the overall impact of gambling. It is inappropriate for the authors to make a decision about how the unmeasurable costs and benefits might change the analysis since this implies value judgements. Businesses and citizens of Louisiana, however, seem to have made this judgment themselves. The resident and business surveys included in this report (See Chapter 3) indicate a clear negative view of the gambling industry statewide. It is also clear from this report that the **measurable** economic benefits are greater than the **measurable** economic costs. It is quite likely that residents and businesses are putting their own value judgements on the **unmeasurable** costs and reaching the conclusion in their minds that the **real** benefits are less than the real costs.

- It is very important to make several points about the implications of the benefit/cost analysis made in this study.
 1. First, the costs and benefits that are presented in this report are for 1998. There is every reason to believe that these costs and benefits may change over time. The gambling industry in the State of Louisiana is still relatively young, starting in earnest in 1993 or 1994. As the industry matures, we believe that the benefits may decrease and the costs will likely increase, thus changing the overall benefit/cost ratio. It is certainly possible that the results could even switch and costs may outweigh benefits at some point in time.

The benefits derived from the local population could decrease due to the fact that the rate of diversion is likely to increase over time. The relatively low diversion rate is caused by the fact that local people can spend new dollars on gambling without reducing other consumption by drawing down existing savings, borrowing, reducing non-local consumption, or by spending “new” income created by a growing economy. Most of these things will tend to diminish over time. Savings are finite; one can spend money from existing savings only for a finite period of time. The amount of money a person can borrow without getting into financial trouble is also limited; and, eventually, prolonged borrowing will result in bankruptcy, loss of credit, or default. Finally, the Louisiana economy will not continue to grow indefinitely at the rate that it grew from 1994 to 1997. The growth rate of the Louisiana economy during that period was above the long-term trend. We are already seeing a slow down in the Louisiana economy as oil prices decrease. To continue increased gambling spending as the rate of growth of the economy slows, consumers must make more difficult financial decisions and diversion may increase. These factors may be offset by the introduction of several new casinos into the State's economy – Harrah's land-based casino in New Orleans and two additional riverboat licenses. In addition, 33 of the State's parishes have voted to make video poker illegal in 1999 upon expiration of current contracts. The effect of this on the benefits and costs of video poker are uncertain. For these reasons, the benefits of gambling may change over time.

The costs will tend to increase over time. The primary reason for this is that most of the costs are due to problem gamblers. It is clear from the psychiatry literature that addictive problems with any activity – drugs, alcohol, or gambling – do not develop overnight. On average, it takes ten years to develop full symptoms of addictive behavior. Thus, as the gambling industry matures in the State, the number of problem gamblers will increase and the costs associated with the gambling industry will also increase. There is evidence from the prevalence survey conducted for this report that this phenomenon may already be underway. When comparing the 1995 prevalence study to the 1998 study, the Level 2 problem gamblers lost on average nearly twice as much in 1998 as they did in 1995. The Level 2 problem gamblers are those that are in a transitional state – they could become a Level 3 pathological gambler or fall back to become a non-problem gambler. If many become pathological gamblers, the social costs of gambling will increase substantially. If they transition to a non-problem gambler, social costs overall will decrease. The evidence that, on average, the problem gamblers are losing much more indicates that many are on their way to Level 3 status.

2. The lion's share of the net new spending created by gambling in the State is created by out-of-state visitor spending at the Lake Charles and Shreveport riverboat casinos. Clearly, most of this spending comes from Texas residents. If Texas legalizes casino gambling or allows for the introduction of Indian reservation casinos, much of this visitor spending could be eliminated. Without the visitor spending, the benefit/cost analysis would reverse and gambling could become a net negative industry in the State.
3. Policy makers should consider carefully the source of the economic benefits derived from gambling. In 1998, according to the Louisiana Prevalence Study conducted for this study, 29.9% of all Louisiana spending on riverboat casinos comes from problem and pathological gamblers. Likewise, 42.3% of all Louisiana spending on Indian reservation casinos comes from problem and pathological gamblers. For video poker, the proportion is 27.2%. The total percentage spent on gambling by disordered gamblers has remained approximately the same – 25.3% compared to 25.1% even though the prevalence of disordered gamblers has decreased in 1998. **The most significant difference is the dramatic increase in the proportion of spending coming from Level 2 gamblers (from 11.2% to 15.5%) to rates that exceed the gambling proportion of Level 3 gamblers in 1998 (9.6%). The increased spending of Level 2 Louisiana gamblers in 1998 could signal an increase in the severity of disordered gambling by this group as a whole, and may argue for increased social costs for this group of gamblers. The increased spending could also chronicle the progression of an addictive disease in this group of gamblers.**
4. The costs and benefits presented in this report are those that existed in 1998. Once the industry has reached maturity, adding additional casinos or other gambling opportunities will not necessarily increase the benefits or costs

proportionately, especially benefits. There is a certain size market for any good or service in a particular location. After maturity, increasing a new retail outlet in that market will not increase the size of the market, it will just spread out the spending. **Thus, if the casino industry has reached maturity, adding new casinos will not increase the size of the market or the new spending related to the casino industry in the State.** Given the data presented in Chapter 1 of this report, there is some reason to believe that the industry may be reaching maturity.

5. Finally, it is not clear that, from a purely economic point of view, repealing the gambling laws would result in increased net benefits for the State. Given all the alternatives to the State's legalized forms of gambling – out-of-state gambling, Internet gambling, 1-800 sports betting, illegal games, and so forth – a repeal of the gambling laws would eliminate the benefits of gambling while not reducing the costs significantly. It is akin to the old saying, “Once the genie is out of the bottle, you can't put it back in.” This does not mean that it is irrational to advocate the repeal of gambling laws, just that it should not be done for measurable economic reasons.

GAMBLING BENEFITS

- The economic benefits of the gambling industry in Louisiana are large. Measured by direct new dollars spent in the State's economy, jobs, earnings and tax revenues, the industry has had a substantial dollar impact on the economy. A large percentage of that impact is created by out-of-state dollars brought in by the industry. Table S-2 presents a summary of the dollar benefits of the gambling industry in the State of Louisiana in 1998. The employment and earnings estimates are large numbers and should be considered in perspective of the overall Louisiana economy. Together, the three forms of gambling identified in Table S-2 amount to 2.1% of all Louisiana employment and 0.7% of total earnings in the State.

TABLE S-2
1998 GAMBLING BENEFITS BY FORM OF GAMBLING
(DOLLAR FIGURES IN MILLIONS)

<u>Category</u>	<u>Riverboats¹</u>	<u>Video Poker</u>	<u>Horse Racing</u>	<u>Total</u>
Direct Spending	\$988.87	\$81.69	\$189.81	\$1,260.37
Employment	24,546	2,914	11,622	39,082
Earnings	\$476.34	\$55.37	\$128.65	\$660.36
State Tax Revenues	\$255.56	\$140.93	\$11.43	\$407.92
Local Tax Revenues	\$82.73	\$38.34	\$3.98	\$125.05

Source: Authors' Calculations

¹ Note that this includes only riverboat casinos not Indian reservation casinos.

RIVERBOAT CASINOS

- The first step in estimating the benefits of riverboat casinos is to estimate net spending created by the casinos. Table S-3 presents a summary of the steps used to estimate the new spending generated by the riverboat casinos in Louisiana.

TABLE S-3
1998 NET NEW RIVERBOAT SPENDING
(DOLLAR FIGURES IN MILLIONS)

Row	Category	Value
1	Total Riverboat Casino Win	\$1,323.24
2	New Out-of-State Revenues	\$675.60
3	In-State Revenues (Row 1 - Row 2)	\$647.64
4	Diversion Rate	68.5%
5	Displaced Spending (Row 3 times Row 4)	\$443.95
6	New Louisiana Customer Spending (Row 3 minus Row 5)	\$203.69
7	Total New Customer Spending (Row 2 plus Row 6)	\$879.29
8	Louisiana Spending by Casinos	\$905.33
9	Louisiana Spending Rate (Row 8 divided by Row 1)	68.4%
10	Net new spending (Row 9 times Row 7)	\$601.59
11	New Local Visitor Spending Outside of Casinos	\$387.28
12	Net New Local Spending	\$988.87

Source: Louisiana State Police, Gambling Study Team, Casino Intercept Survey, 1998, and Authors' Calculations

- The next measure of benefit to the economy is employment. In 1998, riverboat and Indian casinos produced 20,156 jobs directly at the casinos themselves. The direct, or primary, employment of the casinos is relatively straightforward. A more difficult analysis is to determine what, if any, additional jobs in the economy are produced by the casino industry. The additional jobs are sometimes referred to as secondary employment and the phenomenon of creating these secondary jobs is referred to as the "multiplier effect." There has been a great deal of debate about the multiplier effect related to casino employment.
- Table S-4 presents the final results on the impact of riverboat casinos on employment and earnings. These results were generated using the estimated multipliers from a Bayesian analysis of employment data and earnings from the BEA's input-output tables. The Direct Employment column of Table S-4 presents casino employment as number of employees; the number in parenthesis is casino employment as a proportion of total employment. The Total Employment column is the number of jobs generated by the casino, both through directly employing workers and through the multiplier. Total employment is calculated as the product of the employment multipliers estimated in this study and the direct employment numbers in Table S-4.

The Total Earnings column of the table contains the estimated increase in earnings (both direct and via the multiplier effect) created by the casino industry in Louisiana. Table S-4 presents the employment and earnings impact of just riverboat casinos.

TABLE S-4
1998 RIVERBOAT CASINO EMPLOYMENT AND EARNINGS IMPACT

Planning District	Direct Employment ¹	Total Employment ²	Total Earnings
Lake Charles	3,690 (3.4%)	6,015 (5.5%)	\$113,542,126
New Orleans	3,460 (0.6%)	4,533 (0.8%)	\$ 91,324,915
Shreveport-Bossier City	6,799 (3.1%)	11,898 (5.5%)	\$229,265,702
Baton Rouge	1,707 (0.5%)	2,100 (0.6%)	\$ 42,203,659
Total	15,656 (.8%)	24,546 (1.3%)	\$476,336,402

Source: Louisiana Attorney General's Office and Authors' Estimates

¹ Figures in parentheses are direct casino employment as a percentage of total employment in that area.

² Figures in parentheses are total casino employment as a percentage of total employment in that area.

- Riverboat casinos employed 15,656 workers directly in 1998. This implies that less than one out of every one hundred Louisiana workers was employed by a casino. Taking into account the multiplier, Louisiana's casinos accounted for 24,546 jobs and \$476.3 million in earnings.
- The results also show that the impact of casinos is heavily concentrated in two areas. Shreveport-Bossier City led the State with employment of 6,799 casino workers. With the multiplier, casinos in Shreveport-Bossier City accounted for 11,898 jobs. Lake Charles, considering all direct and secondary employment, has 6,015 casino-related jobs, or 5.5% of total employment in the area.
- The final area of benefit is state and local taxes generated. In total the riverboat casino industry in 1998 generated \$255.56 million in net revenue for the State of Louisiana (see Table S-5). One of the main arguments in favor of casino gambling is that it produces large amounts of tax revenue for the State. This appears to be true. Even after considering displaced spending, the tax revenue generated is substantial. The riverboat casino industry in Louisiana is a very heavily taxed industry with direct overall tax rates approaching, and in some cases exceeding, 25% of gross revenues. Other forms of spending are taxed at much lower rates. Thus, even if every dollar spent in the casino industry came from the displacement of other local spending, tax revenues would go up due to the much higher tax rate for gambling.

TABLE S-5
1998 TOTAL, DISPLACED, AND NET STATE TAX REVENUE
FROM RIVERBOATS BY AREA
(IN MILLIONS)

Area	Total Revenue	Displaced Revenue	Net Revenue
New Orleans	\$63.66	\$15.76	\$47.90
Baton Rouge	24.95	6.31	18.64
Lake Charles	68.27	3.06	65.21
Shreveport-Bossier City	132.99	9.18	123.81
TOTAL	\$289.87	\$34.31	\$255.56

Source: Louisiana State Police, Louisiana Fiscal Office and Authors' Calculations

- The same methodology used to estimate the indirect tax revenues was used to estimate the displaced revenue. Table S-6 presents the displaced revenues and the net new local tax revenue.

TABLE S-6
1998 TOTAL, DISPLACED, AND NET LOCAL TAX REVENUE
FROM RIVERBOATS BY AREA
(IN MILLIONS)

Area	Total Revenue	Displaced Revenue	Net Revenue
New Orleans	\$24.42	\$13.55	\$10.87
Baton Rouge	9.16	4.34	4.82
Lake Charles	23.54	2.10	21.44
Shreveport-Bossier City	53.74	6.31	47.43
TOTAL	\$110.86	\$26.30	\$84.56

Source: Louisiana State Police, Louisiana Fiscal Office and Authors' Calculations

- Thus, the riverboat casino industry in 1998 generated \$84.56 million in total net new revenue for local governments in Louisiana. Combining the state tax total of \$255.56 with the local total of \$84.56 million produces total state and local government tax revenue of \$340.12 million.

VIDEO POKER

- In 1998, total video poker revenues were \$668.83 million. Of the total video poker revenues of \$668.83 million, \$27.51 million comes from out-of-state visitors and the remaining \$641.32 million comes from Louisiana residents. The next step in the process is to estimate the proportion of the \$641.32 million of local video poker spending that is displaced from other sources. The same methodology was used to estimate video poker displacement that was used to estimate riverboat casino displacement, with one major exception. The methodology used to estimate riverboat displacement was based on the Bayesian regression analysis to determine total observed employment based on direct riverboat employment.
- The most appropriate multiplier to use for video poker was that of the Baton Rouge market in which the market is mostly local as is the video poker market. Based on that analysis, the rate of displacement was 86.9%. In other words, of every dollar spent on video poker by locals \$.87 is diverted from other local spending.
- Table S-7 presents a summary of the methodology used to estimate net spending associated with the video poker industry.

TABLE S-7
1998 NET NEW VIDEO POKER SPENDING
(DOLLAR FIGURES IN MILLIONS)

<u>Row</u>	<u>Category</u>	<u>Value</u>
1	Total Video Poker Revenues	\$668.83
2	Out-of-State Revenues	\$27.51
3	In-State Revenues (Row 1 minus Row 2)	\$641.32
4	Diversion Rate	86.9%
5	Displaced Spending (Row 3 times Row 4)	\$557.57
6	New Louisiana Customer Spending (Row 3 minus Row 5)	\$83.75
7	Total New Customer Spending (Row 2 plus Row 6)	\$111.26
8	Louisiana Spending by Video Poker Businesses	\$491.07
9	Louisiana Spending Rate (Row 8 divided by Row 1)	73.4%
10	Net new spending (Row 9 times Row 7)	\$81.69

Source: Louisiana State Police and Authors' Calculations

- The same methodology that was used to estimate new employment and earnings for the riverboat casino industry was used to estimate employment and earnings for video poker. Based on the net new revenues of \$81.69 million, the new local earnings supported by that new video poker spending is \$55.37 million. Based on the State's average annual earnings, the new earnings translate to new employment of 2,914 jobs in the State.
- The video poker industry is a heavily taxed industry. In 1998, approximately \$198.71 million in state and local taxes were paid directly by the video poker companies. Of that total, approximately 25% goes to local governments in the jurisdictions that the devices are located and 75% goes to the State of Louisiana. In addition to the direct tax revenues, the new earnings create tax revenues for state and local governments. This indirect tax revenue is estimated using the same methodology that was employed to estimate riverboat casino indirect tax revenues. After netting out the state and local tax revenues lost on the diverted spending, the video poker industry contributed \$179.47 million in tax revenue to state and local governments in Louisiana in 1998. Of that total, \$140.93 million was collected by the State of Louisiana, and \$38.54 million was collected by various local governments in the State.

HORSE RACING

- The horse racing industry is different from both riverboat casinos and video poker devices in two fundamental ways. First, the horse tracks have been legal for many years in Louisiana unlike riverboat casinos and video poker devices. As a result, the impacts are much more likely to be permanent. Whatever adjustment in consumer habits and preferences that are going to occur have probably already occurred. Second, unlike riverboats and video poker, the largest input into the production process – the breeding and training of the horses – occurs in the State of Louisiana almost exclusively. An analogy would be: the video poker industry would be like the horse racing industry if all the video poker devices were actually manufactured and maintained by companies in the State.
- In 1998, the State's four racetracks and related off-track betting (OTB) parlors spent \$56.1 million in the Louisiana economy. In addition, the horse owners paid \$123.63 million to train the horses that are housed at the tracks and near-by facilities. Finally, the horse breeders in the State paid \$47.62 million in the State to support the breeding and raising of thoroughbred racehorses. In total, the horse racing industry in 1998 spent a total of \$227.39 million in the State of Louisiana.
- These local spending figures must be adjusted to determine net new spending related to the horse racing industry. The direct racetrack spending is adjusted in the same manner that the riverboat casino spending is adjusted. The estimate of net new spending involves adjusting 22.1% of training costs by the diversion ratio used above and assuming that the remaining 77.9% comes out of investments and leisure for the wealthy owners and thus does not displace any local spending. Based on that methodology, the total net new spending created by horse training activities in the State in 1998 were \$111.33 million. Horse breeding is assumed to have no local displacement since horses can be sold anywhere and thus the breeding industry is much more like a typical manufacturing industry. Thus, the net new spending associated with the horse breeding part of the industry is \$47.6 million. Thus, the net new spending associated with the horse racing industry in the State in 1998 is \$189.81 million.
- The horse racing industry also creates jobs, earnings and state and local tax revenue. In 1998, the tracks and OTB facilities, horse training operations, and breeding farms employed 7,450 people directly. Using the same methodology used to estimate secondary employment for riverboat casinos, the industry was responsible for the support of 4,172 additional secondary jobs in the State. In total, the horse racing industry supports 11,622 jobs.
- The direct earnings generated by the horse racing industry in 1998 were \$74.74 million. Secondary earnings were \$53.92 million for a total of \$128.65 million of total earnings. The horse racing industry in 1998 was responsible for \$4.35 million in direct taxes to the State and \$7.08 million in secondary revenues for a total of \$11.43 million in state tax revenues. The horse racing industry in 1998 was responsible for

\$1.48 million in direct taxes to local governments and \$2.80 million in taxes generated by secondary spending for a total of \$4.28 million in local tax revenues. In total, the horse racing industry created \$15.71 million in state and local tax revenue.

GAMBLING COSTS

- Gambling costs fall into two broad categories. The first category includes costs to the government, or governments, to regulate gambling. The second category includes the costs to other people or entities in Louisiana – including governments, businesses, and other people in the State – that result from the actions of gamblers, particularly problem gamblers. The first category is relatively easy to quantify and measure. The second category is much more difficult to quantify, so it will be explored more fully.

REGULATORY COSTS

- In Louisiana, gambling is regulated at the state level. There are direct costs to establish and run the Louisiana Gaming Control Board and the other boards that regulate the industry. Additionally, the Louisiana State Police and the Louisiana Attorney General's office are involved in the regulation and policing of the gambling industry.
- The costs of regulating, policing and, in the case of the Lottery, running the game amounted to \$50.02 million in 1998. These costs must be offset against government revenue that is collected from the gambling industry.

EXTERNAL OR SOCIAL COSTS

- Those costs include the following components:
 1. Increased crime rates and related costs such as police and other criminal justice system expenditures that are a result of gambling activity, especially problem gambling activity.
 2. Increased personal and small business bankruptcies and related personal and government costs that result from gambling.
 3. Increased costs to business due to employee theft, employee absenteeism and reduction in worker productivity that result from gambling.
 4. Increased social costs that result from gambling. Social costs could include family problems, personal depression, and suicide.
- People with gambling disorders can develop considerable gambling related debts, commit crimes to obtain money to gamble or pay gambling debts, default on debts, lose productivity at work, and develop other medical and psychological disorders

secondary to the stress of their gambling-related financial problems. Although the majority of these behaviors cause suffering principally for the gambler and their immediate family, some of these behaviors will result in financial burdens to the general public. External costs are defined as costs that people with gambling disorders cause others in society whom are not directly impacted by the gambler's behavior. At present, researchers can only estimate the external costs of people with gambling disorders. With the exception of prison costs, this study will only estimate the social costs of adults aged 18 and over with gambling disorders. Table S-8 presents the costs to society of one Level 4 problem gambler in Louisiana.

TABLE S-8
A SUMMARY OF THE ANNUAL SOCIETAL
COSTS OF ONE LEVEL 4 PROBLEM GAMBLER IN LOUISIANA

<u>Category</u>	<u>Costs</u>
Employment Costs	\$5,968
a. lost work hours (employed only)	5,809
b. unemployment compensation	33
c. lost productivity/unemployment	127
Bad Debts	1,246
Thefts	1,929
Civil Court Costs	457
Criminal Justice Costs	935
a. costs of arrests	53
b. costs of trials	192
c. costs of probation	157
d. costs of incarceration	533 ¹
Welfare Costs	27
Treatment	396
<u>Total Annual Social Costs Each Level 4 Gambler</u>	<u>\$10,958</u>

Source: GA/Treatment Study, 1998 and Various Agencies (Appendix E)

¹ See Estimation of 1998 Louisiana Adult Incarceration Costs of Gambling Disorders, Chapter 5.

- The total social costs are estimated by attributing a fraction of the GA/Treatment sample cost figures to the prevalence study sample and then extrapolating these costs to the adult population of Louisiana. In 1998, there were 3,171,870 people age 18 and over. This total was used to calculate the total social costs of gambling in Louisiana. There are two components of the social costs: the first component is the lost productivity costs created by disordered gambling in the last year (see Table S-9); the second component is the annualized value of the lifetime social costs created by disordered gamblers (see Table S-10). The total social costs are the sum of the two components or \$485.64 million in 1998.

TABLE S-9
PRODUCTIVITY COSTS OF GAMBLING STATEWIDE

SOGS Score	Number of Disordered Gamblers	Productivity Graduated Multiplier	Total Costs Per Person	Costs (in millions)
3	31	22%	\$1,260.02	\$68.83
4	11	29%	1,680.03	32.57
5	11	36%	2,100.04	40.71
6	6	43%	2,520.05	26.64
7	2	51%	2,940.05	10.36
8	5	58%	3,360.06	29.60
9	0	65%	3,780.07	-
10	1	72%	4,200.08	7.40
11	0	80%	4,620.09	0
12	2	87%	5,040.09	17.76
13	1	94%	5,460.10	9.62
14	0	101%	5,880.11	-
15	1	108%	6,300.12	11.10
Total	71		\$49,140.91	\$254.60

Source: Louisiana Prevalence Study, 1998, Louisiana GA/Treatment Study, 1998,
and Table 5-4

TABLE S-10
ANNUALIZED LIFETIME SOCIAL COSTS OF GAMBLING STATEWIDE

SOGS Score	Number of Disordered Gamblers	Graduated Multiplier	Productivity Costs Per Person	Societal Costs Per Person	Total Costs (in millions)
3	41	21.7%	\$34.58	NA	\$2.50
4	19	28.9%	46.11	NA	1.54
5	13	36.2%	57.63	\$1,803.93	42.64
6	9	43.4%	69.16	2,164.71	35.43
7	4	50.6%	80.69	2,525.50	18.37
8	7	57.8%	92.21	2,886.29	36.74
9	3	65.1%	103.74	3,247.07	17.71
10	1	72.3%	115.27	3,607.86	6.56
11	0	79.5%	126.79	3,968.64	–
12	3	86.8%	138.32	4,329.43	23.62
13	2	94.0%	149.84	4,690.21	17.06
14	1	101.2%	161.37	5,051.00	9.19
15	2	108.5%	172.90	5,411.79	19.68
Total	105		\$1,348.60	\$39,686.43	\$231.04

Source: Louisiana Prevalence Study, 1998, Louisiana GA/Treatment Study, 1998, and Table 5-4

REVENUES DERIVED FROM PEOPLE WITH GAMBLING DISORDERS

- In the analysis of the gambling industry on the State, one important factor to consider is the proportion of total gambling spending that is derived from problem gamblers. It is clear that the gambling industry has a very large presence in the State of Louisiana. Policy makers should have information on how much of this spending comes from problem gamblers. The Louisiana prevalence study contains adequate information to make this calculation for all of the various forms of gambling (see Table S-11).

TABLE S-11
PROPORTION OF TOTAL SPENDING FROM
PROBLEM AND PATHOLOGICAL GAMBLERS
FOR EACH GAMBLING ACTIVITY

Games	1995			1998		
	Problem	Path	Total	Problem	Path	Total
Pari-mutuel	18.2%	46.8%	65.0%	1.8%	6.3%	8.1%
Lottery	7.9	3.5	11.4	16.3	3.3	19.7
River Casino	6.9	11.1	18.0	18.3	11.6	29.9
Charity	17.6	6.3	23.9	5.3	6.4	11.7
Indian Casino	6.3	2.5	8.8	33.8	8.5	42.3
Electronic	16.7	9.9	26.6	18.4	8.7	27.1
Out of State	4.0	13.4	17.4	11.9	8.4	20.3
Private	14.4	12.7	27.1	8.1	17.0	25.1
Telephone/Internet	0	0	0	0	10.5	10.5
Other	8.4	5.2	13.6	0	0	0
Total	11.2	14.1	25.3	15.5	9.6	25.1

Source: Louisiana Prevalence Study, 1998 and Louisiana GA/Treatment Study, 1998

- In 1998, 29.9% of all Louisiana spending on riverboat casinos comes from problem and pathological gamblers. Likewise, 42.3% of all Louisiana spending on Indian reservation casinos comes from problem and pathological gamblers. For video poker, the proportion is 27.1%.
- The total percentage spent on gambling by disordered gamblers has remained approximately the same – 25.3% in 1995 compared to 25.1% in 1998 – even though the prevalence of disordered gamblers has decreased in 1998. The most significant difference is the dramatic increase in the proportion of spending coming from Level 2 gamblers (from 11.2% to 15.5%) to rates that exceed the gambling proportion of Level 3 gamblers in 1998 (9.6%). The increased spending of Level 2 Louisiana gamblers in 1998 could signal an increase in the severity of disordered gambling by this group as a whole, and may argue for increased social costs for this group of gamblers. The increased spending could also chronicle the progression of an addictive disease in this group of gamblers.

SUMMARY

- The quantifiable benefits of gambling in Louisiana exceeded the quantifiable costs by a ratio of 2 to 1 in 1998. Caution must be used in extrapolating the results into the future or in answering policy questions not specifically addressed by this study. In light of the many potential changes over time, continued monitoring of the benefits and costs of the gambling industry in Louisiana is strongly advised.