

# **An Economic Analysis of Machine Gambling in South Carolina**

William N. Thompson, Ph.D.  
Chair and Professor  
Department of Public Administration  
University of Nevada, Las Vegas 89154

and

Frank L. Quinn, Ph.D.  
Carolina Psychiatric Services  
Nine Richland Medical Park, 200  
Columbia, South Carolina 29203

A Report Prepared in Conjunction with  
Friends of South Carolina

Presented to  
The Education Foundation of the  
South Carolina Policy Council  
1323 Pendleton Street  
Columbia, South Carolina 29201  
May 18, 1999

## I. An Overview of Machine Gambling South Carolina Style

During the 1990s South Carolina has become the land of gambling loopholes. During the 70s and 80s video game machines began to appear in many South Carolina locations. Cash prizes were given to players who accumulated points representing winning scores at the games. The owners of establishments with the machines paid the players. No cash was dispensed by the machines. While the arrangements seemed on their surface to violate anti-gambling laws, they survived legal challenges. In 1991 the state supreme court bought into a loophole that the operators offered in their defense. The operators argued that the machines were not gambling machines as long as the prizes were not given out by the machines directly. The Court agreed and so naturally a gaming machine industry began to blossom throughout the state. (Thompson, 1999).

Operators "seen their opportunity," as the famous turn of the last century political philosopher George Washington Plunkitt of Tammany Hall would say, "and they took 'em." As the gaming revenues flowed in, the operators formed a very strong political lobby to defend their status quo. The legislature addressed the issue of machine gaming, but they could only offer a set of weak rules that have not been rigorously enforced. Legislation provided that gaming payouts for machine wins were supposed to be capped at \$125 a day for each player. Advertising was prohibited. There could be no machines where alcoholic beverages were sold, and operators could not offer any incentives to get persons to play the machines, and there could be only five machines per establishment. Machines were also licensed and taxed by the state at a rate of \$2000 per year. (Of the tax, \$200 is now given to an out-of-state firm to install a linked information system).

The rules have not been followed in their totality. Establishments have linked several rooms each having five machines. As many as 100 machines appeared under a single roof. Progressive machines offer prizes into the thousands of dollars. Operators claimed they pay each player only \$125 of the prize each day. In some cases, they awarded the full amount of the prize and have the player sign a "legal" statement affirming that the player will not spend more than \$125 of the prize in a single day. Dah! Advertisements of machine gaming appear on large signs by many establishments. Bars and taverns have machines.

There have been thousands of citations against establishments, and fines have been levied: \$429,000 in a nine month period in 1997-8). However, the practices have not ended. (Palermo, 1998).

Several interests in the state did not care for the gambling. They persuaded the legislature to authorize a statewide vote on banning the machines. According to the legislation authorizing the elections, votes were to be counted by counties. If a majority of the voters in a county said they did not want the machines, the machines would be removed from that county. In 1996, 12 of 46 counties said they did not want the machines. However, before they could be removed, the operators won a ruling from the state supreme court saying that the vote was unconstitutional. The court reasoned that South Carolina criminal law (banning the machines) could not be enforced unequally across the state. Equal Protection of the Law ruled supreme in the Palmetto State.

Over the past four years, the legislature and state regulators have continued to wrestle with issues surrounding machine gaming. One effort to have all the machines declared lotteries and banned in accordance with a state constitutional prohibition on lotteries failed, as the supreme court held by a single vote majority that the gaming on the machines did not constitute lottery gaming. The 1998 gubernatorial election seemed to turn on gambling issues, as supporters of machine gaming and lotteries gave large donations to the winning candidate. The new governor has sought to win wide support by initiating new "more effective" regulations, but these have not yet won consensus support in the legislature. One new proposed regulation would allow machines to have individual prizes of up to \$500 that could be one on a single play. Another proposal would set up a new state regulatory mechanism for machine gaming.

In the meantime, the machine gaming flourishes. At the beginning of 1999 there were over 31,000 machines in operation. They attracted over \$2.1 billion in wagers, and operators paid out prizes of \$1.5 billion. Machine owners and operators realized gross gaming profits of \$610 million—approximately \$20,000 per machine per year. Almost all of the machines were made out side of the state. Over one-half were "Pot o Gold" machines made in Norcross, Georgia. These cost \$7500 each. Most of the operators share revenues with owners of slot machine routes. At present there is no mandatory auditing of machine performance, although the state has authorized the statewide installation of a slot information system.

Is machine gaming good for the economy of South Carolina? This is the question addressed in this report.

The machines bring profits to operators of small businesses in the state. They bring profits to machine owners most of whom are in the state. The machines give jobs to South Carolinians. There must be

one employee for each five machines. The machines bring entertainment to thousands and thousands of South Carolinians. Is this good? The case is made over and over to public officials that the machines are good for South Carolina. But how can we assess the question? This report presents an input-output model for that assessment. This report also seeks to fill in the squares of the model with South Carolina information—some hard data, as well as some data gained from secondary sources, and other data based upon assumptions derived from other studies. The model has been utilized to assess the economic advantages of gambling in other jurisdictions. The model can be used to assess the economic value of other non-gaming-entertainment facilities as well. Actually the model could be used to assess the economic growth value of any kind of business venture.

## II. Gaming Economics and the Bath Tub Model: Inputs and Outputs

### A. Overview of Model

The model is simple. The model portrays gambling enterprise as a bathtub for the economy with money running into and out of the bathtub as if it were water. If more money runs in than runs out, the economy gains. If more money runs out than in, the economy loses. (Thompson, 1998a)

Water comes into a bath tub. Water runs out of a bath tub. If the water comes in at a higher rate than it leaves the tub, the water level rises; if the water comes in at a slower rate than it leaves, the water level is lowered. A local or regional economy attracts money. A local or regional economy discards money. If as a result of the presence of gambling enterprise more money comes into an economy than leaves the economy, there is a net positive impact. However, if more money leaves than comes in, then there is a net negative impact.

Money come into economies because of gambling. Players lose money to the games. Also players who come to gamble spend money on food, lodging, and transportation. Gambling enterprise can attract construction money. The money coming to the economy circulates and recirculates at rates which are called multipliers.

Money leaves gambling economies. Money brought to gaming by local residents is actually leaving other sectors of the local economy, so they must be subtracted from the positive side (the water into the tub). State and federal taxes on gaming wins and profits go off to capital cities and may never be seen again (or, only a small portion of the money will be seen again in local services such as salaries for on site gaming regulators). It is unlikely that a central government will give added general services to a local area just because the area

is providing gambling taxes. Gaming establishments need many supplies. Many of these are purchased from sources outside of the area. This is money lost. So too are profits that go to outside owners. Some gaming owners may reinvest monies in the local economy, but few have incentives for doing so.

The economies also lose money due to the costs of government services: extra police protection, better roads, traffic control in the gaming areas. Also gaming may attract or motivate criminal activity resulting in police and judicial system costs as well as costs of victimization and insurance premiums. Additionally, the presence of gaming will be associated with increases in pathological gambling behaviors, and these carry costs for economies.

The factors vary from gaming location to gaming location. The owners may have to be state residents or give preference to local suppliers. Taxes vary. The establishments can be required to pay for extra policemen, or give money to programs for problem gamblers. The bottomline effects of gaming also depend upon the reason for its existence. If gaming exists to block the local resident from going elsewhere to gamble, the establishment may be successful without attracting outside players. If the goal is job production, many players will have to be visitors.

Conceptually, the application of the model is also simple: (1) Identify all the sources of money coming into the business enterprise—in this case into the coffers of those controlling 31,000 gaming machines; conceptualize also other expenditures that visitors playing the machines will bring to the state because they are playing the machines; and (2) Identify all the outflows of moneys resulting from the presence of the machines; and (3) Assess how the inflows and outputs represent moneys flowing into and out of the economy. The economy can be conceptualized as a local economy or a statewide economy. However, what is conceptually easy can be quite complex in actual application. Nonetheless, this report suggests that a general application of the model can be applied to knowledge we have about South Carolina gaming and South Carolina gamers, and from knowledge about gaming elsewhere and knowledge derived from studies of gaming in other jurisdictions.

#### B. Applying the Model to South Carolina—Overview

The question is: does the economy of South Carolina (or alternatively the local economies of South Carolina) experience a growth due to the presence of 31,000 gaming machines in the state? The machines generate revenues for owners and operators approximating \$610,000,000 per year.

## 1. Inputs

The machines bring in \$610 million. Added to these revenues may be other expenditures of visitors to the state—such as lodging and meals—if the visitors came specifically to game at the machines, and otherwise would not have come to the state. In the case of South Carolina it is difficult to believe there is much value in these expenses. So first we need to determine the source of the \$610 million. Of course, the source is players. How many are from South Carolina? The money South Carolinians spend on the machine gaming may not be considered money brought into the South Carolina (or local) economy. There is one exception—the money can be considered money brought into South Carolina if the presence of the machines keeps the South Carolina players from spending their money outside the South Carolina economy. That is, the presence of machines represents an economic gain if the machines keep South Carolinians from traveling to Las Vegas or Atlantic City to gamble, or to the beaches of Florida for holidays. Money spend on machines by persons visiting the state can be considered money brought into the state, again, with one exception. If they would have otherwise spent the money in South Carolina for another purpose, the money cannot be considered an imported value for the South Carolina economy. For instance, if a conventioneer or visitor to Myrtle Beach decided to spend one evening on entertainment and made plans to go to a restaurant and show and spend \$150, but instead spent \$150 on the machines and stuffed snacks from the conference coffee service area into his pocket for dinner, that \$150 cannot be considered money added to the South Carolina and Horry County economies.

Added inputs may come from investments made in the state because of the machines. These investments would have to be financed by out-of-state dollars.

## 2. Outputs: Internal Expenditures—External Expenditures

How much of the \$610 million will remain in the state after it is collected by the operators? We cannot trace the money too many steps, but we should ask where it goes in the first step. The money goes to workers. There will be at least 12000 workers (two shifts), most of whom will earn a minimum wage of approximately \$12000 a year. How many of these workers will live in another state? A two thousand dollar annual fee per machine will move from the local to the state economy. Ten percent of the fee will leave the state and go to a company installing an information system on the machines. The machines are made elsewhere, so too, their cost will leave the state. (There are new instate manufacturers, but to date, their share of the market for machines is miniscule and is not factored into this analysis). The state will also lose money for other supplies purchased by

the machine operators from out of state sources. (We make no assumption for the value of these purchases, hence do not factor these into the analysis either). Any excessive federal tax that is imposed on the machines and not on other entertainment industries may also be seen as money leaving the state. Ordinary corporate and personal income taxes from profits and wages would leave the state anyway, as without the machines, incomes would be earned in other places and also taxed. Profits may stay in the state or leave the state. Are the owners of the machines local residents? Or, in other words, how much of the net profits from the machines will remain in local owners' hands, and how many in the hands of out-of-staters? Then, will they reinvest the money in South Carolina business enterprise, or will they place profits into investments in other places?

### 3. Externalities

An application of the model will not be complete without assessing other costs of gaming. The machines require state regulatory expenses. The many charges and fines of machine operators are made at costs to the government. Do the costs exceed the fines? We can speculate on what would be the cost of a system that would effectively regulate the machine industry. The presence of the gaming also impacts the social fabric of the state in ways that involve costs that would not otherwise be incurred by the full economy of the state, by non-gamers of the state, and by the government of the state. The presence of the gaming may be associated with incidence of problem and compulsive gambling, and we can make estimates of how great a cost each compulsive and problem (or other) gambler has on the state. Gaming may also be related to criminal behaviors which likely would not have occurred in the absence of machines in South Carolina. Our estimates represent moneys taken away from the South Carolina economy.

### 4. Summing It Up

It is a simple matter of inputs and outputs, net wins and net losses for the South Carolina economy and for the local economies of the state.

## C. Some Other Applications of the Model

### 1. The Las Vegas Bath Tub Model

The Las Vegas economy has witness phenomenal growth. This has occurred in the face of increasing casino competition from around the nation and world. The overwhelming amount of gambling money (as much as 90%) brought to the casinos comes from visitors. Visitors stay in Las Vegas an average of four days and spend money outside of casinos.

State taxes are low, and profits remain as owners are local, or if not, they see advantages in reinvesting profits in expanded facilities in Las Vegas. The costs of crime and compulsive gambling associated with gambling are probably major, however, many of these costs are transferred to other economies as most problem players are visitors. Las Vegas is not a manufacturing or an agricultural region so most of the purchases (except for gambling supplies) result in major leakages. Las Vegas does have several gambling locations—bars, 7-11 stores, grocery stores which represent very faulty bath tubs—bath tubs with great leakages. These locations do not attract tourists.

## 2. Other American Jurisdictions

Atlantic City's casino bath tub holds water as many gamblers are outsiders. However, players are mostly "day trippers" (averaging four hour stays) who do not spend money outside the casinos. Most purchases—as with Las Vegas—go to outside vendors. Like Las Vegas, state gaming taxes are reasonably low; other taxes, however, are high. Other American casino jurisdictions do not have well-functioning bath tubs, because most offer gambling products to local players. Native American casinos may help local economies, because they do not pay gambling excise taxes or federal income taxes on gambling profits, and they are wholly owned by tribal governments who keep profits (which are in form tribal taxes) in the local economies.

## 3. Wisconsin and Illinois

Two midwestern studies using the model focused upon Native American casinos in Wisconsin and riverboat casinos in Illinois. In each state the authors discerned that approximately 20% of the gaming dollars came from out-of-the state. The studies examined both local economies and state wide economies. The details of the studies are reported elsewhere. The results found that the Native American Casinos in Wisconsin produce net positive economic impacts for the local areas around the casinos, and also for the state of Wisconsin as a whole. The Wisconsin state impact net benefits amount to \$326.72 million (annualized), while local benefits amount to \$404.41 million. Commercial riverboat casinos in Illinois produce net economic losses for local areas around the casinos, and also for the state of Illinois as a whole. The Illinois state impact losses amount to only \$6,711,205, while local losses amount to \$239.65 million. (Thompson, Gazel and Rickman, 1995; and Thompson, Gazel, and Rickman, 1996a; and Thompson and Gazel, 1996).

As an alternative means of looking at the data, we could envision that there are two casinos each of which is responsible for generating \$100



million for a state in terms of both casino and non-casino spending. One of the casinos is a large Wisconsin Native casino sharing all the attributes—revenues, expenses, and markets—presented above for the Native casinos. The other casino is an average sized Illinois riverboat sharing all the attributes revealed for the riverboat enterprises analyzed above.

As the data reported on Table I indicate a single Native casino responsible for revenues of \$100 million will produce a positive economic impact for the local area within thirty-five miles amounting to \$50.8 million and a positive impact for the entire state of \$41.0 million. The commercial riverboat casino which generates \$100 million in revenues produces negative economic impacts. The local area within thirty-five miles of the riverboat casino experiences an economic loss of \$18.4 million, while the state as a whole experiences a loss of over \$540 thousand.

TABLE I  
REVENUE IMPACTS OF A \$100 MILLION CASINO

	WISCONSIN NATIVE CASINO	ILLINOIS COMMERCIAL CASINO
Total Revenues	\$100,000,000	\$100,000,000
Casino Revenues	83,609,300	96,007,275
Non-Casino Rev.	16,390,700	3,992,725
Economic Impacts		
Local Area	\$50,793,896	-\$18,381,321 (negative)
Entire State	\$41,036,032	-\$ 541,749 (negative)

The casinos in each state made similar purchases, so why was there a difference. Quite simply because all the Wisconsin casinos were owned locally, while the Illinois casinos had out-of-state corporate owners. Also the Native casinos did not pay special casino taxes, while the Illinois boats did—both the state government and to the federal government as profit taxes. The profit margins were higher than other recreational businesses, and therefore the federal government took a greater share of the revenues than they would from other recreational businesses.

The Wisconsin and Illinois studies did not directly apply the negative social costs of compulsive gambling and crime associates with gambling to the analysis. Yet the authors did indicate that the costs would have to be considered in order to have a full economic picture.

### III. The South Carolina Economic Situation

#### A. Inputs

\$610 million dollars comes into the machine gaming industry in one year. The industry cannot make a claim that it attracts outside investment dollars, although there is certainly some (minimal) building activity that surrounds the facilities where the machines are placed. We can assume that the building investments are almost entirely local. To the extent they are not, they are probably short term investments that are repaid to the out-of-state investors in a short period of time. These investments do not affect the overall economic equation, and will be considered to be a neutral factor in the analysis.

The major question then is the source of the \$610 million dollars. We have concluded that 15% of the machines and 20% of the revenues are from out of state and would not have otherwise been expended in South Carolina. In an earlier analysis, Quinn determined that the out-of-state factor was 15%. This assessment was based upon interviews with players at machine locations throughout the state. (Quinn 1998).

We have also looked at the numbers of machines and revenues in the counties of South Carolina. We assume that the 22 interior counties attract no new visitor funds for the machines. We assume further that the machines are not such that they cause South Carolinians to cancel or otherwise avoid visits to recreational areas of other states. The machines do not keep the locals from making trips to Las Vegas, nor do they preclude them from visiting tourist areas such as Orlando or Florida beach communities. Twenty-four counties bordered other states (North Carolina and Georgia) and/or were located beside the ocean. These counties collectively gave the state 19% more machines per person (and vice versa), and 31% more revenue per person than the state would have had if the interior ratios (machines and revenue per person) were applied over all 46 counties. (Figures were gained from analyzing the State of South Carolina Department of Revenue reports for June 1998). Conceptually, we determined the assumed out-of-state revenue by discounting these figures by one third in order to account for gaming in these counties by residents of other South Carolina counties. For this analysis we are saying that 20% of the gambling is from out-of-staters, that is it represents money brought into the state economy. Still the 20% figure may be high as many of the cross-border gamblers from Georgia and North Carolina may be spending money on machines that they might otherwise have spent in South Carolina.

Nonetheless, for this analysis, we assume that \$122,000,000 comes into the state because of the machines.

## B. Output Expenditures.

1. Labor. The 12000 employees we suggest may be hired because of machines receive collective wages of \$144,000,000 (assuming \$6 per hour). Many of the locations do not add extra employees as they have five or fewer machines and the existing clerk of the store oversees the machines as well as other store operations. We can assume that most of the wages from these extra employees stay in South Carolina before they are initially moved to another cycle of spending. However, as many of the machines serving out-of-staters are located very near borders, we have to expect that some of the employees are residents of other states. If only 10% are, this results in a removal of \$14.4 million from the state economy.

2. Machines. There are 31,000 machines. Each costs \$7500. (Palermo, 1998.) They have a life of from three to five years. Assuming a five year life, they carry a value of \$1500 per year each, or collectively \$46,500,000. The machines are for all intents and purposes manufactured out of state. We can assume that \$46,500,000 leaves the state each year because of the machines.

An additional \$200 per machine is taken out of state taxes and sent to an out of state firm to create and run a slot information system. This is an additional loss of \$6,200,000 for the state's economy.

3. Other supplies. We will assume for analysis that other supplies are purchased in South Carolina.

4. State Taxes. The state imposes a \$2000 tax on each machine per year. With the exception of the money that goes for the slot information system, this money stays in the state. However, in an analysis of the economic effects of machines on local communities we have to interpret 50% of this tax as money lost to the locality. Hence we see \$31,000,000 leaving the local areas because of the special machine tax. Other state taxes would be paid by other businesses in the event that the machines did not exist.

5. Federal Taxes. All businesses pay federal income taxes. However, other businesses do not realize the profit margins of the machines. Most retail or recreational businesses would receive a rate of return on revenues of 10% or less. If we subtract the costs above from the revenues we see profits of \$358 million for the machines. Discounting this figure by 10% for unseen expenses—that we will assume are in South Carolina—we still have profits of \$322.2 million. Machine owners often divide the profits with location owners on a shared percentage basis. Assuming here that costs are also shared, this

gaming still represents profits of \$161.1 million for machine owners. Compared with an expected return of \$61 million (10% of sales) for another businessman, we have to realize that the federal government is taking money out of South Carolina that would not leave the state if expenditures were made by players at other businesses rather than at the machines. The \$100 million in "excess" profits gives the federal government an extra take of \$34 million from South Carolina. This is money that is lost to the South Carolina economy each year.

6. Profits. Not all of the owners are South Carolinians. Nor do they keep all their profits in the state. The leading owner of machines indicated to the state of Virginia that he had an investment in a casino boat that he wished to sail out of Virginia ports. We can assume that at least 20% of the profits of the owners—one half of total profits of \$322,000,000—or \$32.2 million goes out of state—either directly to out-of-state investors or to immediate or direct out-of-state investments by instate owners.

7. Summation of Direct Costs

TABLE II		
	INFLOWS	OUTFLOWS
Machine revenue	\$122,000,000	
Other consumer spending	-----	
Labor		\$14,400,000
Machine Cost		\$46,500,000
Slot Systems		\$ 6,200,000
Other Supplies	-----	-----
State Taxes		(\$31,000,000)
		(local only)
Excess Federal Tax		\$34,000,000
Profits		\$32,200,000
 TOTALS.....	 \$122,000,000	 \$133,300,000
 TOTALS (For Local Areas)...	 \$122,000,000.....	 \$164,300,000

The money leaving the state—from direct transactions—equals \$133.3 million compared to \$122 million coming into the state. In direct transactions, the state's economy loses. For the state as a whole, we can see that each dollar (\$1.00) brought into the state as a result of the machines leads to a direct loss of one dollar and nine cents (\$1.09). The loss to local areas is even greater. They attract \$122 million but lose \$164.3 million. That is for each dollar (\$1.00) that

comes into a local economy in South Carolina because of the machines, one dollar and thirty-four cents (\$1.35) leaves the state. A more sophisticated analysis would reveal multipliers for each item of revenue and expenditure. Advocates of certain economic enterprise often look at employment revenue and accurately apply the multipliers to show that the economy benefits many times over for each wage dollar. But they would also have to take the costs leaving the economy and use multipliers on them to show the net value of the enterprise for the economy. Multipliers will only show that the direct losses due to machine gaming are much larger than they appear in this analysis.

The true economic losses will even exceed those shown in an analysis of direct costs using multipliers. There are other costs that must be considered. These include regulatory costs and externalities.

### C. Regulatory Costs

1. Current Regulatory Costs. The current regulatory costs are a very small part of the picture. Regulation is simply not intense, nor is it widespread. Regulatory costs are also off-set by fines to operators. Nonetheless many court cases add to the costs. These can be annualized to about \$550,000 a year. But while these fines may reduce the state government's costs they still represent money internal to the state. They shouldn't be subtracted from the economic loss the state incurs because of regulation. Today this cost may not exceed a few million dollars. If the regulation was truly to be effective, the cost would be in the tens of millions of dollars.

2. Projected Regulatory Costs. We project that effective regulation will cost the economy of the state of South Carolina—particularly the state government—\$30 million dollars a year.

We come to this conclusion by comparing the gaming establishment in South Carolina with that in Nevada.

The state of Nevada budgets \$27.1 million for gaming control. Of this, 90% goes for salaries. An extra \$6.3 million is budgeted for investigations. This amount is paid for by license holders and applicants for licenses. Nevada has 452 staff members. Approximately 200 are tied directly to monitoring gaming activity and supporting others who directly monitor gaming activity. There are 2400 gaming locations in Nevada. Hence there is one regulatory personnel for each twelve locations. With this ratio, South Carolina would have 600 personnel, as there are over 7200 locations in the state. Disregarding all other personnel that Nevada has, we can easily project that the personnel cost needs of South Carolina will be as large as (or larger than) the needs in Nevada. We can therefore project a reasonable cost of \$27.1 million for South Carolina regulation, plus

an additional three (nearly 3) million dollars for an electronics lab, equipment and personnel for inspecting machines before they are put into operation. Hence the regulatory costs will be \$30 million for the government. These costs persist as societal costs even if they are paid for directly by the industry out of its gaming profits. (Nevada, 1999).

Certainly some may argue that the South Carolina and Nevada situations are not at all comparable, and such arguments must be heard. However, in many ways the regulatory needs of Nevada will be less than those in South Carolina, even if Nevada's gaming locations are much larger than South Carolina's. It must be recognized that Nevada gaming is subject for the most part to self-regulation. License holders undergo severe background checks (paid for by licensees). The licensees must have an approved internal control system for both security and financial transactions. The state essentially responds to complaints and makes field inspections. Yet in the course of the most recent year, the state inspected only 62% of the locations. The state does not have to monitor the size of jackpots as South Carolina law suggests the state should do. Nevada operators are required to have state inspectors present when jackpots in excess of \$1 million are awarded, but most locations do not have jackpots anywhere near that amount. Moreover, the state does not have to monitor liquor consumption and gambling as South Carolina should be doing. Most of the gambling sites in Nevada are concentrated geographically in two major urban areas. There are smaller numbers of sites scattered over rural parts of the state.

In contrast South Carolina monitoring needs will involve much heavier duties. South Carolina has 7200 sites which are located throughout the state in every single county. They are not concentrated in a few locations. South Carolina does not have major corporate operators who can be expected to set up effective monitoring programs internally. South Carolina will have to be able to monitor prize limits as well as alcohol consumption at the sites. South Carolina will also bear heavier responsibilities in keeping underage persons out of facilities. South Carolina also has rules prohibiting advertising and incentives for gambling that have to be monitored. There are no such state prohibitions in Nevada. South Carolina also intends to have a slot machine information system linking all the machines of the state. The operations of the system will have to be monitored in each location, and reports from the system—given on a daily basis—will also have to be monitored. South Carolina in contrast with Nevada demands hands-on regulation. For effective regulation, South Carolina cannot simply license operators of five machines and then expect them to do the monitoring as Nevada does. Nevada's large operators accept the responsibility of regulation with the understanding that

lapses in internal enforcement of rules and regulations can and will result in the loss of a license.

To be sure Nevada has some regulatory needs that are not present in the same degree as those in South Carolina. Accounting systems for large casinos are more complex than those for slot machine halls. Moreover Nevada casinos have more employees. There is a monitoring function here as well. Nonetheless, it is realistic that under the circumstances of the South Carolina gaming the monitoring function will demand the same ratio of personnel to site locations. If there is a regulator for each 12 sites in South Carolina, there will be 600 regulators. This contrasts with 200 field inspectors and staff in Nevada. Not considering any of the other regulatory staff in Nevada (It is 452), we can assume that the 600 monitors and staff in South Carolina will have the same salary demands (as a minimum) as the 452 in Nevada. With the same ratio of personnel versus all costs, we can assume a regulatory need of \$27.1 million. To this we must add the cost of a lab to inspect machines before they are put into use. The \$3 million cost is appropriate.

In our years the lab cost will be reduced as equipment needs will lessen, however, these reductions will be offset by inflation and the need for more inspectors if the numbers of machines increase. Effective regulation will cost the state \$30 million a year.

#### D. Compulsive Gambling Costs Analysis: Building the Cost Model

##### 1. Methodology

The researchers have sought to establish a social cost for compulsive gambling through surveys of gamblers who are self identified as compulsive or serious problem gamblers. The surveys were given to members of Gamblers Anonymous groups in South Carolina and also mailed out to gamers who have sought to sue the owners and operators of machine games in South Carolina. In the suit they claim that they have been victimized by the machine owner-operators because they are compulsive or pathological gamblers. The questions were presented to the subjects in a written form. Subjects who filled out questionnaires mailed them back to the researchers. All responses were anonymous.

The same methodology was utilized in gaining assessments of the costs of compulsive gambling in Wisconsin, Illinois, and Connecticut. (Thompson, Gazel and Rickman, 1996b; Connecticut, 1998; Lesieur, 1998). In fact the authors of this study used questions drawn from those

specific surveys. The original questionnaire used as a base point for all the studies was designed by Henry Lesieur for his Illinois study. A more recent study by the National Opinion Research Council used telephone interviews and also face to face interviews with gamblers to gain much of the same information. (NORC, 1999).

The studies came to different conclusions regarding the social cost of gambling. In Wisconsin the social cost of one compulsive gambler was seen as approximately \$7100 a year while the cost in Connecticut was seen as \$11000. The NORC study found the cost to be \$2500 a year for compulsive gamblers and \$1350 for problem gamblers. The NORC study did not include all the costs used in the Wisconsin, Illinois, and Connecticut studies, but on the other hand did include some costs not identified in the three studies. Other studies using different methodologies have found the annual social cost of one compulsive gambler to range from 13,000 to over \$60,000. (Kindt, 1994; Politzer, 1981; Thompson, Gazel and Rickman, 1996b).

Again, other studies used different factors as well as coming to different conclusions regarding the cost of specific factors. Rather than arguing over what should or should not be included in a cost analysis, we choose instead to plow forward with references to the other studies, but also with a complete openness that will allow others to reformulate our cost findings to their models if they take issue with our model. (See Thompson and Gazel, 1998)

## 2. The Respondents—Demographics

Seventy persons answered the surveys. Forty-seven were in fifteen Gamblers Anonymous (GA) groups in South Carolina, and responded to a distribution made through the groups. The state has twenty-five groups and most have not been in operation for more than five years. An additional 23 interviews were made through the mail with persons suing the machine owner-operators. Ten of these were also members of GA. They claim that the owner-operators have cheated them because they are problem or compulsive gamblers. All responses were given in an anonymous manner.

Gender. Sixty-nine respondents indicated gender. Most were male: 46 (66.7%). Twenty-three females responded (33.3%). Sixty-six identified their race. Sixty (90.9%) were white, five (7.6%) were African American, while one (1.5%) was Asian.

Family Incomes. Income levels among the respondents was moderately high. Sixty-nine indicated family incomes. The median respondent indicated a family income between \$50,000 and \$74,999. Twenty-three percent indicated family incomes of over \$75,000. They were also well



educated. Only ten had not graduated from high school. Forty (57.1%) had attended college, while 14 (20.0%) were college graduates.

Marital Status. Most of the respondents were currently married (43) or living in partnerships (1). Nine were single and had never been married. Fourteen were separated or divorced, while two were widowed. Sixteen of 33 who had been divorced at sometime indicated that they had been separated or divorced specifically because of gambling problems. The median respondent had two children, while the mean number of children for the respondents was 1.82.

### 3. Ages and Gambling Careers

The respondents were an average age of 44.63 years old. (68 of the 70 gave responses to all age questions). We used average ages to determine the chronological extent of gambling careers.

The 68 who responded to all the questions regarding ages of activities, indicated collectively that they had begun to gamble when they were 28.87 years old. At 32.07 years they were gambling on a weekly basis. They first borrowed in order to gamble at an average age of 35.25 years old. By their own assessments, they became problem gamblers at an average age of 35.28 years. They had been in Gamblers Anonymous, or alternatively had not made a wager for an average of 1.14 years.

We determined that their careers as compulsive gamblers were equivalent to the time between the onset of problem gambling and the time they had sought treatment by joining GA or alternatively had stopped making wagers. This methodology paralleled that used by one author in the Wisconsin study. (Thompson, Gazel and Rickman, 1996b). The National Opinion Research Council in its study for the National Gambling impact Study Commission used the identical methodology. In fact they actually used the Wisconsin number found by using means in Wisconsin (6.4 years) and applied that specific number for their national study in identifying the span of a compulsive gamblers career. They did not seek to find a number independently for their national study.

Here we determine that the compulsive gambler's career in gambling in South Carolina lasts 8.2 years. (44.63 minus time in treatment-1.14, minus the age of onset of gambling problems-35.28)

### 4. The Games They Played

As the 23 respondents contacted from the list of plaintiffs in a law suit against machine owner-operators certainly by definition had problems with machines, we can only suggest the pervasiveness of

machine gaming among problem gamblers by looking at the 47 who responded to our questionnaires through GA meetings. We asked each whether they had a serious problem, some problem, or no problem with various forms of gambling. Of the 47, 40 (85.1%) said they had serious problems with machine gambling. Four indicated they had "some" problem with machine gambling, and 3 said they had no problem with the gambling. No other form of gambling commanded such attention from the gamblers (former gamblers). Seven said they had serious problems with gaming in other commercial land-based casinos; four in Indian casinos; and 4 at tracks, 3 with bookies, and one each with casino boats, personal games, gambling with friends, and gambling on the stock market. The respondents were asked what percentage of their gambling was on each form. Twenty-nine of the 47 (61.7%) responded that 100% of their gambling was on the machines. Six others said at least 75% of their gambling was with the machines. Overall, by averaging the percentages (not a sound methodological technique) we found that 76.5% of the gambling by the 47 was at the machines.

The players indicated gambling losses that averaged \$79,434 each during their careers as compulsive gamblers. They indicated that in their last year they lost an average of \$25,903. Their career losses can be annualized to \$9687 each. (It should be noted that one respondent said he lost \$10 million gambling. While we wish to accept this response as accurate, we discarded it from the analysis as it would drastically affect the averages. The above averages are for the other 69 former gamblers).

##### 5. Debts and Borrowed Money and Bankruptcy

At the time that the respondents sought treatment or counselling for gambling problems they owed an average of \$29,586 in debts incurred because of their gambling problems. Of those debts, \$17,350 were incurred during their last twelve months of gambling. Over their gambling careers they had borrowed \$49,781 because of gambling, and in the last twelve months of gambling they borrowed \$16,062. Eighteen of the 70 (25.7%) respondents had been in bankruptcy. It can be assumed that their creditors lost at least one half of their debts. While we should assume that many more of the debts of the gamblers were never settled in full, we will only assign 50% of the bankruptcy debts to the social cost figures. Averaged over the group these social costs represent \$3802 for the career, and \$464 on an annualized basis.

The bankruptcy actions also carry costs. We have estimated that each court action carries a cost of \$3750. The 18 bankruptcies added a social cost of \$67,500, or \$964 for the career of each problem gambler which can be annualized to a cost of \$118.

Additionally, the gamblers were subject to many law suits. Collectively the 70 were sued 37 times because of their gambling activity. At a social cost of \$3750 per law suit, this represents a career cost of \$1982 per gambler, or an annualized cost of \$241.

(The data on court costs is drawn from an analysis made in the Wisconsin Study by Thompson, Gazel, and Rickman, 1995. The study took the budget for federal court services and divided it by the number of federal cases. The average case could be assigned a cost of approximately \$7500. We simply assumed that the cases represented in our study cost one-half the cost of federal cases, or \$3750 per case. We use this court cost for each kind of case. Data utilized came from the Statistical Abstract of the United States and the U.S. Department of Justice Source Book.)

The gamblers obtained funds from many sources. Table III indicates that they sought funds from household accounts and banks first, followed by credit cards. They it appears they turned to relatives for support. Over one half passed bad checks in order to get funds to gamble, and over one-half sold property. We asked the value of property that was sold. The respondents indicated values averaging \$15,363 over the career of each gambler. In their last year of gambling, the respondents sold \$8649 in personal property. Annualized the sales equalled \$1874. As pawn shops and others involved in "fire sales" will give approximately 50% of the value (or less), we can see that the sales represent a personal annualized loss of \$937.

TABLE III  
SOURCE OF FUNDS

Household	56 Yes (81.2%)	13 No
Banks-Credit Union	53 Yes (76.8%)	16 No
Credit Cards	51 Yes (76.1%)	16 No
Relatives/inlaws	44 Yes (67.7%)	21 No
Sold Property	36 Yes (55.4%)	29 No
Bad Checks	37 Yes (55.2%)	30 No
Spouse	30 Yes (46.2%)	35 No
Cashed Stocks	25 Yes (39.7%)	38 No
Bookie	10 Yes (15.9%)	53 No
Casino Credit	8 Yes (13.1%)	53 No
Loan Shark	8 Yes (12.5%)	56 No

## 6. Work

Nineteen of 70 (27.1%) had lost or quit jobs because of their gambling problems. They were out of work for an average of 3.55 months (averaged over the 70) because of gambling. Over their gambling careers this represents a lost productivity of \$8875 for each gam-

bler. (We assume an annual income of \$30,000 for this analysis). This productivity loss can be annualized to a loss of \$1082.

Fifteen of the 19 gamblers who lost jobs were covered by unemployment compensation. Coverage of 204 months for these gamblers at an estimated \$500 per month was spread over the 70 and averaged. This equalled an average career cost of \$1457, which is annualized to \$178.

Fifty of 70 (71.4%) indicated that they missed work because of their gambling problems. In total, they missed hours which constituted an average 23.9 per month when spread over the 70 respondents. At \$15 per hour this represents a social cost loss of \$35,276 over a career and \$4302 on an annualized basis.

## 7. Stolen Money

Twenty-six respondents (37.1%) indicated that they had stolen money from their employers. Many stole from others as well. As indicated above 37 had passed bad checks in order to get gambling funds. Thirty-seven gave a financial value to their thefts. They gave values that could be averaged (over all 70) to career thefts amounting to \$84916515, and thefts of \$3209 over the last year of gambling. Annualized, the thefts averaged \$1035 per gambler.

## 8. Criminal Actions

While the clear majority of the gamblers were involved in criminal actions as evidenced with the data reported above, only a few indicated that they had been arrested and subject to the criminal justice system. The 70 reported 56 arrests, however only 23 of these were attributed to gambling causes. Each arrest may be cost out at \$2900 (this figure is utilized in the NORC national study). This represents a career cost of \$953 for each problem gambler, and an annualized cost of \$116 each.

The gamblers were put on trial 19 times; they were convicted 16 times. At a trial cost of \$3750 each, this represents career gaming social costs of \$1018, and annualized costs of \$124.

The respondents spent 96 months in jail as a result of gambling related crime convictions. This represents 1.37 months for each surveyed gambler. At a cost of \$2000 per month, this is a career cost of \$2743 per gambler, and an annualized cost of \$334. Seven were placed on probation. At a cost of \$9600 (4800 a year for two years) for each this represents a social cost per gambler of \$960 over the gambling career, or \$117 for one year of that career.

Fifteen of the respondents indicated the amounts of money they paid for attorneys. These are personal losses, but they also represent lost productivity for society. Much more is spent on legal services, however, these are the only costs that can be documented through our methodology. While we cannot assign the cost to the burdens placed upon society, they should be identified. Averaged over the 70, they represent a loss of \$910 per career gambler, and \$111 for each year of compulsive gambling per gambler. (Actually we averaged the figures over 69 gamblers, as we discarded one who reported attorney costs of \$100,000 as this diverged considerably from other reported costs).

#### 9. Welfare

Four of the 70 indicated that they accepted food stamps because of gambling. For cost purposes, we assume that the stamps were received over four years (one-half of the gambling career). At a one year social cost of \$2000 for each of these we find a collective career social cost of \$457 for each gambler, and an annual cost of \$56. Two of the gamblers were on welfare. Assuming again a four year cost at \$500 a month, each imposed a \$24,000 career burden on society. This is a collective career social cost of \$685 for each of the 70, and an annualized cost of \$84.

Seventeen of the 70 indicated that they had undergone divorce actions or separations because of their gambling. The National Commission's study on problem gambling (made by the National Opinion Research Council) indicated a cost of \$20,000 for each divorce action. This would translate to a career cost of \$4857 for each of the gamblers, and an annualized cost of \$592. To be sure these costs are for the most part absorbed directly by the gamblers themselves. However, we can assume a public cost of one trial for each divorce. At \$3750, this translates to a collective career gambler social cost of \$911, and an annual cost of \$111.

#### 10. Medical and Therapy Costs

Twenty-five of the gamblers had seen a doctor or therapist because of gambling problems, and 15 were hospitalized due to gambling problems, while 13 indicated they took medication as part of their treatment. Seventeen identified costs of treatment. The career costs averaged \$1368 over the 70, with annual costs of \$167. Most indicated that costs were covered by insurance. Assuming that one-half of the costs were, we have career costs to others of \$684 and annual costs of \$83.

#### 11. Summary and Totals

We have placed each of the cost factors into a category: cost to South Carolina society as a whole, cost to government, and cost to specific others (creditors, employers, victims), as well as costs to self. The figures are totalled on Table IV. We find that one compulsive gambler cost the full society \$1682 each year, government \$1479 each year and specific groups of others \$3137. Collectively, therefore, they each imposed costs of \$6299 onto other people each year. They also impose costs of \$13,566 upon themselves.

We have calculated the costs imposed by problem gamblers as well. Quite simply, we have used the ratio discovered in the NORC study: the problem gamblers' social costs equal 53% of those of the compulsive gambler. Hence we conclude that one problem gambler imposed costs of \$891 onto society as a whole, \$783 onto government, and \$1663 onto specific others. This represents a total of \$3338 imposed upon other people. They personally incur costs of \$7189 each year because of their gambling.

TABLE IV  
ANNUALIZED COST OF ONE COMPULSIVE GAMBLER

	SOCIETY	GOVERNMENT	OTHERS	TOTAL	SELF
DEBT				\$464	\$464
LOST WORK			\$2156	\$2156	\$2156
UNEMPLOY COMP		\$178		\$178	
PRODUCTIVITY	\$1082			\$1082	
THEFT	\$517		\$517	\$1035	
ARREST		\$116		\$116	
TRIALS		\$124		\$124	
JAIL		\$334		\$334	
PROBATION		\$117		\$117	
CIVIL CASES		\$241		\$241	
BANKRUPT CASES		\$118		\$118	
DIVORCE		\$111		\$111	\$592
WELFARE		\$84		\$84	
FOOD STAMPS		\$56		\$56	
THERAPY	\$83			\$83	\$83
ATTORNEYS					\$111
SOLD PROP					\$937
GAMBLE LOSS		\$9687			
TOTALS	\$1682	\$1479	\$3137	\$6299	\$13566

TABLE V  
 ANNUALIZED COST OF ONE PROBLEM GAMBLER  
 (53% of ABOVE)

SOCIETY	GOVERNMENT	OTHERS	TOTAL	SELF
\$891	\$783	\$1663	\$3338	\$7189

12. Real Costs that are not included in the analysis

The numbers that are presented above do not represent the total social costs brought upon the citizenry because of problem gambling. Quite frankly, it is difficult to put specific money value on many of these costs. That does not mean that the costs do not exist. They do. The 70 gamblers indicated that they had an average of 1.82 children each. The divorces cause by gambling will have major costs in child development. Broken homes will carry costs into schools and onto the streets as the consequences of these actions unfold over future years.

We have not factored in costs of suicides that certainly arise out of gambling problems. The April 24 edition of the Las Vegas Review Journal reported that Clark County (Las Vegas) suicides rose to a record level in 1998. There were 286 such deaths in the county last year. The article reported that "experts say the causes of suicide are complex, but generally gambling, depression, drug and alcohol abuse are significant contributing factors to people's decision to kill themselves." The survey respondents indicate that suicides in South Carolina may be related to gaming too. Twenty-five of 47 (53.2%) indicated that as a result of gambling problems, they had felt so low that they wished they could die. Fifty-one of 69 (73.9%) had entertained thoughts of suicide; while 49 of 69 (71.0%) reported they had made plans to take their lives. Twenty-one of 69 (30.4%) indicated they had actually attempted suicides. Eleven of 68 (16.2%) had made more than one suicide attempt. We were not able to survey any who made successful attempts. The thought and the attempt carries costs. The costs may be in the work place in terms of lower productivity. They may be in medical costs not considered gambling related. Society loses financially when productive people die.

We have not considered work place costs incurred as employees give less than full attention to their job duties even if they do come to work. Also we have cut the employer's lost value of work due to absentee employees in half, to be conservative in general, but also in recognition that some of the lost time was by those in self-employment.



We have also neglected to include many dollars that have been lost to creditors because we cannot discern specific numbers. We have only included lost debts from gamblers who underwent bankruptcy protection from creditors. And here we have cut the reported debts in half for our analysis. Certainly other creditors were also "stiffed" by their gambling debtor.

Also it should be noted that we have taken a non-response to any question to mean zero for purposes of assuring that we do not overestimate any factor. Of course, some gamblers who did not cause costs in some area left the response blank and the response should be interpreted as a zero. However, others who might have imposed costs onto others may as likely have chosen not to answer the question, either by direct choice, or because they simply do not recall the information requested. Again we are taking a very conservative approach to the data, if they did not respond, we assume a response of zero.

### 13. Projecting the costs to the total society

The cost of compulsive gambling can be projected to the society if we can assess how many compulsive gamblers there are in the society. We did not have the opportunity to have a prevalence study of the South Carolina population. Other prevalence studies have determined that the portion of compulsive gamblers in a general society ranges from .6% to over 5%. Our Wisconsin survey found that .9% were serious problem gamblers. (See Thompson, Gazel and Rickman, 1996b) An analysis of all studies made by Harvard University Medical School researchers on behalf of the American Gaming Association—the number one lobby group for gambling in America—concluded that 1.29% of the adult population in America could be placed into the pathological gambling category. The most expansive national survey was recently conducted by the National Opinion Research Council. The study determined that .8% of the adult population of the United States, while 1.3% were problem gamblers. (NORC, 1999). We offer to use these very conservative NORC numbers for the South Carolina analysis. Projected to the South Carolina population this represents 19,200 compulsive gamblers, and 31,200 problem gamblers.

The collective social cost of compulsive gamblers for South Carolina then are \$0120,940,800, while problem gamblers add an extra \$104,145,600 in social cost. Personal costs represent \$260,467,200 for compulsive gamblers and \$224,296,800 for problem gamblers.

TABLE VI  
COMPULSIVE GAMBLER COSTS

SOCIETY	GOVERNMENT	OTHERS	TOTAL
\$32,294,400	\$28,396,800	\$60,230,400	\$120,940,800

PROBLEM GAMBLING COSTS

SOCIETY	GOVERNMENT	OTHERS	TOTAL
\$27,799,200	\$24,429,600	\$51,885,600	\$104,145,600

The data we gathered from the gamblers indicates that approximately 76% of these costs can be assigned to machine gaming, while other costs should be assigned to other forms of gambling. Such being the case we can hold that compulsive gamblers cost the South Carolina society \$91,915,008 each year because of the presence of machines in the state, while problem gamblers add another \$79,150,656 to this cost burden because of machines. In addition the gamblers incur another \$265,090,410 in personal gambling losses because of the machines. (Gambling losses times .76). Essentially this says that 43.5% of the machine gambling (\$610 million) in South Carolina is by 2.1% of the adult population who are compulsive and problem gamblers. (In fact these are conservative numbers—very conservative, as we are considering an annual gambling figure that has extended over eight years, while the machine revenues of \$610 million are revenues for the current year. Averaged over eight years machine revenues are much less. Indeed, the figures of the last year of gambling losses from the players—\$25,196 for compulsives with \$19,686 at machines; and \$13,354 for problem gamblers with \$10,434 at machines constitute an amount equal or exceeding machine revenues. Compulsive gambler and problem gambler losses to machines would exceed \$700 million if the problem gamblers acted as they did in their final year of gambling. Certainly if this is the case, some of the problem and compulsive gambling on machines takes place in other states. But the suggestion can still be made that a considerable portion of the machine gambling in South Carolina is by persons who are if not compulsive gamblers, serious problem gamblers. Those with compulsive attributes, less than one per cent of the population, put \$377 million into the machines—based upon their last year play. This is over 61% of the amount gambled on the machines.

E. Costs of Crime

Not all gambling crime can be assigned to compulsive gamblers and problem gamblers. Gambling enterprise adds to the criminal burdens of societies in many ways. Non-problem gamblers steel to cover

losses. And non-gamblers engage in criminal activities because of the presence of "easy" money around gambling. Also other activities such as drunkenness are associated with gaming. We have not done a close analysis of crime statistics in South Carolina. One should be made. As a point of reference here we shall project the Wisconsin costs onto the South Carolina population. The summary statement from the Wisconsin study concludes:

"The survey of serious criminal incidents and Part II crime arrests in all Wisconsin counties for more than a decade leads to the firm conclusion that the introduction of casinos has had a pronounced effect upon the safety and security of Wisconsin residents. We have concluded that an additional 5,277 serious crimes per year cost the public \$16.71 million, while an additional 17,100 arrests for Part II crimes cost the society \$34.20 million each year. The data indicate the sad conclusion that casinos may be responsible, directly or indirectly, for nearly \$51 million each year in societal costs due to crime generated as a result of their existence." (Thompson, Gazel and Rickman, 1996c).

We can note that Wisconsin had 14 widely dispersed casinos, while South Carolina has 31,000 gaming machines that are located in all cities and counties and are widely accessible to the total population on a daily basis. It is not unfair to suggest that the crime impacts in South Carolina should be as great per capita as those in Wisconsin. The population of South Carolina is 2/3rd that of Wisconsin (1990 Census). If we consider the crime ration to be the same, we can suggest that the cost of gambling related crime in South Carolina is \$34 million per year.

It must be stated that there is some overlapping costs between the compulsive/problem crime and the general crime related to gambling. We identified for compulsive gamblers that there were \$691 in governmental costs related to crime. (\$366 for problem gamblers.) If these costs are totaled they constitute a large portion of the crime costs identified (\$24,686,400 of \$34,000,000). The overlap is greater when we factor in theft costs. Rather than adding significantly to the social costs identified for the compulsive/problem gamblers, the crime costs interpolated from the Wisconsin study only serve to strengthen the numbers we have established above through our surveys.

#### F. Other Overlapping Problems

We have not assigned costs for criminal activity as some of the activity results from pathological gambling problems already identified. We should add some costs but we do not know how much to add, so we are adding no costs. Similarly, some of the costs may be due not

to gambling alone, but to an accumulation of pathologies that are experienced by the compulsive or problem gambler. Again we do not know what portion of the costs are so assignable, and we are therefore also leaving these out of the analysis. In any event the following information should be reported as it may have interest for those dealing with this analysis.

We asked the respondents had other addictive disorders. Thirty-six of the 70 (51.4%) indicated they had at least one of the addictions listed. Nineteen (27.1%) indicated they were alcoholics; 15 (21.4%) said they were drug addicts; 17 (24.3%) were compulsive overeaters; 13 (18.6%) were compulsive shoppers; and 6 (8.6%) were anorectic or bulimia sufferers.

Additionally the gamblers had other maladies that could have had causal effects or been causal results of their gambling pathologies. As these conditions may integrated into the gambling syndrome, they are not considered as separate cost influences (other than reflected in treatment costs). Thirty (42.9%) suffered from depression, while 12 (17.1%) indicated that they were bipolar.

G. Total Cost Picture

TABLE VII  
INFLOWS      OUTFLOWS

Direct Costs	\$122,000,000	\$133,300,000
Regulation (effective)	\$30,000,000	
Compulsive Gambling		\$91,915,008
Problem Gambling		\$79,150,656
Crime		not factored in
Other Maladies		not factored in
Total	\$122,000,000	\$334,365,656

NET LOSS ECONOMIC AND SOCIAL.....\$212,365,656  
multipliers x 2.....\$424,731,312

The bottom bottom line is that machine gambling is a major cost for the state of South Carolina. The society and economy of South Carolina losses over \$424 million each year because of the machines. And this assessment downplays about all of the costs identified.

What else could \$424 million purchase for South Carolina. A lot of college scholarships and computers for schools. A budget for a university system. A medical complex. A substantial share of the state's medicaid obligation. South Carolina is \$424 million poorer each year because of machine gambling, and we are not talking about the machine players, we are talking about every citizen of the state.

The players losses of \$610 million a year are individual losses that are added to the equation in other ways.

South Carolina has dug itself into a hole. It is paradoxical that some policy makers believe that the best strategy is now just to keep digging. The notion of having more gambling is just more digging. The extra forms of gambling South Carolina is being asked to embrace—machines with greater payouts and lotteries—will do nothing to add to the wealth of the state. They have absolutely no potential for bringing in any new revenues, at least in any quantity that will offset new social costs created by extra gambling. Some policy makers may see a solution in greater taxes. This is even more paradoxical, as higher tax rates on machine gaming will only encourage the state to endorse more and more gaming. And the tax money cannot be seen as imported value for the state. Rather it will only be more money taken out of pockets of South Carolina residents who are unfortunate to have become exposed to the machines and succumbed to temptations and compulsions of gambling as a result of the gaming policy of the state.

## Appendix A.

### SOUTH CAROLINA-ADDED COMMENTS FROM QUESTIONNAIRES

#### GA Members Interviewed at Site of GA Meeting

002-Please explain to anyone, who will listen, this is a terrible, terrible compulsion that anyone can get. It destroys you and your family. My life could end tonight, but I know that I didn't play video poker today. I would die proud of that.

005 Women do not get the support they need from GA or their families, as a rule. I feel I am an exception to the rule. I received support from GA and my family.

006 Could not get into Treatment Center because gambling was my only problem and insurance would not pay.

010 This probably doesn't pertain to gambling research-but I felt compelled to say that regulations and rules are a must. Owners of establishments (individually owned video casinos) should not be allowed to play their own machines. Their employees are forbidden to play. For the three solid years that I played video games I observed an interesting topic. I played these games in several different establishments (and the many hours spent there) I feel this a professions observance. Convenience Store owners do not play the machines in their establishments. The owners watch by video cameras and walk around greeting the players-they watch the machines heavily played with very little payouts. Wait until late "wee" hours and get on those machines after the customer leaves or turns a key on machine which on the screen displays temporarily out of order, no one else has a chance to play it and the owner at a quiet time will play the machine. I've watched this many times. A regulation would help the people who will continue to play in the future.

015 I think it's ironic that the media seems convinced that only 5% of gamblers have a gambling problem. I suppose it's because the problem is so easy to hide. (We ARE masters of deception, you know). If the 20 Questions from GAMANON WERE PRINTED AT LEAST MONTHLY IN "THE STATE" many more spouses/friends would send their gambler to GA.

016 Although the survey is trying to measure economic costs to society and the individual, a much greater cost is the effect gambling has on emotions, families, etc.

017 I believe early life experiences and heredity have a great Deal to do with wanted to be accepted or afraid of being rejected because of

other lack of education about this problem and how to identify it and get the person help as early in life as possible even grammar school. But not to give up on the older gambler since that is where the real money is coming from through volume, such as bussing them to casinos to win big and not satisfied.

018 Algamus—Its a transitional living treatment facility which provides compulsive gamblers the opportunity to live with other compulsive gamblers. So whenever they come out of Algamus and attend GA, they have a strong understanding and foundation of this addiction, which may help them in future matters and challenges.

025 The leadership in the state of South Carolina, does not realize the problem they have allowed, a plague upon the people of the state!

030 Never gambled until age 45 when I started playing video poker.

032 Tell state lawmaker to destroy all video gambling industries!

046 Gambling will make you sick and will cause you to lose your mind if you let it get you to that point. I have been at the point I don't want to live anymore because of this habit.

038 The first time I attended GA, I stayed with it for two months. I didn't gamble for that two months. I quit GA thinking that I didn't need their help anymore. A week after I quit GA, I made a slip with \$5.00. Since that 1st \$5.00 I gambled twice as bad as ever.

046 Gambling will make you sick and will cause you to lose your mind if you let it get you to that point. I have been at the point I don't want to live anymore because of this habit.

#### GA MEMBERS IN LAWSUIT—INTERVIEWED BY MAIL

103 Video gambling should be discontinued. It is very easy to become addicted. I wish they never would have invented those machines. People don't want to admit they have a problem, but if you play one time and learn your money, you are hooked.

107 I hope this survey will help you guys and I sure hope the lawsuit goes through. I think we have a sick society. I think our society really sucks, when we have to have gambling money to give our kids a education.

I think these machines are a danger to our society. They are so many

people hooked on these things and so many lives will be ruined. I am still very depressed over the money I lost. And these machines will take 1000 from you and never give you nothing in return. They also about destroyed my husband and he has never played in his life. I also thought about killing myself and still do so. These machines have made my life a living Hell for about the last three years. I hate myself and everything about myself.

122 Video gaming machines should not be legal!! They are sooo habit forming, it's deadly! Most people who play they become addicted!!

123 I should also be asked if treatment was sought for gambling treatment, what state did you have to go to. I had to go all the way to Minnesota to get proper help.

OTHERS IN LAWSUIT—INTERVIEWED BY MAIL

204 Please try to stop video gambling Period, we need help bad. Thanks.

208 I think gambling of any kind should not be in South Carolina Video poker is the worst.

209 Not been hospitalized for mental but should have been hospitalized for physical that it contributed to. Heart disease.

214 I cannot walk in to even a gas station or convenience store without being confronted with video poker machines. This diminished my quality of life. I have begged establishments not to give me money, by cashing checks or loaning me thousands of dollars at a time. They give you alcohol also. It doesn't seem to matter to them. They then harass you for payment. I have told all I was obsessive-compulsive, an addicted gambler and on medication twice per day. I have even had to attorneys speak to them on my behalf. I have informed them that I am a part of a class action gambling suit. They still don't care. The mindset seems to be, everyone is doing it, though it's illegal inducement to gamble. I have lost my family, lost my self esteem and many times, even my desire to live. All of my assets have been sold off to cover gambling debts. I think it is a cancer on our society. It is, in my opinion, a license to steal.

219 I have stopped playing video poker since treatment for drug addiction and gambling in 1997, but I completed the "Video Gaming Device Interest Survey" because I did have, at the time of playing, the thoughts, behaviors, and feelings of playing.



## References

State of Connecticut (Department of Revenue Services). 1998. A Study Concerning the Effects of Legalized Gambling on the Citizens of Connecticut. (Prepared by WEFA Group, William N. Thompson and Henry Lesieur)

Kindt, J.W. 1994. Testimony to U.S. House of representatives Committee on Small Business. September 21.

Lesieur, H.1988. Costs and Treatment of Pathological Gambling. Gambling: Socioeconomic Impacts and Public Policy (James Frey, ed.) The Annals of the American Academy of Political and Social Science, March 1998, pp.153-171.

National Opinion Research Council (NORC). 1999. Overview of National Survey and Community Database Research on Gambling Behavior. A Report to the National Gambling Impact Study Commission. April.

State of Nevada (Office of the Governor). 1999. Executive Budget, Fiscal Years 1999-2000.

Palermo, D. 1998. The Secret Slot Market. International Gaming and Wagering Business. December, v. 19:12, pp. 1, 18-22.

4Politizer, R.M., Morrow, J.S., and S. Leavey. 1981. Report on the Societal Cost of Pathological Gambling and Cost-Benefit Effectiveness of Treatment. Presented to Fifth Conference on Gambling and Risk Taking. October 22.

Thompson, W.N. 1999. Inside Straight: South Carolina Battlefield. Gaming Law Review. February, v. 3:1, pp. 5-8.

Thompson, W.N., Gazel, R., and Rickman, D. 1995. The Economic Impacts of Native American Gaming in Wisconsin. Wisconsin Policy Research Institute. April.

Thompson, W.N., Gazel, R., and Rickman, D. 1996a. Comparative Impacts of native American and Commercial Casino Gambling: Taxation, Ownership, and Social Factors. National Conference on Gambling Crime, and Law Enforcement, Normal, Illinois. April 2.

Thompson, W.N., Gazel, R., and Rickman, D. 1996b. The Social Costs of Gambling in Wisconsin. Wisconsin Policy Research Institute.

Thompson, W.N., Gazel, R., and Rickman D. 1996c. Crime and gambling: What's the Connection. Wisconsin Policy research Institute.

Thompson, W.N. and Gazel, R. 1996. The Economics of Casino Gambling in Illinois. Chicago Better Government Association. July.

Thompson W.N., and Gazel, R. 1998. Social Costs of Gambling: A Comparative Study of Nutmeg and Cheese State Gamblers. A paper presented to the Twelfth National Conference on Problem Gambling. June 18.