



State of Washington  
Legislative Budget Committee

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# Washington State Lottery

## Report 95-6

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February 15, 1995

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for persons with disabilities.*

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Established by Chapter 44.28 RCW, the Legislative Budget Committee (LBC) provides oversight of state funded programs and activities. As a joint, bipartisan legislative committee, membership consists of eight senators and eight representatives equally divided between the two major political parties.

Under the direction of the Legislative Auditor, committee staff conduct performance audits, program evaluations, sunset reviews, and other types of policy studies. Study reports typically focus on the efficiency and effectiveness of agency operations, impact of state programs, and compliance with legislative intent. As appropriate, recommendations to correct identified problem areas are included.

Reporting directly to the legislature, the LBC generally meets on a monthly basis during the interim between legislative sessions.



State of Washington  
Legislative Budget Committee

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# TABLE OF CONTENTS

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<b>Chapter</b>		<b>Page</b>
	SUMMARY	i
	SUMMARY OF RECOMMENDATIONS	iv
1	BACKGROUND	1
2	FACTORS THAT IMPACT SALES	5
	Discussion of Findings	6
	Conclusions	10
	Recommendations	11
3	LOTTERY ADVERTISING AND PROBLEM GAMBLING	15
	Discussion of Findings	18
	Conclusions	18
4	ADMINISTRATION	19
	Discussion of Findings	19
	Conclusions	23
<b>Appendices</b>		
1	Scope and Objectives	25
2	Agency Responses	27
3	U.S. Lottery Jurisdiction	37

<b>Appendices</b>		<b>Page</b>
4	Description of Lottery Games	43
5	Lotto Randomness Discussion	45
6	Lotto Statistics Discussion	47
7	Annual Jackpot Sales History	49
8	Lottery Media Budget	53
9	Summary of Publicly Funded Problem Gambling Efforts Across the Nation	57

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# WASHINGTON STATE LOTTERY

## Summary

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**T**his study is the result of a legislative request to examine operations of the Washington State Lottery. Based on analysis of the lottery, we conclude that:

- The most significant factor impacting sales is jackpot size.
- The television advertising hiatus during the summer results in a potential loss in sales of \$4.5 million.
- The lottery lacks adequate criteria in measuring advertising effectiveness.
- The network of lottery retailers selling on-line games is underdeveloped.

## INTRODUCTION

During the 1994 Legislative Session, the legislature adopted as part of the 1994 Supplemental Omnibus Appropriations Act a proviso directing the Legislative Budget Committee to conduct a study of the Washington State Lottery (WSL). Specifically, the legislature directed the LBC to review the WSL's administration, the effect of advertising on problem gambling, and to review the factors that impact sales. A preliminary report was presented to the legislature on December 13, 1994.

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<sup>1</sup>RCW 67.70.040 (1).

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## Overview

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## 1994 study mandate

We approached this study by evaluating the lottery as a business enterprise with the mission to *“produce the maximum amount of net revenues for the state consonant with the dignity of the state and the general welfare of the people.”*<sup>1</sup>

The scope of this study involved a review of the revenue and operating expenses of all 37 U.S. state lotteries (including the District of Columbia) and two Canadian lotteries. Operating areas reviewed included administration, prize payments, retailer network, retailer commissions, and the lottery’s net income.

This study does not attempt to evaluate the public policy question of whether the state should be promoting a lottery; nor does this report attempt to define which lottery activities are “consonant with the dignity of the state and the welfare of the people.”<sup>2</sup> Further, an evaluation of the state’s role in general gambling policy or tribal gambling policy was not part of our study scope.

## SUMMARY OF FINDINGS

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### Three directives from legislature

**Factors which impact sales:** Our analysis showed that the most significant factor influencing sales for the Lotto and Quinto games is jackpot size. Sales substantially increase with jackpot size. The ability for the jackpot to grow results from the random process of consecutive games in which winning numbers are not matched by players. Lotto sales data suggests that for a given jackpot size, sales have been declining over time (age of the game).

While the lottery does undertake different advertising campaigns, it lacks adequate criteria for measuring the effectiveness of its advertising strategies. The report also finds that the presence of TV advertising positively influences sales, as would increasing the number of on-line retailers.

**Advertising and problem gambling:** We found no research that studied the correlation between advertising and problem gambling. However, we cannot be assured that the absence of such studies means that such a correlation does not exist.

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<sup>2</sup>RCW 67.70.040 (1).

**Washington State Lottery Administration:** We found that the WSL has adequate internal management, contract evaluation, and sales force efforts; that the sales for Lotto and Quinto (games that constitute about 70 percent of total sales) are very volatile; and that the objective of the lottery is to return an increasing amount of revenues to the general fund each biennium. Our review identified that the potential for WSL sales is underdeveloped but could be increased by adding more on-line retailers. The lottery could further increase sales by redistributing its advertising budget to eliminate a three month summer television hiatus.

## **AGENCY RESPONSE AND AUDITORS' COMMENTS**

The Washington State Lottery concurs with Recommendations 2 and 4, and partially concurs with Recommendation 1 of this report. The WSL partially concurs with Recommendation 1 which recommends the WSL incorporate the effects of randomness of the Lotto and Quinto games when developing estimates of general fund revenues. The WSL will modify their revenue estimates to the Office of Financial Management to reflect a broader range of pessimistic and optimistic revenue estimates.

The WSL concurs with Recommendation 3, although their comments do not reflect agreement with the findings. The auditors found that the WSL cannot demonstrate the relative impact on sales from the expenditures of the various forms of advertising (e.g., television, radio, and other advertising media), and from the summer and non-summer advertising strategies.

A copy of the auditors' response to agency comments as well as the WSL's response to the report recommendations is included in Appendix 2.

## **ACKNOWLEDGMENTS**

We wish to acknowledge the assistance provided by employees of the Washington State Lottery.

We are grateful and wish to thank TLF Publications, publishers of the 1994 World Lottery Almanac, for the resource material provided, as well as the dozens of staff of lottery jurisdictions who provided technical information and assistance during our study.



We are also grateful for the assistance provided by members of the staffs from the Washington State Council on Problem Gambling and the National Council on Problem Gambling.

This performance audit was conducted by Bob Williams, Project Consultant, and Martin Chaw of the LBC staff, under the supervision of Cheryle A. Broom, Legislative Auditor.

Cheryle A. Broom  
Legislative Auditor

On February 15, 1995, this report was approved by the Legislative Budget Committee and its distribution authorized.

Representative Jean Silver  
Chair

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# RECOMMENDATIONS

## Summary

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### *Recommendation 1*

The WSL should incorporate the effects of randomness of the Lotto and Quinto games when developing estimates of general fund revenues.

Legislation Required:	None
Fiscal Impact:	None
Completion Date:	1995-97 Biennium

### *Recommendation 2*

The WSL and its contractor should establish criteria to assess the relative cost-effectiveness of its advertising campaigns and spending. This criteria should include measures to assess the relative effectiveness of its summer and non-summer advertising program.

Legislation Required:	None
Fiscal Impact:	Unknown
Completion Date:	1995-97 Biennium

### *Recommendation 3*

The WSL should reallocate its existing annual advertising budget, eliminating the summer TV advertising hiatus, unless the cost-effectiveness of the existing plan can be substantiated.

Legislation Required:	None
Fiscal Impact:	Potentially increase annual sales by \$4.5 million
Completion Date:	1995-97 Biennium

### *Recommendation 4*

The WSL should increase the number of on-line retailers more quickly to maximize sales and net income to the state.

Legislation Required:	None
Fiscal Impact:	\$9,500/yr for each instant retailer upgraded to on-line retailer
Completion Date:	1995-97 Biennium

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# BACKGROUND

## Chapter One

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**A**s part of the 1994 Supplemental Omnibus Appropriations Act, the legislature directed a study of the Washington State Lottery. This included three primary directives: 1) review of the lottery's administration; 2) review of the effects of lottery advertising on problem gambling; and 3) review of the factors which impact lottery sales.

### *How was this study approached?*

We approached this study by evaluating the lottery as a business enterprise with the mission to "*produce the maximum amount of net revenues for the state consonant with the dignity of the state and the general welfare of the people.*"<sup>1</sup>

The scope of this study involved a review of the revenue and operating expenses of all 37 U.S. state lotteries (including the District of Columbia) and two Canadian lotteries. Operating expenses reviewed included administration, prize payments, retailer network, retailer commissions, and the lottery's net income.

### *What does this study not cover?*

This study does not attempt to evaluate the public policy question of whether the state should be promoting a lottery, nor does this report attempt to define which lottery activities are "consonant with the dignity of the state and the welfare of the people." Further, an evaluation of the state's role in general gambling policy or tribal gambling policy was not part of our study scope.

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<sup>1</sup>RCW 67.70.040 (1).

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Lottery  
evaluated as  
a business  
enterprise

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Public  
policy of  
lotteries not  
discussed

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## One of 37 lotteries in the nation

### *Who is the Washington State Lottery?*

The Washington State Lottery (WSL) was created in 1982 as a means of generating revenue for the state. The WSL employs about 150 FTEs and operates on an appropriated budget of \$19,357,000, and a nonappropriated budget of \$458,396,000 for the 1993-95 biennium. Daily operating expenses, prize payment, and retailer discounts are funded from sales revenues. Any amount remaining after payment of expenses is transferred to the general fund. Historically, the amount transferred to the state has averaged about 37 percent of sales revenues.

Legislatively appropriated expenses include central administrative and staff expense. All remaining expenses including prizes, advertising and vendor expenses, and retailer commissions are nonappropriated.

The WSL is one of 37 lotteries around the country. A national map highlighting the states offering a lottery; a worksheet summarizing key operating statistics for each state; and a financial operations summary of the WSL for 1989-1994 are included as Appendix 3.

### *What types of games does the WSL offer?*

The WSL offers four computerized (on-line) games and one scratch (instant) game. The four on-line games include Lotto, Quinto, the Daily game, and Daily Keno. The object of these four games is to make a selection from a series of numbers or symbols. A ball machine randomly selects a set of winning numbers, and players with a successful match win the grand prize. Secondary prizes are awarded to players successfully matching a portion of the winning numbers or symbols. The Lotto and Quinto are the dominant on-line games, constituting about 62 percent of the WSL's sales revenues in FY94.

The scratch games require players to scratch off a latex covering from the play ticket, exposing several symbols or numbers. A player wins when a winning match or symbol is made. Scratch games constitute about 26 percent of the WSL's annual sales revenues in FY94. A more detailed description of each WSL game is included as Appendix 4.

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## Five games offered

***How are revenues and expenditures for the WSL distributed?***

The following exhibit lists the preliminary revenues for each game for fiscal year 1994.

**Exhibit 1**

<u>Game</u>	<u>FY94 Sales</u>
Lotto	\$157.4 M
Quinto	\$ 39.9 M
Instant Scratch Tickets	\$ 84.1 M
Daily Game	\$ 18.1 M
Daily Keno	\$ 17.0 M
Total Sales	\$316.5 M

WSL sales revenues are used to support administrative expenses, prize payments, and retailer commissions. Net income, or the amount remaining after expenses, is transferred to the General Fund. The following exhibit lists the preliminary major expenses and net income for the WSL in fiscal year 1994.

**Exhibit 2**

<u>Expense Category</u>	<u>FY94 Expenses</u>	<u>% of Sales</u>
Prizes <sup>(NA)</sup>	\$165.7 M	52%
Retailer discounts <sup>(NA)</sup>	\$ 19.6	6.2
Vendor expense & advertising <sup>(NA)</sup>	\$ 20.9	6.7
Administration <sup>(A)</sup>	\$ 9.1	2.9
Total operating expenses:	\$215.3 M	68%
Net income <sup>(NA)</sup>	\$101.2	32
Total	\$316.5 M	100%

NA = expense is not appropriated by the Legislature.

A = expense which is appropriated by the Legislature.

Net income is the amount of sales revenues transferred to the General Fund - State after payment of expenses.

Since inception of the State Lottery in 1982, the WSL has generated about \$2.7 billion in sales revenue. Over \$1 billion, or 37 percent of sales revenue, has been returned to the General Fund.

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# FACTORS THAT IMPACT SALES

## Chapter Two

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**T**he LBC was directed by the legislature to assess the relationships between lottery sales and general fund revenues, including factors of prize size, advertising, mix of existing games, and introduction of new games. The approach taken was to review available information from lottery operations as well as information and studies from other jurisdictions.

### *What did we focus on?*

Our review focused on the relationships between sales and net income (i.e., contribution to the General Fund) and factors contributing to sales. Our primary focus was on the two major games of Lotto and Quinto. These two games constitute approximately 70 percent of total sales and 80 percent of net income for fiscal years 1991 through 1994.

The relationship between sales and general fund contribution includes the additional factors contributing to the production of sales: cost of prizes and administrative and sales expenses. Administrative expenses are addressed in Chapter 4.

### *What did we find?*

We found several factors influencing sales of Lotto and Quinto. These factors include jackpot size, advertising, product maturity, and playing opportunity (vendor outlets). Of these factors, we found that the most significant factor influencing Lotto and Quinto sales is jackpot size. Sales substantially increase with jackpot size, and the ability for the jackpot to grow results from the random process of consecutive games in which winning numbers are not

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What drives sales for Lotto and Quinto games?

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Jackpot size, advertising, player convenience

matched by players. Further, Lotto sales data suggests that for a given jackpot size, sales have been declining over time (age of the game). The WSL lacks adequate criteria in measuring advertising effectiveness. The report also finds that the presence, rather than the intensity, of TV advertising has a greater influence on sales. Increasing the number of on-line retailers would also increase sales.

## DISCUSSION OF FINDINGS

### Jackpot Size Resulting From Random Drawings Is The Most Significant Factor Influencing Sales And Net Income

Jackpot size

The WSL has developed a statistical model that describes likely sales for a given jackpot and, for those given sales, the probability of a winner. We took this data and developed a simulation model<sup>1</sup> that projected 50 years of Lotto game drawings. The results of this simulation are presented in Appendix 5, Lotto 50 Year Simulation Result. Included in this appendix are 1993 and 1994 actual sales and total prize payouts. The simulation model was developed to illustrate the randomness of the Lotto game.

\$105 million sales range, due solely to randomness

#### Exhibit 3 Summary of Results from Lotto Sales Simulation

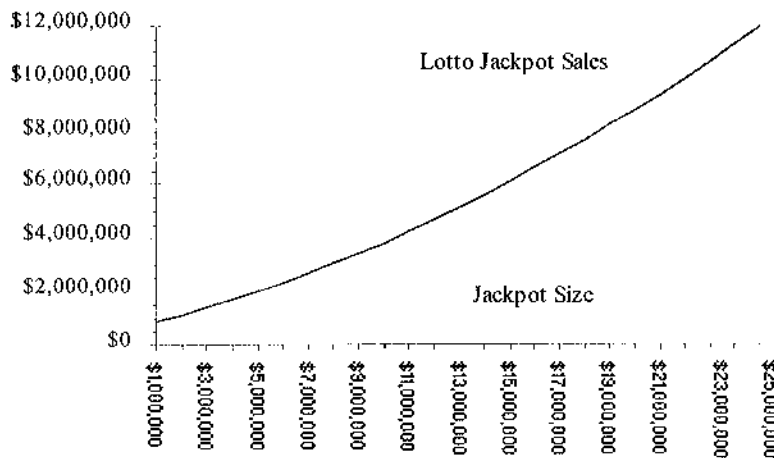
	<u>Sales</u>	<u>Contributions to Net Income &amp; Administration</u>		
Average	176,121,704		89,792,036	
High	243,093,161		139,586,934	
Low	137,850,290		57,822,282	
	High above average	38.0%	49,794,897	55.5%
	Low below average	-21.7%	(31,969,754)	-22.9%
	High vs low range		81,764,652	

The average annual total sales from these sample projections is approximately \$176 million, almost identical to the WSL statistical model. Simulated sales ranged from a low of \$138 million to a high of \$243 million, a difference of \$105 million. It is important to note that Appendix 5 confirms that 1993 was an atypically high year, as sales of \$229 million were near the maximum of the simulation range.

<sup>1</sup>Please refer to Appendix 5.

Lotto and Quinto sales per drawing are directly impacted by jackpot size; as the jackpot grows due to the absence of a winner in the previous drawing, sales will increase. This is graphically depicted below.

Exhibit 4




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Sales increase with jackpot size

Further, as sales increase, the probability that a winner will result also increases. Appendix 6, Lotto Statistics Discussion, includes a table that shows the probability of a jackpot winner at given sales levels.

### Variation In Net Income Is Even More Volatile Than Sales

Net income is even more volatile than sales. As the jackpot grows as a consequence of no winner, sales grow, the prize payout percentage compared to accumulated sales falls, and the contribution to net profit and income increases. Consequently, whereas the sample simulation sales range from 38 percent above to 22 percent below the average of \$176 million, contributions to net income and overhead (sales less prizes) ranges from 56 percent above to 23 percent below the average of \$90 million. Although less extreme, similar variations exist in Quinto sales and profits.

The lottery revenue forecast adopted by the Office of Financial Management is typically used by the legislative fiscal committees when developing biennial revenue estimates. Although the lottery

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Inherent volatility not considered in revenue estimates



includes a high and low range when developing its revenue estimates, the inherent volatility of Lotto and Quinto profits are not explicitly considered.

### **Sales For A Given Jackpot Size Are Declining**

We found that Lotto game sales for a given jackpot size have been steadily declining. We reviewed the sales history of Lotto since the pick "6 of 49 numbers"<sup>2</sup> format was implemented in 1990, comparing all sales data by jackpot size and day of week. We found 1993 sales at comparable jackpot levels were consistently lower than the 1990-1994 period average, and 1994 sales have been lower than calendar 1993. Appendix 7, Annual Jackpot Sales History, illustrates this pattern of declining sales. This is somewhat due to the aging and declining interest in games over time.<sup>3</sup>

### **The Presence Of TV Advertising Has A Positive Impact On Sales**

Each year, the lottery eliminates TV advertising for three to four months during the summer, but has increased its non-television advertising (e.g., radio, billboard, and transit) budget during the same period. The results of this annual TV advertising hiatus has been used by the WSL to demonstrate the positive relationship of TV advertising to sales. In 1993 this hiatus was 13 weeks; in 1994 the hiatus was 17 weeks.

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Summer TV  
advertising  
hiatus...

loss of \$4.5  
million in  
sales

We compared Lotto sales per jackpot size and day of week pre- and post-hiatus. Had the pre-hiatus sales, when TV coverage was in force, occurred during the comparable day and jackpot during the summer hiatus, annual lotto game sales would have been approximately \$4.8 million higher in 1993 and \$4.5 million higher in 1994.

We found no other definitive studies quantifying the relationship of added TV or other advertising to specific sales results for

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<sup>2</sup>The "pick 6 of 49 numbers" format is a common method of describing the goal of the Lotto game which is to select and match the six numbers randomly drawn by the lottery from a field of 49 consecutive numbers.

<sup>3</sup>The WSL recognizes that interest in games decline over time. The WSL periodically introduces new games or modifies existing games to maintain and rejuvenate player interest.

Washington. The WSL did provide studies from other states which attempted to identify the added sales attributable to advertising. In general, these studies supported the positive sales impact due to the presence of advertising and, to a much lesser extent, the amount or intensity of advertising.

During the 1994 Legislative Session, the legislature considered reducing or eliminating the WSL's advertising budget. The WSL defended the importance of advertising by indicating that reduced sales in the summer are due to the absence of television advertising during that time. In response to this claim, the legislature did not make any changes to the WSL's advertising budget.

Although the lottery acknowledges the financial impact of the summer hiatus, the WSL chose to continue the television advertising hiatus when developing the FY95 advertising budget. For example, the FY95 Lotto game advertising budget of \$2.9 million is 42 percent higher than FY94. Instead of reducing or eliminating the summer television advertising hiatus, the WSL increased the intensity of advertising during the non-summer advertising period. They also increased the Lotto game's summer advertising budget with radio and other non-television media.

Despite increased 1994 spending in these other non-television advertising, the lottery continued to experience the summer hiatus sales shortfall; sales actually declined from 1993 hiatus levels for 10 out of 12 comparable jackpot levels.

### **The Lottery Lacks Adequate Criteria In Measuring Advertising Effectiveness**

The lottery and its advertising consultants, McCann/Erickson - Seattle, have portrayed their 1995 advertising plan as the best utilization of the \$2.9 million available for Lotto game advertising. Their plan places greater emphasis on non-television media during the summer as they believe television advertising during this period is less effective than other forms of advertising. However, they were unable to provide criteria assessing the relative effectiveness of their summer and non-summer advertising media plan. Further, McCann/Erickson stated that "advertising impact is measured in terms of product sales or advertising awareness," although they cannot show how those two measures relate to their

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FY95 Lotto advertising budget 42% higher than FY94...

...but sales did not increase

media plan. The lack of criteria does not allow for determining the effectiveness of the relationships between the different plan components.

We recommend that the lottery establish such criteria in developing and monitoring their annual media plan, and in assessing advertising strategies.

A summary of the WSL 1994 and 1995 media budgets, by media type and by game, is included as Appendix 8.

### **Sales Are Negatively Impacted By The Low Number Of On-line Retailers**

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Low  
number of  
on-line  
retailers

On-line retailers are able to sell both instant and on-line games. On-line games constitute approximately 73 percent of WSL sales in fiscal year 1994. More on-line retailers would generate greater sales since purchase availability and convenience is cited by WSL as a significant sales factor. Currently, 46 percent of the state's lottery outlets sell on-line products,<sup>4</sup> the 31st lowest proportion of on-line retailers of 38 lottery jurisdictions studied. A further discussion of this finding can be found in Chapter 4, Administration.

## **CONCLUSIONS**

### **Sales Are Extremely Volatile Due To The Random Nature Of Jackpot Growth**

Jackpot size is the most significant factor impacting sales. Since the ability for the jackpot size to grow results from the random process of consecutive games in which winning numbers are not selected, this randomness makes for high sales variability. This high variability should be considered when lottery baseline revenue estimates and high and low ranges are developed and adopted.

### **Player Interest Declines Over Time**

Sales over time, for a given jackpot size, are declining. In general, this pattern appears to be true for most lottery games, reflecting

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<sup>4</sup>WSL data.

either players' greater tolerance for larger jackpots or waning interest in the game itself. This conclusion supports the WSL's policy of introducing new games or modifying existing games to maintain player interest and to rejuvenate sales.

### **The Lottery Lacks Adequate Criteria In Measuring Advertising Effectiveness**

The WSL does not have adequate criteria to assess the relative effectiveness of the individual components within its media plan. Further, the WSL was unable to assess the relative effectiveness of its summer and non-summer advertising campaigns.

### **Advertising Budget Should Be Reallocated**

The WSL has a factual basis for eliminating the summer TV hiatus, but has no similar substantiation for selecting radio and other media during the summer, or for increasing the intensity of advertising during the remainder of the year. With the additional media dollars available in the 1995 budget, our analysis shows that the summer TV hiatus could have been eliminated rather than used to enhance non-television advertising media. Absent a cost benefit substantiation of the existing WSL media plan, the advertising budget should be reallocated to eliminate the summer television hiatus.

### **The Number of On-line Retailers Should Be Increased To Increase Sales**

The WSL should consider a more rapid expansion of on-line lottery outlets. Converting an instant retailer to an on-line retailer costs about \$3,000 annually. Although the WSL recognizes that its on-line retailer network is underdeveloped, it has conservatively approached the expansion of on-line retailers. Additional discussion of this conclusion can be found in Chapter 4, Administration.

## RECOMMENDATIONS

### *Recommendation 1*

*The WSL should incorporate the effects of randomness of the Lotto and Quinto games when developing estimates of general fund revenues.*

The ability for the jackpot size for the Lotto and Quinto games to grow results from the random process of consecutive games in which winning numbers are not selected. This randomness results in a very unstable source of income for the state. Although the lottery recognizes the randomness of these two games, the WSL revenue estimates for the General Fund does not reflect this randomness.

### *Recommendation 2*

*The WSL and its contractor should establish criteria to assess the relative effectiveness of its advertising campaigns and spending. This criteria should include measures to assess the relative effectiveness of its summer and non-summer advertising program.*

The lottery and its advertising consultants, McCann/Erickson - Seattle, have portrayed their 1995 advertising plan as the best utilization of the \$2.9 million available for Lotto game advertising. Their current plan lacks criteria for assessing the cost-effectiveness of their choice of media, or for their choice of summer and non-summer emphasis. We recommend that the lottery establish cost-effectiveness criteria in developing and monitoring their annual media plan, and in assessing advertising strategies. These criteria should include the expected contribution of individual media components as translated into advertising awareness and projected lottery sales.

### *Recommendation 3*

*The WSL should reallocate its existing annual advertising budget, eliminating the summer TV advertising hiatus, unless the cost-effectiveness of the existing plan can be substantiated.*

Our analysis estimates that the annual revenue loss of continuing the summer television advertising hiatus is about \$4.5 million. The lottery is aware of this loss in revenue but continues the summer television advertising hiatus. Research conducted by other jurisdictions shows that the presence of advertising is a more significant factor than the intensity or amount of advertising. The lottery has further used the loss in revenues from this hiatus as a basis for defending the value of advertising and its impact on sales. Unless the cost-effectiveness review of the media plan concludes otherwise, the summer television hiatus should be eliminated through reallocating the existing budget.

#### *Recommendation 4*

*The WSL should increase the number of on-line retailers more quickly to maximize sales and net income to the state.*

Our analysis of comparable operating statistics from other lottery states indicates that Washington has the lowest number of on-line retailers per capita as well as the lowest percentage of on-line retailers in the nation. Since on-line games constitute about 80 percent of lottery sales, the low number of on-line retailers is affecting potential sales. The WSL has acknowledged that its number of on-line retailers is underdeveloped.

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# LOTTERY ADVERTISING AND PROBLEM GAMBLING

## Chapter Three

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**T**he LBC was directed by the legislature to study the extent to which lottery advertising affects problem gambling. The approach taken to accomplish this directive included discussions with representatives of the State Council on Problem Gambling, the National Council on Problem Gambling, and discussions with national experts on this issue.

### *What did we find?*

We found no research that studied the correlation between advertising and problem gambling. However, we cannot be assured that the absence of such studies means that such a correlation does not exist.

### *What is problem gambling?*

Problem gambling is a complex, progressive disorder in which there is no single identified cause. Much like alcohol or drug addiction, problem gamblers gamble to achieve a rush, a euphoria, or a high that progressively demands more time, money, and energy of the gambler. It is not uncommon for the problem gambler to wager an ever increasing amount of money to satisfy his addiction.

### *What is the prevalence of problem gambling in Washington State?*

In 1992, the Washington State Lottery funded two studies on problem gambling among adults and among adolescents. The

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## Overview

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Problem  
gambling  
is a  
progressive  
disorder

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1992  
prevalence  
studies

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<sup>1</sup>*Gambling and Problem Gambling in Washington State*, Dr. Rachel A. Volberg, February 13, 1993, page 16.

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2.8% of  
adults and  
10% of  
adolescents

results of the adult prevalency study estimated that 100,800, or 2.8 percent of Washington State adults were currently experiencing moderate to severe problems related to their gambling.<sup>1</sup>

The adolescent prevalency study estimated that 83 percent of Washington State adolescents had participated in a form of gambling. Of these, an estimated 10 percent, or 31,490 adolescents, were considered to be either at risk or problem gamblers.<sup>2</sup> Adolescent problem gamblers tend to be male, aged 14-17, with a weekly income of \$50 or more, and live in a household in which one or both parents gambled.

These studies recommended that Washington State must give consideration to educating the public about the potential problems associated with gambling. This can be achieved through public education, public awareness of treatment programs, and training for mental health and gambling establishment employees to screen for and recognize persons who may be suffering from problem gambling.

#### *Which games are at-risk for problem gamblers?*

Although almost any type of gambling activity is an attraction to a problem gambler, it is those games that provide an immediate result which problem gamblers seem to have the most difficult time managing. The prevalence studies identified betting on sports events, non-Indian Bingo, pull tabs and punch boards, and the lottery's daily game as games which pose the largest risk to problem gamblers. Conversely, there are some games in which problem gamblers seem to play less. These are card games with family and friends, sport pools, and lottery instant tickets. Games which appealed to adolescent problem gamblers include raffles, card/board/dice games, games of personal skill, and sport events.

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Lottery  
limits  
promotion  
of the daily  
game

The WSL has acknowledged the findings of these studies and has limited the advertising and promotion of the lottery's Daily Game. The WSL has also encouraged its retailers to display the Council's brochure on problem gambling, and has also made arrangements for displaying the Council's hotline number on point-of-sale materials.

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<sup>2</sup>*Gambling and Problem Gambling among adolescents in Washington State*, Dr. Rachel A. Volberg, 1992, page 19. This study estimates 9 percent of adolescents are at risk problem gamblers and 1 percent are problem gamblers.



*What treatment programs are available for problem gamblers?*

Most states do not support any treatment or intervention programs for problem gamblers. For states that do provide support, services generally include a toll-free help and referral line, training seminars for medical and professional persons dealing with problem gamblers, public education and awareness campaigns, outpatient/inpatient treatment, intervention, and mental health services, and prevalence studies. These services are usually provided through a local, private, nonprofit organization or through a state agency such as a community development/assistance program, a social service, or an alcohol and substance abuse program.

Funding mechanisms for these services include direct support from the General Fund, a predetermined percentage of the lottery advertising budget, receipts from fines or taxes assessed against gaming establishments, or a predetermined percentage of gaming revenues. The amount of money dedicated toward problem gambling varies greatly. According to the National Council on Problem Gambling, annual funding ranges from \$20,000 to fund a hotline in Maryland to \$2 million in Texas, with most allocations around \$100,000.

In Washington State, the state affiliate of the National Council on Problem Gambling provides a variety of services for the problem gambler. These services include a toll-free help line which provides guidance and referrals to about 160 callers annually, development and production of educational and problem awareness materials, and providing training to professional and medical staff involved in treating problem gamblers. Annual funding sources for the Council includes about \$60,000 from the Washington State Gambling Commission for general operating expenses, and \$2,000 from the Washington State Lottery for support of the toll-free help line. The Council's help line is available from 10 a.m. to 4 p.m., Mondays through Fridays. An answering service is available during the rest of the time including Saturdays and Sundays.

Services of the Washington State Council on Problem Gambling are advertised through an informational brochure displayed at lottery retailer locations and other gambling establishments.

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Public support ranges from \$20,000 to \$2 million annually

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WA State toll-free hotline receives 160 calls annually

Included as Appendix 9 is a summary of publicly funded problem gambling activities in other states.

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## Lottery sells the fantasy of winning

*What is the message that Lottery advertising intends to send?*

Lottery advertising comes in several different forms. Point of sale materials are displayed at lottery retailers to target impulse buyers and to remind people to play the lottery. Radio and television advertising spots also remind people to play the lottery and, in addition, attempt to sell the fantasy of winning the grand prize.

## DISCUSSION OF FINDINGS

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### No studies found

#### **No Studies Have Been Performed**

A review of the literature and discussions with national experts on problem gambling have not identified any studies, definitive data, or information evaluating the extent to which lottery advertising causes problem gambling. We found no research that studied the correlation between advertising and problem gambling. However, we cannot be assured that the absence of such studies means that such a correlation does not exist. Further, no research has been conducted to determine the efficacy of publicly funded problem gambling treatment programs.

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### No research on efficacy of publicly funded problem gambling programs

## CONCLUSIONS

#### **No Conclusions Given The Lack Of Information**

Given the lack of information and research evaluating lottery advertising and its affects on problem gambling, no conclusions are made regarding the adequacy or appropriateness of the WSL current advertising plan.

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# ADMINISTRATION

## Chapter Four

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**T**he LBC was directed by the legislature to review the administrative budget in relation to other lotteries in the U.S. and other countries. The approach taken to accomplish this directive included reviewing comparable sales and expense statistics from other lotteries, reviewing the WSL's operations, its sales force, and its network of retailers.

### *What did we focus on?*

Our review focused on the WSL administrative budget and operations relative to maximizing net revenue to the state and whether or not administrative changes could be made to improve, strengthen, or stabilize the return of net revenues to the state.

### *What did we find?*

We found that the WSL has adequate internal management, contract evaluation, and sales force efforts. We also found that the objective of the lottery is to return an increasing amount of revenues to the General Fund each biennium. We also found that the potential for WSL sales is under developed. Sales for the lottery could be increased by adding more on-line retailers.

## DISCUSSION OF FINDINGS

### **Comparative Performance Ratios Are Generally Low**

Appendix 3 includes a table showing the comparative statistics we used to evaluate the WSL's performance relative to its 39 U.S. and

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Changes to  
improve,  
strengthen,  
or stabilize  
revenue to  
state

Canadian counterparts. As this exhibit presents FY93 sales, analysis of the data on this table should be done cautiously as the WSL sales in FY93 were extraordinarily high due to high Lotto jackpots (see discussion in Chapter 2, Factors Impacting Sales).<sup>1</sup> Therefore we also included comparable WSL data for FY94 when jackpots were unusually low.

**Comparative performance low**

We evaluated the performance of the Lottery on several different performance ratios which are used by the WSL and the lottery industry. These ratios were: 1) sales per capita; 2) net income per capita; 3) net income as a percentage of sales; 4) prize payments as a percentage of sales; 5) net operating expenses, including administration, as a percentage of sales; and 6) the number of on-line retailers per capita.

The exhibit below summarizes WSL's statistics and ranking for 1993 and 1994.

**Low on-line retailers per capita**

**Exhibit 5  
Comparative Statistics: 1993 vs. 1994**

	<u>1993</u>	<u>1994</u>	<u>1993 Rank</u>	<u>1994 Rank</u>	<u>1993 Average</u>	<u>1993 Median</u>
Sales Per Capita	\$71.00	\$61.30	30/37	30/37	\$129.20	\$118.90
Net Income Per Capita	\$25.76	\$19.68	26/37	30/37	\$42.30	\$37.50
Net Income % of Sales	36.3%	32.0%	10/36	24/36	33.9%	34.3%
Operating Expenses % of Sales	14.0%	15.7%	16/36	22/36	14.7%	15.1%
Prizes % of Sales	49.7%	49.3%	26/36	29/36	51.3%	51.2%
On-line Retailers Per Capita	0.22	0.26	38/38	38/38	0.56	0.55

Rankings above illustrate the relative position of the WSL relative to other jurisdictions. Data was not available in all categories for all 39 jurisdictions. In rating the relative performance of the WSL, the lower the ranking, the higher (better) their relative performance. For example, 29 jurisdictions had higher (better) per capita sales than Washington in 1993. 1994 rankings show how the WSL performance ratios for 1994 compare with 1993 for other jurisdictions. Source: 1994 LaFleur's World Lottery Almanac.

**FY93 sales were extraordinarily high**

In almost all cases, the performance ratios for the WSL are less favorable than for other jurisdictions. Ratios deteriorated from FY93 to FY94 as Lotto game sales fell by 31 percent, or \$72 million, due in large part to relatively fewer large jackpots.

<sup>1</sup>Due to the random nature of lottery games, FY93 sales for the WSL were extraordinarily high (see discussion in Chapter 2). To provide a balanced perspective and to emphasize the variability of sales and performance measures, we include later in this chapter a comparison of WSL FY94 performance ratios to other lotteries' FY93 data.

The WSL performed well relative to the other jurisdictions in FY93 for net income as a percentage of sales, ranking 10th highest in the nation. However, when comparing WSL's comparable FY94 figures to all other jurisdictions' FY93 data, the WSL ranking fell to 24th. This volatility reflects the random nature of the Lotto game and accentuates the caution that should be used when estimating lottery revenues and net profits and when making interjurisdictional comparisons in any single year.

Although the ratios shown above provide valuable insight into the performance of the WSL, caution should be used especially when comparing expense to sales ratios. For example, a game may have relatively higher expense ratios, but may generate an increase to net income. A strict adherence to maintaining a favorable expense ratio may therefore cloud the benefit of a game.

### **Internal Management**

We reviewed the bidding documents for each of the current major vendors. We found that each vendor selected had the highest overall score and lowest cost proposal.

The WSL research staff has developed models to predict product sales at given prize sizes. These models were developed objectively, reflect sound statistical practices, and present themselves as valuable management tools.

The WSL has developed a performance based commission schedule to augment base salaries for sales staff.

### **Sales Network**

Supermarkets, convenience stores, and gasoline convenience stores make up approximately 85 percent of the WSL instant and on-line retailer outlets.<sup>2</sup> The balance are drug and liquor stores and restaurants. Retailers are compensated at a base 6 percent of sales. On-line retailers receive an additional 1 percent bonus on Lotto game sales when the jackpot surpasses \$6 million.

The WSL has established criteria for converting instant retailers to on-line retailers. These criteria include: that retailers

<sup>2</sup>As of FY94, of 2,968 retailers 1,378, or 46 percent, were on-line retailers.

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Adequate  
internal  
management

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85% of  
lottery  
retailers  
are: super-  
markets,  
convenience  
stores, and  
gas stations

**73% of sales  
from on-line  
games...**

**...but less  
than half of  
the retailers  
sold on-line  
products**

demonstrate the ability to meet sales goals, that sales levels reach a point meriting expansion, and that generic evaluation standards are met. An administrative appeals process has been established whereby a retailer may appeal the denial or revocation of a license to sell lottery instant or on-line tickets.

Although 73 percent of WSL game sales in FY94 were from on-line products, the WSL has only a third of its retailers selling such products. Nationally, the WSL not only has the lowest per capita number of on-line retailers, but also the lowest proportion of on-line retailers.<sup>3</sup> The WSL recognizes that its on-line retailer network is underdeveloped.

The WSL has evaluated alternatives of aggressively adding instant retailers versus emphasizing existing instant retailers. However, the WSL found that providing support to existing instant retailers is more cost-efficient than aggressively expanding instant retailers.

### **Net Revenue Objectives**

Included in the Governor's 1993-95 Biennial Budget request for the WSL is an objective which states that the lottery is to return an increasing amount of revenues to the state each biennium. Further, included in the WSL's 1993-95 business plan is an objective of increasing net revenues to the General Fund a minimum of 5 percent each year, and setting sales goals which are equal to the previous year plus inflation. Since 1990, the WSL was able to meet this objective in four of the six years. The years in which the WSL was unable to meet this goal was FY90 and FY94, both years in which Lotto sales fell from the previous period.

The WSL provides three estimates of biennial net revenues to the Governor's office for revenue forecasting and budget development. These estimates include an optimistic, pessimistic, and an expected WSL net revenue figure. The WSL develops these estimates based upon sales data from the most recent fiscal year. However, the WSL does not attempt to incorporate the random nature of the Quinto and Lotto game sales into their revenue forecasts. Please refer to Chapter 2 for a further discussion of this finding.

<sup>3</sup>In FY93, the WSL had .27 on-line retailers per 1,000 population. Under this ratio, the WSL ranked 38th lowest of all 38 lottery jurisdictions studied.

## **CONCLUSIONS**

### **Internal Management**

#### **WSL administrative expenses are comparable**

The WSL's administrative expenses, expressed as a percentage of sales, are comparable to other lottery jurisdictions. In 1993, the average jurisdiction's operating expenses averaged 14.7 percent with a median of 15.1 percent. In 1993 when the WSL sales were high, their operating expenses were 14.0 percent, but in 1994 when sales were low, operating expenses were 15.1 percent.

#### **Expense to product sales performance ratio can be misleading**

The WSL's performance should not be based solely on expense-to-sales ratios. A strict adherence to expense-to-sales ratios could cause the decision maker to reject a game which, for example, could further the WSL's mission of maximizing total revenue to the general fund.

### **On-line Retailers Should Be Increased**

Of all the jurisdictions surveyed, the WSL has the lowest number of on-line retailers per capita, and the lowest number of on-line retailers relative to their entire network. WSL could be more aggressive in converting instant retailers to on-line operations, at an annual cost of about \$9,500 each, which could result in a net increase in sales and net revenue to the state. Although the WSL recognizes that its on-line retailer network is underdeveloped, it has conservatively approached the expansion of on-line retailers, taking care to not jeopardize existing on-line retailer relations.

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# SCOPE AND OBJECTIVES

## Appendix 1

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### *SCOPE*

The scope of this mandated study includes, but may not be limited to, an assessment of the efficiency and economy of the operations of the Washington State Lottery with a particular focus on the relative cost-effectiveness of the lottery's games and the effect of the lottery's advertising on problem gambling.

### *OBJECTIVES*

1. Assess the relationships of lottery sales and General Fund revenues: Review the cost-effectiveness of prize size, advertising, mix of existing games, and introduction of new games in affecting sales, revenues, and contributions to the General Fund.
2. Assess the extent to which the lottery's advertising may affect problem gambling.
3. Analyze the lottery's administrative budget including a comparison of the lottery's administrative budget relative to the administrative costs for similar public and private organizations in other states and countries.



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# **AGENCY RESPONSE**

## **Appendix 2**

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- **Auditor's Comments to Agency Response**
- **Washington State Lottery**
- **Washington State Council on Problem Gambling**

## AUDITOR'S COMMENTS TO AGENCY RESPONSE

The Washington State Lottery concurs with Recommendations 2 and 4, and partially concurs with Recommendation 1 of this report. The WSL partially concurs with Recommendation 1 which recommends the WSL incorporate the effects of randomness of the Lotto and Quinto games when developing estimates of general fund revenues. The WSL will submit, with the approval of OFM, a broader range of pessimistic and optimistic revenue estimates. This modification covers about two-thirds of the range estimated by our model simulating the effects of randomness on Lotto game sales.

Although the WSL concurs with Recommendation 3, the WSL maintains that summer television advertising is not cost-effective relative to other forms of summer advertising and the use of television advertising during the rest of the year. Their response implies that sales revenue overall would be reduced if their existing annual advertising budget is reallocated to eliminate the summer television advertising hiatus. However, the WSL has not provided data to substantiate this claim.

During the 1994 Legislative Session, the Legislature considered reducing or eliminating the WSL's advertising budget. The WSL defended the importance of advertising by indicating that reduced sales in the summer are due to the absence of television advertising during that time. In response to this claim, the legislature did not make any changes to the WSL's advertising budget. However, in fiscal year 1995, the WSL, at its own discretion, increased the Lotto game advertising budget by 42 percent over the previous period. Nevertheless, the WSL did not fund summer television advertising but instead enhanced non-television advertising during the summer.

When asked to provide data which would demonstrate the relative cost-effectiveness of their summer and non-summer advertising campaign, the WSL could not provide supporting cost-benefit data. Our finding, therefore, is that neither the original argument made by the WSL concerning the effect of a summer hiatus in television advertising, nor the subsequent 42 percent increase in the advertising budget, has been supported. The intent of Recommendations 2 and 3 of this report is for the WSL to demonstrate the relative impact on sales from the expenditures on the various forms of advertising (e.g., television, radio, and other advertising media) and from the summer and non-summer advertising strategies.

A copy of the WSL's response is included in Appendix 2, and a summary of the LBC's recommendations is on the following page.

EVELYN P. YENSON  
Director



STATE OF WASHINGTON  
WASHINGTON STATE LOTTERY

P.O. Box 43000 • Olympia, Washington 98504-3000 • (206) 753-1412

RECEIVED

JAN 25 1995  
LEGISLATIVE  
BUDGET COMM

January 25, 1995

Ms. Cheryle A. Broom  
Legislative Auditor  
Legislative Budget Committee  
P.O. Box 40910  
Olympia, Washington 98504-0910

Dear Ms. Broom: *Cheryle*

Enclosed is our draft response to the Legislative Budget Committee's preliminary report on the Lottery. I will be available on January 31 to present this information and to answer any questions the Committee members might have.

Once again, I would like to thank Martin Chaw, Bob Williams, and you for your perceptive report. If you have any questions or suggestions, please contact me.

Sincerely,

*Evelyn P. Yenson*  
Evelyn P. Yenson  
Director

EPY/sa  
Enclosure

Lottery response to LBC recommendations

Recommendation Number	Agency Position	Comments
One	Partially concur	<p>As part of our biennial budget submittal, the Lottery provides a revenue estimate to OFM.</p> <p>The Revenue Forecast Council requires a quarterly update which includes the forecasts which are discussed in this report: baseline, optimistic and pessimistic.</p> <p>During the last 4 biennia, the average variance between cash deposited in the general fund and the Lottery's original revenue estimate (baseline) has been less than 8%.</p> <p>Two-thirds of the of the net income outcomes listed in the "50 year simulation" (p.26) are within <math>\pm 15\%</math> of the average.</p> <p>With the concurrence of the Forecast council, we will submit optimistic and pessimistic revenue estimates which are <math>\pm 15\%</math> from the baseline.</p>

Recommendation Number	Agency Position	Comments
Two	Concur	<p>The advertising industry standard for measuring media advertising effectiveness is sales and awareness of current advertising.</p> <p>We will construct a measurement tool to capture the qualitative difference between different forms of media advertising.</p>

Recommendation	Agency Position	Comments
Three	Concur	<p>We know, and this study concurs, that advertising works. We differ w/ LBC in that we believe general awareness of advertising is not superior to a weighted purchasing based upon viewership.</p> <p>Since our advertising and our advertising budget have received recent attention from policy makers, we believe that maintaining minimal spending for advertising is prudent. To allocate money for summer television would mean reducing expenditures in another program, like radio advertising for Scratch games.</p> <p>Summer rates/cost are not reflective of low television viewership. When measured by viewership, summer television is significantly more costly and less efficient than other times of the year.</p>

Recommendation Number	Agency Position	Comments
Four	Concur	<p>We have employed a very rational, measurable approach to on-line network growth resulting in an on-line network which has expanded too slowly.</p> <p>Since FY93 we have expanded our on-line network more quickly. Currently 45% of our retailers are on-line. We will continue a more aggressive expansion.</p>



**RECEIVED**

**JAN 09 1995**

**LEGISLATIVE  
BUDGET COMM**

January 4, 1995

Legislative Budget Committee  
State of Washington  
506 16th Avenue, S.E.  
Olympia, WA 98501-2323

To whom it may concern:

The Washington State Council on Problem Gambling (WSCPG) commends the Legislative Budget Committee (LBC) for including an examination of the relationship between Lottery advertising and problem gambling in its study on the Washington State Lottery (WSL). The Council appreciates the opportunity of including its comments in the final report.

The Council on Problem Gambling has been working closely with the Lottery Commission for several years, and is encouraged by the positive response it has received. As mentioned in the LBC report, the WSL has funded two prevalence studies in the state, supports the Council's information and referral line, and is in the process of placing public awareness decals and brochures at its Lottery outlets. These efforts are extremely important; nevertheless, more needs to be done.

The State of Washington benefits directly from Lottery gambling. As Commissioner Robert M. Tull, Chairman of the Gambling Commission, stated on September 8, "It's the only game the State of Washington plays against its citizens." Since the State is profiting from the Lottery, the State should contribute to the solution of the problems created by that activity, just as should other sectors of the gambling industry.

The gambling industry is supporting solutions. The State Gambling Commission, which is financed by license fees, provides funding to the Council on Problem Gambling. Also, the Gambling Commission has taken a lead in public awareness, and a member of the staff holds a seat on the Board of the National Council on Problem Gambling.

A large percentage of the private gambling industry is involved also. This support has not only come in the form of contributions, but also in the form of personal assistance. This assistance includes the work of several prominent industry officials active on the Board of the WSCPG.

The tribal gaming industry has stepped forward to take part. Many tribes have instituted problem gambling policies, and others are considering such programs. The tribal gaming industry contributes to the work of the WSCPG. Even more importantly, they provide funds for Native American treatment services. As an example of efforts

in progress, the Jamestown S'Klallam Tribe requested and received two training seminars on problem gambling. The Tribe intends to develop a problem gambling program prior to opening its new casino.

Of particular interest is the work of the Tulalips, who established the first problem gambling policy for a casino in the state. In extreme cases, the Tulalip casino will ban a problem gambler from playing in their Casino.

These positive efforts highlight the need for more action from the Washington State Lottery. The WSCPG strongly recommends that the state accept its responsibility by undertaking the following actions:

- 1. Mandate that the Division of Alcohol and Substance Abuse (DASA) address public education and prevention, particularly for adolescents, within the agency's existing infrastructure.**
- 2. Provide sustained funding of \$150,000 over a two year period for use by DASA for the education and prevention program. This funding should be supplied from the Lottery advertising budget.**
- 3. The placement of the toll-free assistance and referral number run by the WSCPG on all Lottery tickets.**
- 4. The placement of the toll-free assistance and referral number within all Lottery television advertisements.**

By implementing these steps, the State of Washington can join the rest of the responsible members of the gambling industry in addressing the issue of problem gambling.

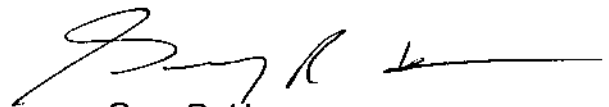
In addition to the steps above, the Washington State Council on Problem Gambling wants to emphasize the fact the Legislative Budget Committee could find no research on the relationship between Lottery advertizing and problem gambling. It seems reasonable to assume that advertising designed to encourage people to gamble on the Lottery would have the effect of encouraging gambling in general. If this is true, such advertising would have an effect on problem gambling. The reality can only be determined by a comprehensive study of the subject, and the Council on Problem Gambling encourages the State to consider undertaking such a study.

In closing, the Washington State Council on Problem Gambling appreciates the opportunity of having its views considered by the Legislative Budget Committee, and looks forward to working with the State in the future.

Sincerely,



Charles D. Maurer, PhD, ABPP  
President



Gary R. Hanson  
Executive Director

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# U.S. LOTTERY JURISDICTIONS

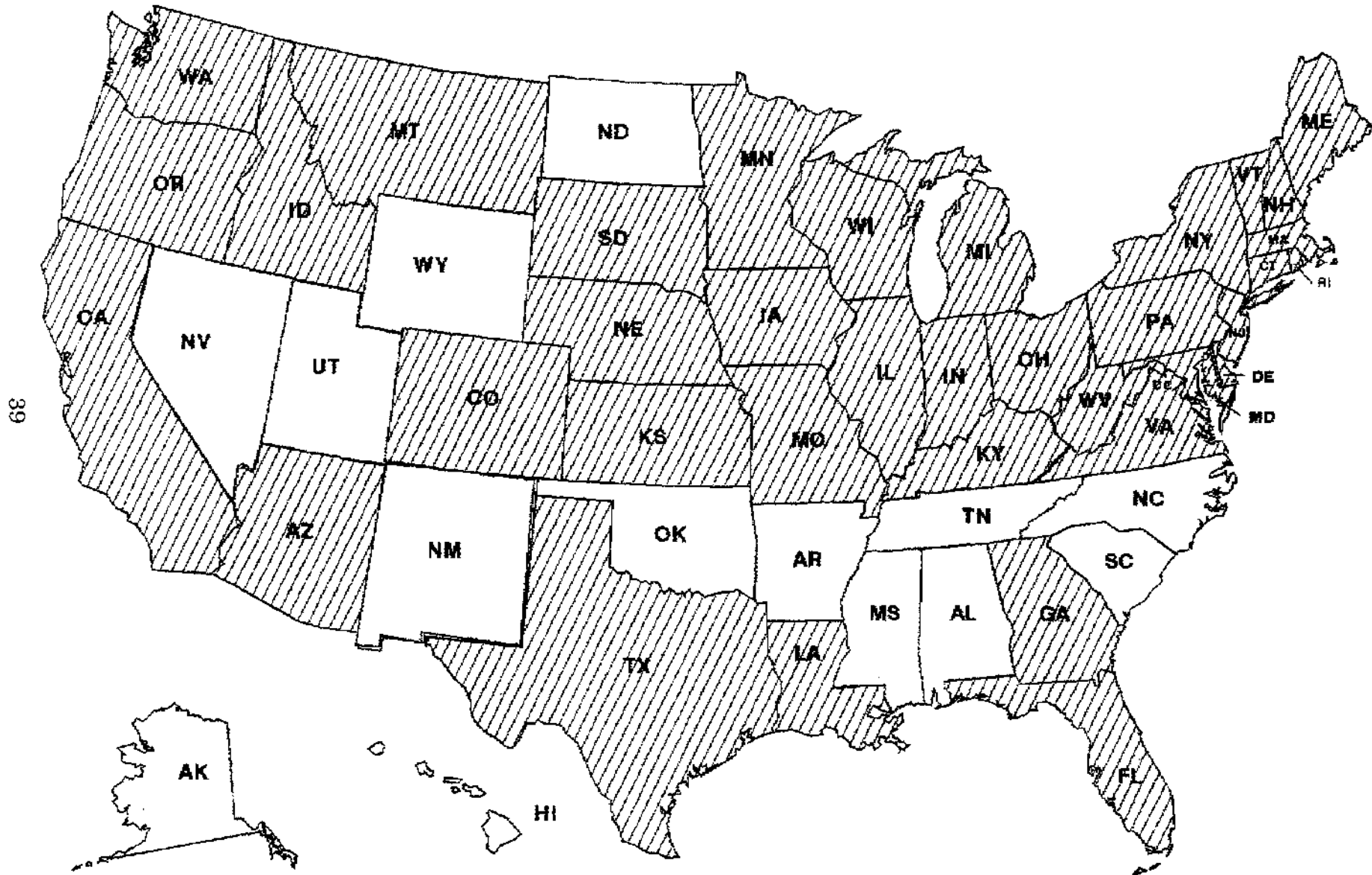
## Appendix Three

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# U.S. LOTTERY JURISDICTIONS



39

### Comparative 1993 Statistics

State or Province	FY93		1994 Television	Adv 94 Total	FY93		FY93		On-line Retailers Per 1,000 Pop	% of Retailers On Line
	Sls:Per C.	Net Income Per Capita			Net Inc. to Sales	FY93 Prizes:Sls	Net op. Expenses			
Arizona	\$67.61	\$24.12	2.43	10.40	35.6%	48.9%	15.5%	0.53	92.7%	
British Columbia	\$240.77	\$80.41	3.63	10.11	33.0%	49.8%	17.1%	0.69	91.8%	
California	\$57.00	\$19.67	12.70	38.75	34.3%	49.8%	15.9%	0.37	52.5%	
Colorado	\$75.93	\$21.18	3.49	6.69	27.7%	55.8%	16.5%	0.58	79.1%	
Connecticut	\$168.47	\$57.60	0.21	1.27	34.2%	56.8%	9.0%	0.94	100.0%	
Delaware	\$129.25	\$43.71	0.00	1.62	32.5%	54.2%	13.3%	0.42	65.7%	
District of Columbia	\$333.90	\$113.80	0.60	3.90	33.9%	50.1%	16.0%	0.97	100.0%	
Florida	\$157.29	\$62.18	9.20	29.50	39.9%	49.5%	11.1%	0.57	67.6%	
Georgia	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.65	75.0%	
Idaho	\$53.08	\$11.68	1.02	2.16	21.9%	55.1%	23.1%	0.46	40.9%	
Illinois	\$129.58	\$50.70	7.52	23.97	38.6%	51.3%	10.1%	0.47	75.5%	
Indiana	\$90.71	\$25.81	2.65	5.98	28.2%	56.9%	14.9%	0.55	68.1%	
Iowa	\$73.73	\$20.54	2.20	5.80	27.8%	56.2%	16.0%	0.43	39.3%	
Kansas	\$45.43	\$13.94	0.41	2.10	30.5%	51.0%	18.5%	0.51	65.7%	
Kentucky	\$129.38	\$26.35	3.13	9.95	20.3%	63.7%	16.0%	0.69	79.4%	
Louisiana	\$114.85	\$43.94	2.63	5.60	38.1%	49.9%	12.0%	0.61	76.8%	
Maine	\$95.22	\$29.44	1.30	2.23	30.9%	53.9%	15.2%	0.85	67.6%	
Maryland	\$179.68	\$66.27	3.80	10.70	36.9%	53.1%	10.1%	0.59	89.4%	
Massachusetts	\$382.29	\$95.98	4.20	11.60	25.0%	66.3%	8.7%	0.95	82.6%	
Michigan	\$131.50	\$0.00	1.39	13.60	n/a	n/a	n/a	0.54	59.3%	
Minnesota	\$73.40	\$17.53	2.10	8.09	23.8%	59.7%	16.5%	0.41	46.2%	
Missouri	\$49.45	\$14.76	3.31	6.38	29.8%	53.8%	16.4%	0.34	40.5%	
Montana	\$44.76	\$10.84	0.26	0.74	24.1%	48.1%	27.8%	0.39	40.6%	
Nebraska	n/a	n/a	0.65	1.35	n/a	n/a	n/a	n/a	n/a	
New Hampshire	\$101.38	\$33.60	1.10	3.00	35.0%	49.7%	15.3%	0.72	59.3%	
New Jersey	\$175.06	\$74.68	0.00	3.50	42.1%	49.6%	8.3%	0.67	100.0%	
New York	\$130.24	\$55.25	11.60	31.91	42.3%	46.6%	11.1%	0.49	61.8%	
Ohio	\$179.35	\$66.82	9.08	18.91	34.8%	50.8%	14.4%	0.48	55.4%	
Ontario	\$174.02	\$63.79	8.24	24.61	36.5%	48.3%	15.2%	0.71	62.6%	
Oregon	\$144.39	\$50.71	1.60	6.58	34.8%	35.5%	29.7%	0.75	69.8%	
Pennsylvania	\$118.85	\$50.41	7.70	16.00	42.3%	48.5%	9.2%	0.33	53.0%	
Rhode Island	\$136.67	\$44.06	n/a	n/a	32.1%	50.5%	17.3%	0.89	73.9%	
South Dakota	\$240.65	\$80.55	0.38	1.01	71.3%	19.4%	9.4%	0.41	35.6%	
Texas	\$103.41	\$36.40	11.30	40.20	34.6%	53.0%	12.4%	0.57	66.4%	
Vermont	\$87.81	\$29.47	0.15	0.57	33.1%	53.9%	13.0%	0.64	43.7%	
Virginia	\$132.16	\$46.57	5.82	36.28	34.9%	52.3%	12.8%	0.43	47.8%	
Washington-1993	\$71.00	\$25.76	1.70	6.20	36.3%	49.7%	14.0%	0.27	46.4%	
West Virginia	\$64.01	\$19.84	1.31	2.77	30.5%	52.6%	16.8%	0.54	60.6%	
Wisconsin	\$97.73	\$37.47	1.37	4.60	34.6%	53.8%	11.5%	0.56	54.2%	
Wa. State Rank 1993 v. all 93	30	26	21	20	10	26	16	38	31	
of	of	of	of	of	of	of	of	of	of	
# of reporting jurisdictions	37	37	36	36	36	36	36	38	38	
Average	\$129.2	\$42.3	\$3.5	\$11.0	33.9%	51.3%	14.7%	0.58	65.4%	
Median	\$118.9	\$37.5	\$2.2	\$6.4	34.3%	51.2%	15.1%	0.56	65.7%	

lottery product operating income

Multi Year Operations Summary

Net Sales					Net Profit								
Year	Total	Lotto	%	Quinto	Other	Total	%	Lotto	%	Quinto	%	Other	%
1989	\$ 255,411,465	\$ 178,463,665	69.9%	\$ -	\$ 76,947,800	\$ 105,052,655	41.1%	\$ 83,209,817	46.6%	\$ -		\$ 21,842,838	28.4%
1990	246,334,056	163,726,701	66.5%	3,600,003	79,007,352	93,929,530	38.1%	73,723,560	45.0%	13,767	0.4%	20,192,203	25.6%
1991	258,768,254	164,160,852	63.4%	18,561,363	76,046,039	97,883,967	37.8%	71,926,689	43.8%	5,990,483	32.3%	19,966,795	26.3%
1992	302,189,789	185,943,117	61.5%	24,315,275	91,931,397	108,426,334	35.9%	75,495,503	40.6%	11,070,103	45.5%	21,860,728	23.8%
1993	364,955,820	229,146,146	62.8%	28,932,736	106,876,938	132,323,394	36.3%	93,387,095	40.8%	12,650,494	43.7%	26,285,805	24.6%
1994	316,412,139	157,376,317	49.7%	39,862,313	119,173,509	101,162,405	32.0%	58,091,978	36.9%	15,406,836	38.7%	27,663,591	23.2%

Net Sales Increases					Net Profit Increases				
Year	Total	Lotto	Quinto	Other	Total	Lotto	Quinto	Other	
1989	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
1990	-3.6%	-8.3%	n/a	2.7%	-10.6%	-11.4%	n/a	-7.6%	
1991	5.0%	0.3%	415.6%	-3.7%	4.2%	-2.4%	43413.4%	-1.1%	
1992	16.8%	13.3%	31.0%	20.9%	10.8%	5.0%	84.8%	9.5%	
1993	20.8%	23.2%	19.0%	16.3%	22.0%	23.7%	14.3%	20.2%	
1994	-13.3%	-31.3%	37.8%	11.5%	-23.5%	-37.8%	21.8%	5.2%	

Prize Payouts					Other Expenses				
Year	Total	Lotto	Quinto	Other	Total	Lotto	Quinto	Other	
1989	\$ 117,688,175	\$ 77,033,115	\$ -	\$ 40,655,060	\$ 32,670,635	\$ 18,220,733	\$ -	\$ 14,449,902	
1990	116,749,231	72,079,598	1,729,040	42,940,593	35,655,295	17,923,543	1,857,196	15,874,556	
1991	124,247,185	74,230,248	8,567,433	41,449,504	36,637,102	18,003,915	4,003,447	14,629,740	
1992	151,009,630	87,524,853	9,803,641	53,681,136	42,753,825	22,922,761	3,441,531	16,389,533	
1993	181,518,269	108,797,879	12,865,288	59,855,102	51,114,157	26,961,172	3,416,954	20,736,031	
1994	165,655,913	77,633,737	19,008,521	69,013,655	49,593,821	21,650,602	5,446,956	22,496,263	

Prize Payouts % of Sales					Other Expenses % of Sales				
Year	Total	Lotto	Quinto	Other	Total	Lotto	Quinto	Other	
1989	46.1%	43.2%	n/a	52.8%	12.8%	10.2%	n/a	18.8%	
1990	47.4%	44.0%	48.0%	54.4%	14.5%	10.9%	51.6%	20.1%	
1991	48.0%	45.2%	46.2%	54.5%	14.2%	11.0%	21.6%	19.2%	
1992	50.0%	47.1%	40.3%	58.4%	14.1%	12.3%	14.2%	17.8%	
1993	49.7%	47.5%	44.5%	56.0%	14.0%	11.8%	11.8%	19.4%	
1994	52.4%	49.3%	47.7%	57.9%	15.7%	13.8%	13.7%	18.9%	

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# DESCRIPTION OF LOTTERY GAMES

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## Appendix Four

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The WSL offers one scratch ticket (instant) game and four computerized (on-line) games.

**Lotto:** Lotto was introduced in 1984. Since 1990 this has been a game in which players pick six figures from a field of 49 consecutive numbers. Twice a week, the lottery randomly selects six numbers. Players matching three, four, five, and six of the figures are winners. The odds of picking all six correctly is approximately one in seven million for each dollar played. The jackpot, paid as a 20 year annuity, begins at \$1 million and grows by \$1 million each time there is no winner. Beyond approximately \$10 million, the jackpot grows by \$2 million or more, depending upon sales volume. Lotto generates over 60 percent of total sales and represents over 70 percent of net profits of the lottery.

**Quinto:** Introduced in 1990, Quinto is played much like the Lotto. However, instead of picking 6 out of 49 numbers, Quinto consists of picking 5 out of 52 cards. The odds of winning per dollar played is approximately 1 out of 2.6 million. The jackpot, paid in cash, begins at \$100,000 and grows by \$100,000 each time there is no winner. Beyond approximately \$1 million, the jackpot grows by \$200,000 or more, depending upon sales volume. Quinto generates approximately 10 percent of total sales and net profits to the lottery.

**Scratch Games:** The WSL's only hard ticket, or scratch game, is its second best revenue-generating game, accounting for about 20 percent of annual sales. New games are introduced about every five weeks. Winning prizes range from \$1.00 to as much as \$10,000 or more. The scratch game generates about 25 percent of total sales and about 15 percent of net profits to the lottery.

**The Daily Game:** The Daily Game, introduced in 1984, requires players to choose three numbers from a field of ten. The goal of the player is to match the three number combination chosen by the lottery. Players can select different variations of their selected numbers. Prizes from a \$1.00 bet range from \$50 to a high of \$500, depending upon variations selected. The Daily Game generates about \$18 million in annual sales, or about 6 percent of total lottery sales in FY94.

**Daily Keno:** Introduced in 1992, players choose up to ten numbers, known as spots, from a field of 80 consecutive numbers. Each evening, the lottery's computer randomly selects 20 of the 80 numbers. Winning players successfully match 1 to 10 spots. The greater the number of spots matched, the greater the payout. Players can wager up to \$20 per drawing and can select up to seven consecutive plays from one ticket. Daily Keno is the lottery's third most popular on-line game, generating about \$17 million in sales annually, or about 5 percent of total sales in FY94.

The Daily Game and Daily Keno combined constitute about 5 percent of profits and sales.

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# LOTTO RANDOMNESS DISCUSSION

## Appendix Five

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The random nature of the Lotto game (Quinto also) could cause wide variations in sales and resulting profits to the General Fund for no reason other than the chance that the jackpot could grow due to no winner being selected. We sought to quantify the effect of randomness (events beyond the control of WSL management) by developing our own model, running 50 trials (50 sample years), and recording the sales variance.

The WSL has developed a statistical Lotto model whereby an average sales forecast for a fiscal year is estimated based on the sum of sales expected for given jackpot sizes. Their current model forecasts annual sales of approximately \$176 million. This model includes the number of potential combinations selected for a given sales level as a fraction of total possibilities per dollar of sales. (Odds per dollar bet are approximately 1 per 6.8 million, but some bettors will select the same number.) Probabilities of a given jackpot size occurring is calculated based on the probability of the preceding smaller jackpot not being won. This model further includes an estimate of consolation prizes for drawings where a winner is not selected (approximately 16 percent of sales) and the cost of financing the 20 year annuity for the jackpot (currently approximately 55 percent of the winning jackpot).

To study the effects of random events given the statistical probabilities and assumptions used in the WSL model, our model used WSL assumptions and added an assumption that the Lotto jackpot would be increased by \$1 million each time a winner was not selected until the jackpot reached \$10 million, thereafter we assumed that the jackpot would grow by \$2 million each drawing.

We ran our simulation model and summarized the results of 50 trials (50 sample years) each time simulating the results of 104 consecutive drawings, each dependent on the preceding simulated drawing. The results of these 50 trials are summarized in the table on the next page entitled, **Comparison of 1993 and 1994 Results and a 50 Year Random Sample**.

This table shows sales, total prizes, and contributions to administration and profit widely vary. While sales approximate the statistical average calculated by the WSL, sales vary from a high of \$243 million to a low of \$138 million, a range of \$105 million strictly due to random events inherent in the Lotto game. Similarly, but even more dramatically, contributions to administration and profit vary from a high of \$140 million to a low of \$58 million, a range of \$82 million.

Lotto 50 Year Simulation Result  
Comparison of 1993 and 1994 Results and a 50 Year Random Sample

			<u>Total Sales</u>	<u>Total Prizes</u>	<u>Contribution to Profit and Admin</u>	<u>% of sales</u>
1	Sample #	13	243,093,161	103,506,227	139,586,934	57%
2	Actual	1993	229,146,146	108,797,879	120,348,267	53%
3	Sample #	23	218,779,902	97,829,952	120,949,950	55%
4	Sample #	5	208,520,339	93,930,968	114,589,371	55%
5	Sample #	24	202,132,478	92,323,138	109,809,340	54%
6	Sample #	4	200,232,150	85,958,444	114,273,706	57%
7	Sample #	41	198,990,372	91,252,806	107,737,566	54%
8	Sample #	25	198,426,706	90,609,463	107,817,243	54%
9	Sample #	2	197,427,528	90,443,999	106,983,529	54%
10	Sample #	16	196,736,377	89,229,544	107,506,833	55%
11	Sample #	27	192,240,972	88,485,105	103,755,867	54%
12	Sample #	49	189,669,057	89,159,196	100,509,861	53%
13	Sample #	19	187,222,826	83,804,100	103,418,726	55%
14	Sample #	37	186,596,427	90,850,368	95,746,059	51%
15	Sample #	30	186,140,906	88,574,934	97,565,972	52%
16	Sample #	40	185,399,841	89,002,214	96,397,627	52%
17	Sample #	47	180,412,269	85,976,272	94,435,997	52%
18	Sample #	45	179,348,113	87,450,048	91,898,065	51%
19	Sample #	44	177,941,752	83,917,154	94,024,598	53%
20	Sample #	9	177,843,276	87,200,847	90,642,429	51%
21	Sample #	43	176,262,665	87,489,027	88,773,568	50%
22	Sample #	22	175,829,855	86,317,424	89,512,431	51%
23	Sample #	48	175,721,709	87,949,515	87,772,194	50%
24	Sample #	21	175,429,419	85,151,112	90,278,307	51%
25	Sample #	32	174,856,308	85,056,205	89,800,103	51%
26	Sample #	34	174,638,214	86,670,088	87,968,126	50%
27	Sample #	42	173,559,891	87,591,518	85,968,373	50%
28	Sample #	3	173,530,666	87,586,678	85,943,988	50%
29	Sample #	26	170,558,086	83,794,419	86,763,667	51%
30	Sample #	31	170,336,845	84,857,782	85,479,063	50%
31	Sample #	18	168,957,919	84,629,431	84,328,488	50%
32	Sample #	14	167,296,369	83,254,279	84,042,090	50%
33	Sample #	39	167,239,934	82,144,933	85,095,001	51%
34	Sample #	36	166,608,591	83,690,383	82,918,208	50%
35	Sample #	33	165,701,145	84,090,110	81,611,035	49%
36	Sample #	12	164,775,939	84,486,895	80,289,044	49%
37	Sample #	35	164,659,699	81,717,125	82,942,053	50%
38	Sample #	10	164,470,834	83,886,370	80,584,464	49%
39	Sample #	28	163,866,921	84,336,362	79,530,559	49%
40	Sample #	38	162,531,611	84,115,235	78,416,376	48%
41	Sample #	15	161,086,579	83,875,937	77,210,642	48%
42	Sample #	8	159,181,305	82,460,424	76,720,881	48%
43	Sample #	50	158,650,015	81,822,442	76,827,573	48%
44	Actual	1994	157,376,317	77,633,737	79,742,580	51%
45	Sample #	1	155,044,521	81,775,373	73,269,148	47%
46	Sample #	46	154,187,213	82,733,402	71,453,811	46%
47	Sample #	20	152,017,082	79,624,029	72,393,053	48%
48	Sample #	7	149,745,323	81,997,825	67,747,498	45%
49	Sample #	29	148,684,537	80,172,159	68,512,378	46%
50	Sample #	6	146,674,266	81,489,258	65,185,008	44%
51	Sample #	17	144,697,943	78,411,979	66,285,964	46%
52	Sample #	11	137,850,290	80,028,008	57,822,282	42%
	Average		176,121,704		89,792,036	
	High		243,093,161		139,586,934	
	Low		137,850,290		57,822,282	
	Standard Deviation		21,183,301		16,140,287	
	High above average		66,971,457	38.0%	49,794,897	55.5%
	Low below average		(38,271,414)	-21.7%	(31,969,754)	-22.9%
	High vs low range		105,242,871		81,764,652	

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# LOTTO STATISTICS DISCUSSION

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## Appendix Six

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We have attached a Lotto Summary Statistics Table summarizing the basic information from the WSL statistical model (see appendix 4). Included in this table are calculations describing relationships such as: the cost of an annuity for any given jackpot (column H) and its average cost (column D); the total average prizes paid as a percentage of sales (column G); cumulative prize cost, when a jackpot is hit (column I) expressed as a percentage of sales (column J); and cumulative prizes as a percentage of cumulative sales (column K). Two key statistics should be noted.

The first measure, average prizes for a given sales level, expresses the relative attractiveness of that game to bettors. For example, when the jackpot is \$1 million, sales of \$869,300 are expected with an 11.4 percent probability of a winner. That probability multiplied by the value of the jackpot annuity (55 percent of \$1 million) creates an expected jackpot cost of \$62,700. When added to other consolation prizes for each drawing, the expected total payout is \$206,700 or 23.8 percent of sales. In the event that the jackpot is not hit, the jackpot grows and sales increase. Once the jackpot hits about \$18 million, the expected payout, \$7,746,000 (column F) becomes greater than the amount wagered, \$7,677,000 (column B).

The second measure, the actual cost of a jackpot hit when it occurs, is represented as the cumulative total prize cost expressed as a percentage of total cumulative sales (column K). This calculation (79.8 percent for a \$1 million jackpot, 41.1 percent for a \$10 million jackpot, etc.), reflects the reason why an increasing jackpot size not only results in greater profits due to a higher sales level but also results in an increasing fraction of sales available for profits.



### Lotto Summary Statistics

A	B	C	D	E	F	G	H	I	J	K
<u>Jackpot</u>	<u>Average Sales</u>	<u>Probability of Jackpot Winner</u>	<u>Jackpot "Average cost"</u>	<u>Other Prizes</u>	<u>Total "Average" Prizes</u>	<u>% of Specific Drawing Sales</u>	<u>Jackpot Cost When "Hit"</u>	<u>Total Prizes Jackpot "Hit"</u>	<u>% of Drawing Sales</u>	<u>% of cumulative Drawing Sales</u>
\$ 1,000,000	\$ 869,290	11.40%	\$ 62,700	\$ 143,954	\$ 206,654	23.8%	\$ 550,000	\$ 693,954	79.8%	79.8%
2,000,000	1,127,629	14.60%	160,600	186,735	347,335	30.8%	1,100,000	1,286,735	114.1%	71.6%
3,000,000	1,403,729	17.80%	293,700	232,458	526,158	37.5%	1,650,000	1,882,458	134.1%	65.1%
4,000,000	1,697,592	21.10%	464,200	281,121	745,321	43.9%	2,200,000	2,481,121	146.2%	59.7%
5,000,000	2,009,217	24.50%	673,750	332,726	1,006,476	50.1%	2,750,000	3,082,726	153.4%	55.3%
6,000,000	2,338,604	27.80%	917,400	387,273	1,304,673	55.8%	3,300,000	3,687,273	157.7%	51.5%
7,000,000	2,685,753	31.20%	1,201,200	444,761	1,645,961	61.3%	3,850,000	4,294,761	159.9%	48.3%
8,000,000	3,050,664	34.60%	1,522,400	505,190	2,027,590	66.5%	4,400,000	4,905,190	160.8%	45.5%
9,000,000	3,433,338	38.00%	1,881,000	568,561	2,449,561	71.3%	4,950,000	5,518,561	160.7%	43.2%
10,000,000	3,833,774	41.40%	2,277,000	634,873	2,911,873	76.0%	5,500,000	6,134,873	160.0%	41.1%
11,000,000	4,251,972	44.70%	2,704,350	704,127	3,408,477	80.2%	6,050,000	6,754,127	158.8%	39.2%
12,000,000	4,687,932	47.90%	3,161,400	776,322	3,937,722	84.0%	6,600,000	7,376,322	157.3%	37.6%
13,000,000	5,141,654	51.10%	3,653,650	851,458	4,505,108	87.6%	7,150,000	8,001,458	155.6%	36.1%
14,000,000	5,613,138	54.10%	4,165,700	929,536	5,095,236	90.8%	7,700,000	8,629,536	153.7%	34.8%
15,000,000	6,102,385	57.10%	4,710,750	1,010,555	5,721,305	93.8%	8,250,000	9,260,555	151.8%	33.7%
16,000,000	6,609,394	60.00%	5,280,000	1,094,516	6,374,516	96.4%	8,800,000	9,894,516	149.7%	32.6%
17,000,000	7,134,165	62.70%	5,862,450	1,181,418	7,043,868	98.7%	9,350,000	10,531,418	147.6%	31.6%
18,000,000	7,676,696	65.40%	6,474,600	1,271,261	7,745,861	100.9%	9,900,000	11,171,261	145.5%	30.8%
19,000,000	8,236,994	67.90%	7,095,550	1,364,046	8,459,596	102.7%	10,450,000	11,814,046	143.4%	30.0%
20,000,000	8,815,051	70.30%	7,733,000	1,459,772	9,192,772	104.3%	11,000,000	12,459,772	141.3%	29.2%
21,000,000	9,410,871	72.60%	8,385,300	1,558,440	9,943,740	105.7%	11,550,000	13,108,440	139.3%	28.6%
22,000,000	10,024,453	74.70%	9,038,700	1,660,049	10,698,749	106.7%	12,100,000	13,760,049	137.3%	28.0%
23,000,000	10,665,797	76.70%	9,702,550	1,766,256	11,468,806	107.5%	12,650,000	14,416,256	135.2%	27.4%
24,000,000	11,304,903	78.60%	10,375,200	1,872,092	12,247,292	108.3%	13,200,000	15,072,092	133.3%	26.9%
25,000,000	11,971,772	84.00%	11,550,000	1,982,525	13,532,525	113.0%	13,750,000	15,732,525	131.4%	26.4%

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# **ANNUAL JACKPOT SALES HISTORY**

## **Appendix 7**

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## Annual Jackpot Sales History

<u>Day of Week</u>	<u>Jackpot</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>Period Average</u>	<u>93 vs Ave</u>	<u>94 v Ave</u>	<u>94 vs 93</u>
Saturday	1,000,000	913,702	1,018,154	975,628	849,446	839,069	919,200	-7.6%	-8.7%	-1.2%
Wednesday	1,000,000	757,461	818,148	845,155	816,861	771,166	801,758	1.9%	-3.8%	-5.6%
Saturday	1,500,000	1,039,849	1,142,465	1,137,459	0	0	1,106,591			
Wednesday	1,500,000	822,916	995,659	913,957	796,245	0	882,194	-9.7%		
Saturday	2,000,000	1,176,871	1,303,642	1,266,676	1,155,702	1,125,480	1,205,674	-4.1%	-6.7%	-2.6%
Wednesday	2,000,000	1,134,244	1,150,249	1,111,762	924,966	971,312	1,058,507	-12.6%	-8.2%	5.0%
Saturday	3,000,000	0	1,619,205	1,606,118	1,333,203	1,292,154	1,462,670	-8.9%	-11.7%	-3.1%
Wednesday	3,000,000	1,284,689	1,468,854	1,397,581	1,241,333	1,228,778	1,324,247	-6.3%	-7.2%	-1.0%
Saturday	4,000,000	1,723,805	2,023,674	1,899,248	1,739,757	1,650,507	1,807,398	-3.7%	-8.7%	-5.1%
Wednesday	4,000,000	1,677,951	1,771,328	1,804,395	1,462,737	1,445,244	1,632,331	-10.4%	-11.5%	-1.2%
Saturday	4,500,000	0	1,821,656	0	0	0	1,821,656			
Wednesday	4,500,000	0	0	0	0	0				
Saturday	5,000,000	2,195,298	2,413,040	2,123,640	1,914,169	1,830,847	2,095,399	-8.6%	-12.6%	-4.4%
Wednesday	5,000,000	1,793,329	2,217,313	2,120,646	1,793,233	1,759,485	1,936,801	-7.4%	-9.2%	-1.9%
Saturday	6,000,000	0	2,885,251	2,610,505	2,370,166	2,160,828	2,506,688	-5.4%	-13.8%	-8.8%
Wednesday	6,000,000	0	0	2,405,577	2,008,784	1,938,403	2,117,588	-5.1%	-8.5%	-3.5%
Saturday	7,000,000	0	2,992,011	2,968,098	2,483,072	2,343,441	2,696,656	-7.9%	-13.1%	-5.6%
Wednesday	7,000,000	2,678,604	3,214,243	2,899,131	2,542,531	2,275,151	2,721,932	-6.6%	-16.4%	-10.5%
Saturday	8,000,000	3,173,374	0	0	3,086,428	2,742,049	3,000,617	2.9%	-8.6%	-11.2%
Wednesday	8,000,000	0	3,577,640	3,150,859	2,821,005	2,614,419	3,040,981	-7.2%	-14.0%	-7.3%
Saturday	9,000,000	0	0	4,707,122	3,323,698	0	4,015,410	-17.2%		
Wednesday	9,000,000	3,219,055	3,836,149	0	0	2,949,463	3,334,889		-11.6%	
Saturday	10,000,000	0	5,186,774	4,401,597	0	3,436,871	4,341,747		-20.8%	
Wednesday	10,000,000	0	0	0	3,673,387	0	3,673,387	0.0%		
Saturday	11,000,000	0	0	4,802,339	0	4,131,113	4,466,726		-7.5%	
Wednesday	11,000,000	0	0	6,216,761	4,542,887	0	5,379,824	-15.6%		
Saturday	12,000,000	4,711,199	0	0	4,632,562	0	4,671,880	-0.8%		
Wednesday	12,000,000	0	0	4,961,117	0	3,988,655	4,474,886		-10.9%	
Saturday	13,000,000	0	7,459,342	0	0	0	7,459,342			
Wednesday	13,000,000	0	0	0	0	4,946,132	4,946,132		0.0%	
Saturday	14,000,000	0	0	0	0	5,074,459	5,074,459		0.0%	
Wednesday	14,000,000	0	0	7,621,357	0	0	7,621,357			
Saturday	15,000,000	0	0	0	6,582,375	5,455,054	6,018,715	9.4%	-9.4%	-17.1%
Wednesday	15,000,000	0	0	8,024,962	5,788,551	0	6,906,757	-16.2%		
Saturday	16,000,000	0	0	0	0	6,652,687	6,652,687		0.0%	
Wednesday	16,000,000	0	0	0	0	0				
Saturday	18,000,000	0	0	0	7,624,447	0	7,624,447	0.0%		
Wednesday	18,000,000	0	0	0	0	7,161,500	7,161,500		0.0%	
Saturday	20,000,000	0	0	10,671,021	0	0	10,671,021			
Wednesday	20,000,000	0	0	0	0	0				
Saturday	21,000,000	0	0	0	0	9,508,201	9,508,201			

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# LOTTERY MEDIA BUDGET

## Appendix 8

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## Lottery Media Budget

### Lottery Media 1994

	<u>Television</u>	<u>Radio</u>	<u>Outdoor</u>	<u>Transit</u>	<u>C-Stores</u>	<u>Sports Sponsorships</u>	<u>Print</u>	<u>Other</u>	<u>Total</u>
Lotto	1,388,484	511,918	105,093	32,385					2,037,880
Quinto	331,854	242,498							574,353
Keno		234,744							234,744
Scratch			80,443	64,770					145,213
Minority / Corporate									
Print							80,114		80,114
Sport Spnsrshp						428,597			428,597
Total	1,720,339	989,160	185,537	97,155		428,597	80,114		3,500,901

### Lottery Media 1995-Revised

	<u>Television</u>	<u>Radio</u>	<u>Outdoor</u>	<u>Transit</u>	<u>C-Stores</u>	<u>Sports Sponsorships</u>	<u>Print/Trade</u>	<u>Other</u>	<u>Total</u>
Lotto	1,709,232	859,454	235,784	98,994					2,903,464
Quinto	46,237	17,513							63,750
Keno									-
Scratch	554,003	59,540	294,496	144,160	36,975				1,089,174
Minority / Corporate									
Print							32,501		32,501
Miscellaneous								196,155	196,155
Sports spnsrshp						193,236			193,236
Total	2,309,472	936,507	530,280	243,154	36,975	193,236	32,501	196,155	4,478,280

### Change 95 vs 94

Total	589,133	(52,653)	344,743	145,999	36,975	(235,361)	(47,613)	196,155	977,379
	34.2%	-5.3%	185.8%	150.3%	n/a	-54.9%	-59.4%	n/a	27.9%
Lotto	320,748	347,536	130,691	66,609	-	-	-	-	865,584
	23.1%	67.9%	124.4%	205.7%					42.5%

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**SUMMARY OF PUBLICLY FUNDED  
PROBLEM GAMBLING EFFORTS  
ACROSS THE NATION**

**Appendix 9**

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Summary of publicly funded problem gaming efforts across the nation

State	Program Description										Budget	
	Statewide Toll-free hotline	Hotline number on Lottery tickets	Training	Public education/awareness	Outpatient treatment services	Adolescent prevention programs	Prevalency studies	Council affiliate support	Payroll insert for state employees	Enforcement programs		Unspecified
Connecticut					x							surcharge against gaming establishments (greyhound tracks, teletheatre, jai alai frontons)
Delaware								x				portion of the Lottery advertising budget
Florida	x											\$99,000 from the Lottery advertising budget
Georgia	x		x									funding from the Lottery as established in Lottery enabling legislation
Indiana											x	\$ .10 from riverboat admission tax to go toward state Div. of Mental Health
Iowa	x		x	x	x							\$250,000 appropriation from general fund
Maryland	x	x										\$22,000 annual contract with State
Massachusetts					x			x				\$230,000 provided to hotline (\$35,000) and outpatient services (\$195,000)
Minnesota	x	x	x	x	x	x	x					\$1.9 million from state
Missouri											x	small % of riverboat revenue diverted to communities
Nebraska											x	1% of Lottery revenues for compulsive gambling programs
New Jersey	x		x	x				x	x			Fines levied against casinos (\$500k/yr) adm. through state contract
New York				x	x			x				\$400,000 general fund contribution
North Dakota	x			x								Fines assessed against gaming establishments
Ohio	x	x	x	x								Lottery supported activities
Oregon					x						x	6% of video poker sales
South Dakota				x	x							State and local support
Texas	x	x	x	x	x	x	x	x	x			\$2 million annually from state budget
Washington	x		x	x				x	x			\$60,000/yr from Gambling Commission and \$2,000/yr from Lottery for helpline

Source: Public policy implications: How Governments are addressing pathological gambling. April 28, 1994, National Council on Problem Gambling