Georgia Department of Audits and Accounts
Performance Audit Division
Greg S. Griffin, State Auditor
Leslie McGuire, Director

Requested Information on the Georgia Lottery Corporation

Why we did this review

This special examination of the Georgia Lottery Corporation (GLC) was requested by the Senate Appropriations Committee. The Committee requested that we:

- review the effectiveness of GLC's efforts to increase sales from existing games and provide recommendations on increasing revenues and transfers;
- provide recommendations on operational improvements in working with retailers and advertisers;
- evaluate the return on investment from awarding tickets as prizes as a Lottery practice and review the significance of tickets as prizes as revenue; and
- conduct a comparison with other states.

About the Georgia Lottery Corporation (GLC)

In 1992, Georgia voters approved a constitutional amendment authorizing the state to operate and regulate a lottery. In 1993, the Georgia Lottery for Education Act was approved, and GLC was created as a public corporation to oversee operations. As a public corporation, GLC is an instrumentality of the state, not a state agency.

GLC is charged with providing entertainment to the public, maximizing revenues, and ensuring that the lottery is operated with integrity and without political influence.

What we found

The Georgia Lottery continues to rank highly in many key areas. As of fiscal year 2015, it had the 2nd largest per capita traditional sales and the 6th largest traditional sales. Among state lotteries that offer only traditional lottery games, Georgia ranks 6th in total government transfers and 3rd in per capita government transfers.

While ticket sales have continued to grow over the past five years, growth is slowing when adjusted for inflation and population. The Georgia Lottery Corporation (GLC) is continually working to increase sales of existing games and expand offerings to players to keep sales high. Compared to lotteries of similar age, Georgia has not experienced the periods of sales declines seen in some states.

Sales drive the amount of money available to be transferred to the state for education. These funds have been used primarily to fund the state's voluntary pre-kindergarten program and the state's college tuition assistance program (known as the HOPE scholarship program). Transfers have had sustained growth over the years. In fiscal year 2014, GLC returned $945 million to the state for education. The amount increased to $981 million in fiscal year 2015 and to $1.097 billion in fiscal year 2016. When adjusted for inflation and population growth, transfers to the state have declined since a peak in fiscal year 2000; however, transfers for fiscal year 2015 and 2016 are trending upwards.

A review of sales, revenues, and transfers identified several areas where GLC could improve the information it is using to manage operations and inform decision making. We found potential issues with a GLC-commissioned study intended to identify an optimal prize payout rate, which is necessary for maximizing transfers. If the rate is below optimal, there is additional opportunity to increase sales and profits by increasing the rate; conversely, if the rate is above optimal, expenses erode profit and the rate should be reduced. GLC did not properly vet the study results.

Documentation of the study results showed several of the key variables used to identify the optimal prize payout rate were not statistically significant. This issue should have been explored further.

A review of operations found that GLC's contract periods with gaming vendors are the longest in the nation at 22 years. The most recent extension occurred in May 2016 for the instant game contractor and October 2016 for the gaming system contractor; both are set to expire in 2025. GLC may benefit from re-bidding these contracts to determine whether additional services can be obtained or costs reduced.

A review of GLC's operations related to retailers found that Georgia is in line with or performing better than most other state lotteries. We found Georgia's retailer density is better than the average for other states. We surveyed a small sample of retailers and contacted industry organizations. While most respondents requested an increase in compensation, our analysis indicated that Georgia's compensation is comparable to other states. GLC has authority to increase retailer compensation but indicated it is not planning to make changes at this time.

With regard to advertising, Georgia's per capita expenses are higher than the average for other states. GLC has not determined if advertising expenditures are at the optimal level to maximize transfers.

Finally, the return on investment of free tickets as prizes cannot be assessed because information on the cost and the value players assign to these tickets is not collected. According to GLC, free tickets are used to provide players with a "winning experience" without incurring additional expense. However, there are expenses associated with providing free tickets; retailers are paid on gross sales, so 6% of the face value of free tickets is paid as sales commission to retailers. In addition, GLC's vendors are paid approximately 1% on free tickets. Our review found the use of free tickets would need to generate approximately $82 million in additional sales to cover the additional costs of free tickets. The value players place on free ticket prizes is unknown, so GLC cannot reliably determine the "return" or the extent to which the free tickets impact sales. There is currently no empirical research regarding the impact of offering free tickets in Georgia, which would be beneficial in determining where to set the optimal rate (i.e., the percentage of total tickets that are free ticket winners).

What we recommend

This report is intended to provide answers to questions posed by the Senate Appropriations Committee. In addition, we recommend GLC ensure future studies of the optimal prize payout rate are validated prior to being used to inform decisions on prize payout, given the critical nature of this rate. We also recommend consideration be given to studying the optimal rate for free tickets and rebidding contracts for gaming vendors instead of extending them. With regard to advertising, introducing advertising costs as a variable into the prize payout study may help GLC determine if it has already optimized its advertising spending.

In addition, we recommend that GLC collect information currently received through the player hotline to inform decisions regarding game development and/or marketing. Finally, should GLC consider changes to retailer compensation in the future, we recommend it evaluate the effect on the returns to the state before any adjustments are implemented.

See Appendix A for a detailed listing of recommendations.

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Purpose of the Special Examination

This review of the Georgia Lottery Corporation's (GLC) operations was conducted at the request of the Senate Appropriations Committee. Specifically, we were asked to:

- Review the effectiveness of GLC's efforts to increase sales from existing games and provide recommendations on increasing revenues and enhancing transfers;
- Provide recommendations on operational improvements in working with retailers and advertisers;
- Evaluate the return on investment from awarding tickets as prizes as a Lottery practice and review the significance of tickets as prizes as revenue; and
- Compare other state like-sized lottery's returns and expenses and provide legislative recommendations that could enhance transfers and/or improve operational efficiency.

A description of the objectives, scope, and methodology used in this review is included in Appendix B. A draft of the report was provided to GLC for its review, and pertinent responses were incorporated into the report.

Background

History

In 1992, Georgia voters approved a constitutional amendment authorizing the state to operate and regulate a lottery. In 1993, the Georgia Lottery for Education Act was approved, and the Georgia Lottery Corporation (GLC) was created to oversee state lottery operations. The first Georgia lottery tickets were sold on June 29, 1993.

GLC is charged with providing entertainment to the public, maximizing revenues, and ensuring that the lottery is operated with integrity and without political influence. According to state law, the net proceeds of the lottery are to be used to "support improvements and enhancements for educational purposes and programs." The Act specifically designates that the lottery's net proceeds are to be used to "supplement, not supplant, existing resources for educational purposes and programs."

The state's voluntary pre-kindergarten program and the state's college tuition assistance program (known as the HOPE scholarship program) have received the majority of lottery funds. Since its inception, the lottery has returned approximately $17.6 billion to the state.

Structure, Governance, and Legislative Oversight

The Lottery Act established a "public corporation" structure for lottery operations. As such, GLC is an instrumentality of the state but not a state agency. The Lottery Act also requires that GLC be self-funded. As a result, GLC does not receive an annual appropriation from the General Assembly for operating expenses; rather these

expenses are funded with revenue from ticket sales. The net proceeds from ticket sales are then remitted to the state.

The Act further provides that GLC be governed by a Board of Directors. The Board's seven members are appointed by the Governor and confirmed by the Senate to serve five-year terms. The Board's chair and vice chairpersons are elected by the Board.

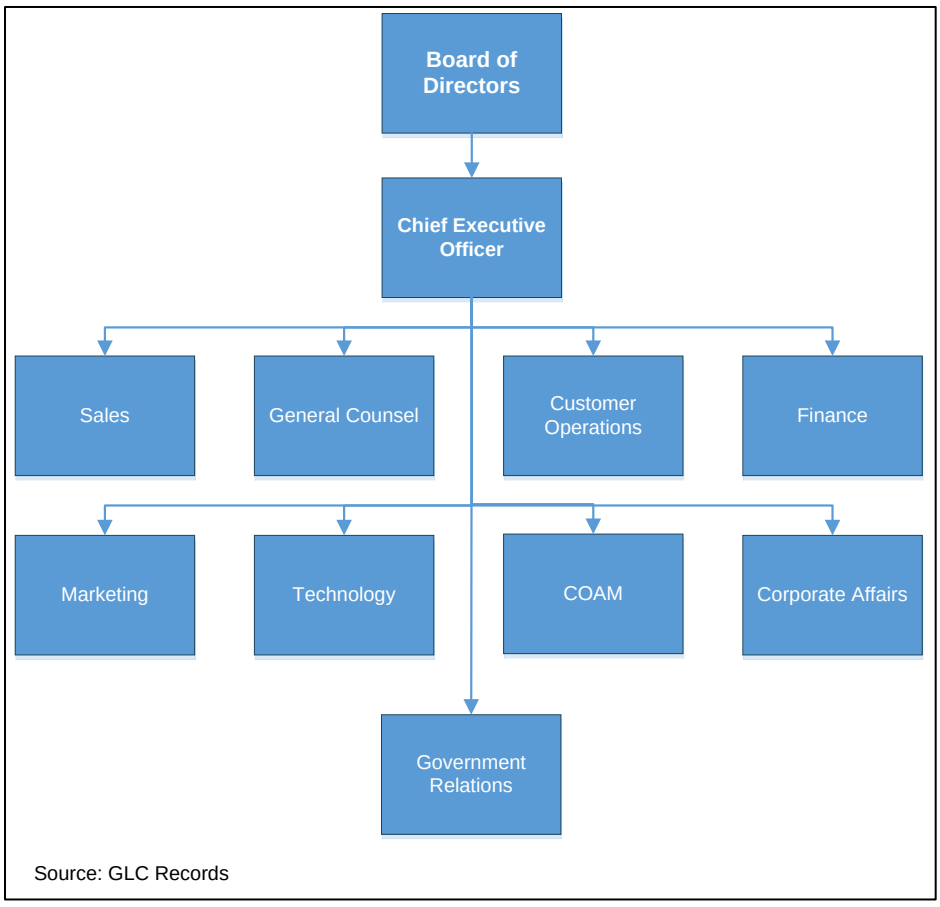
Legislative oversight is provided by the General Assembly's Lottery Corporation Legislative Oversight Committee. This committee is comprised of all members of the House Committee on Regulated Industries and all members of the Senate Economic Development Committee.

Organization and Operations

GLC's daily operations are managed by a Chief Executive Officer (CEO) appointed by the Board of Directors. The Act charges the CEO with a broad range of powers and duties, including administering the lottery, employing personnel, entering into contracts, preparing a budget, and submitting quarterly reports to the Board, the State Accounting Office, and the State Auditor's Office.

GLC is headquartered in Atlanta. It has approximately 348 full-time employees and 9 divisions (see **Exhibit 1**). There are eight district sales offices throughout the state.

Exhibit 1
GLC Organizational Structure



Source: GLC Records

Games

Lottery games include draw games and instant games. Draw games (also known as on-line games) use a computer terminal network that players access via a local retail store. Draw games include numbers games, *KENO!*, and lotto-style games. As shown in **Exhibit 2**, draw games may be multi-state games (e.g., *Mega Millions* and *Powerball*) or specific to Georgia (e.g., *Cash 4* and *All or Nothing*). Instant games (also known as scratchers) are ticket games that require a player to remove a latex coating to determine if the ticket is a winner. Instant tickets are available at the $1, $2, $3, $5, $10, $20, $25, and $30 price point. As of November 2016, GLC offers 8 Georgia draw games, 3 multi-state draw games, and approximately 67 varieties of instant games.

Exhibit 2
Draw and Instant Games, 2016

Source: GLC Website

Responsibility for oversight of Coin Operated Amusement Machine (COAM) games moved to GLC from the Department of Revenue in 2013. COAMs include various types of machines that provide amusement or entertainment to players for payment and whose operation depends in whole or in part upon the skill of the player (e.g., pinball machines, video games, crane machines, etc.). COAMs must require some level of skill (not based entirely on chance) and may not reward players with cash or other prohibited items.

Gaming Contracts

GLC contracts with Scientific Games for printing, warehousing, and distribution of instant game tickets. Scientific Games also provides marketing services, including game development, ticket design, focus group testing, and sales data and trend

analysis. The original contract was awarded following a 2002 request for proposal process. The contract has been extended multiple times since then, with a current expiration date of 2025. Currently, the base compensation is equal to 0.99% of tickets produced under the agreement and activated for sale and 1.3% of ticket sales greater than $2.6 billion per year. In fiscal year 2016, Scientific Game's base compensation was $32.2 million.

International Game Technology (IGT) provides GLC with a centralized gaming system that manages ticket transactions from shipping of instant games (or purchase, for draw games) to prize claim. The system is required to support up to 10,000 terminals in real time. IGT also provides a retailer hotline to address retailer issues as well as systems for managing retailer information and billing. The original contract was awarded following a 2002 request for proposal process. The contract has been extended multiple time since then, with a current expiration date of 2025. Base compensation is equal to 0.999% of net ticket sales effective September 2016 (prior to this, it was equal to 1.15% of net ticket sales). In fiscal year 2016, IGT's base compensation was $48.4 million.

Lottery Sales and Proceeds

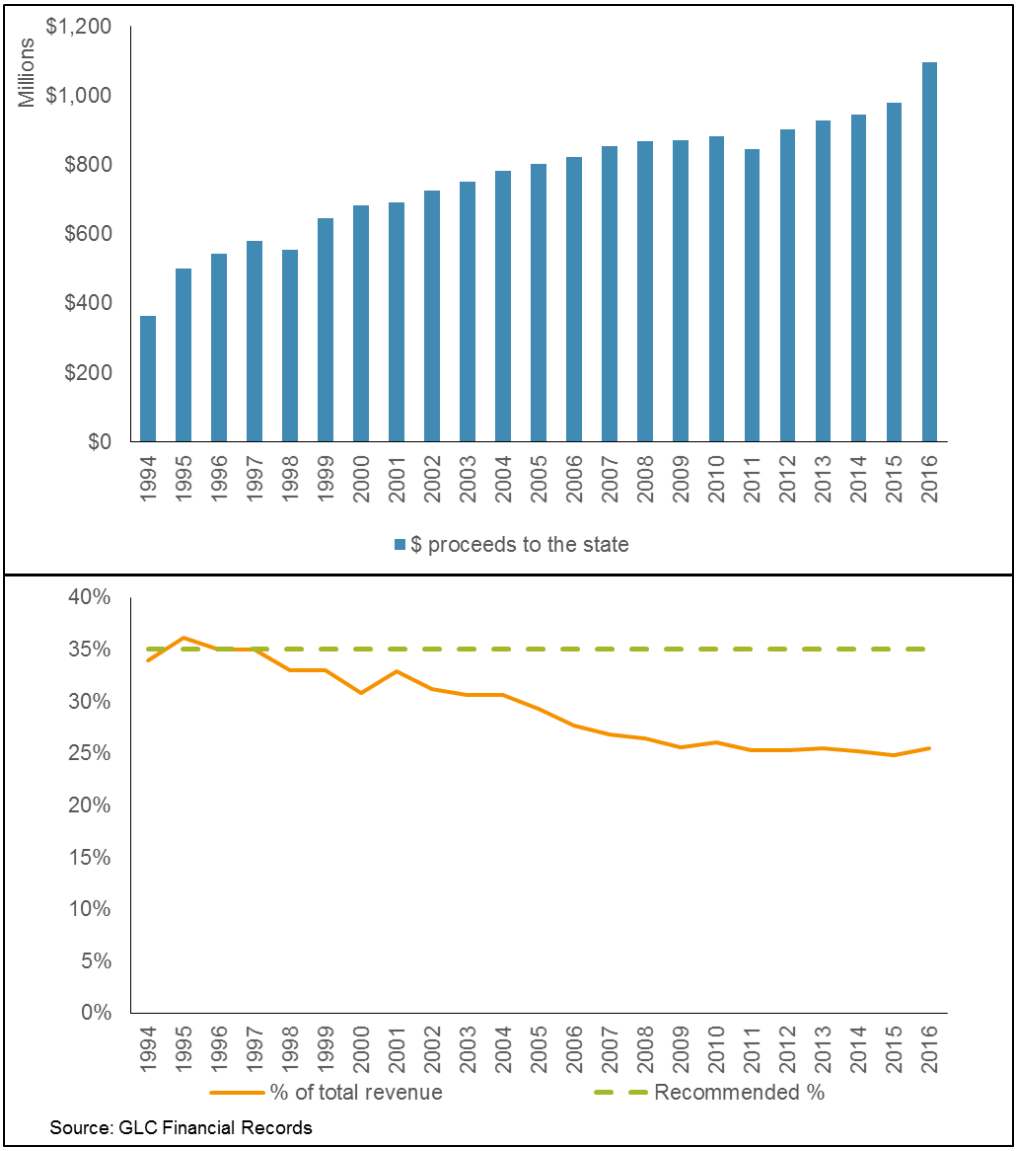
Since the lottery's inception, net ticket sales have increased steadily from $1.1 billion in fiscal year 1994 to $4.3 billion in fiscal year 2016. Ticket sales grew by 4.3% from fiscal year 2014 to 2015 and by 8.6% from fiscal year 2015 to 2016. Sales have increased every year since inception, with the exception of 2001, 2010, and 2011.

As of July 2016, there were approximately 8,600 retailers selling Georgia lottery tickets. In fiscal year 2015, retailer sales were estimated at $4.18 billion. GLC also sells lottery tickets through its own locations, the official Georgia Lottery mobile application, and its website. Physical locations include two at Atlanta Hartsfield-Jackson International Airport and kiosks located at the headquarters office and the eight district offices. In fiscal year 2015, GLC sales of lottery tickets accounted for $12.8 million (.3%).

Pursuant to O.C.G.A. §50-27-2, the net proceeds of lottery games are used "to supplement, not supplant, existing resources for educational purposes and program." The majority of net proceeds are used to fund the Georgia HOPE scholarship program and pre-kindergarten programs. **Exhibit 3** shows historical net proceeds remitted to the state by GLC each year since the lottery's inception, as well as the percent of total proceeds remitted to the state. Net proceeds to the state have increased every year since 1994, except for 1998 and 2011.

The language in the Lottery for Education Act is somewhat ambiguous regarding the amount of lottery proceeds expected to be transferred to the state. The Act provides that GLC should "as nearly as practical" remit "at least 35%" of lottery proceeds to the state annually and also requires that the Lottery be operated in a manner that "maximizes revenues." In 11 of the last 18 years, the percentage remitted has decreased. However, the dollar amount transferred has increased over time. In fiscal year 2016, GLC remitted $1.097 billion, or 25.5% of lottery proceeds to the state.

Exhibit 3
Dollars Remitted to the State has Increased,
Percentage has Stayed Below 35%, 1994-2016



Source: GLC Financial Records

Revenues and Expenses

As shown in **Exhibit 4,** in fiscal year 2016, GLC had net ticket sales of approximately $4.25 billion. In addition to ticket sales, GLC had other income of $51 million that was related to retailer fees and COAM fees.[1]

In the same year, GLC's largest expense was prize payouts to lottery winners (approximately $2.75 billion). Prizes represented the largest operating expense in fiscal years 2014-2016, accounting for approximately 86% in each year. Prizes also accounted for approximately 64% of the net operating revenue in each of the three years. Unclaimed prizes accounted for $43 million in fiscal year 2016. This amount is included in the "Prizes" expense line item and represented 1.6% of that expense in fiscal year 2016.

Administrative expenses, defined in statute as total operating expenses minus prizes, were $456 million in fiscal year 2016. They represented 14.2% of total operating expenses and 10.6% of net operating revenue. The largest component of administrative expenses is retailer commissions, which are set by statute. In fiscal year 2016, GLC's payments for retailer commissions accounted for 59.3% of its administrative expenses ($271 million of $456 million).

In fiscal year 2016, GLC's second largest administrative expense was for contractor fees for services such as gaming system management and ticket printing. This expense accounted for approximately 21.8% ($100 million of $456 million) of its administrative expenses. Fees for the two primary gaming contractors are set as a percentage of ticket sales, so an increase in sales will increase these expenses.

Other operating expenses included salaries, benefits, advertising, and marketing. Personnel costs, including salaries, benefits, and bonuses, accounted for 7.0% of the administrative expenses ($32 million of $456 million) and 1.0% of total operating expenses ($32 million of $3.2 billion). Advertising expenses accounted for 6.6% of the administrative expenses ($30 million of $456 million) and less than 1% of total operating expenses ($30 million of $3.2 billion).

GLC transferred net proceeds of $1.097 billion to the Lottery for Education Account in fiscal year 2016. Remittances to the state have increased year over year, with a 3.7% increase from fiscal year 2014 to 2015 and an 11.9% increase from fiscal year 2015 to 2016.

[1] COAM owners and operators must pay fees to GLC to obtain various licenses and permits. Additionally, GLC receives a percentage of net receipts for certain types of machines. These machines are linked to a central terminal that tracks game play and determines the amount to be remitted to the state. COAM revenues are considered lottery proceeds, used to fund HOPE and pre-kindergarten.

Exhibit 4
Ticket Sales and Remittances to Lottery for Education have Increased
Fiscal Years 2014-2016

	Fiscal Year		
	2014	**2015**	**2016**
Operating Revenues			
Ticket Sales	4,022,201,000	4,195,151,000	4,555,890,000
Less: Free Tickets	(282,279,000)	(291,684,000)	(307,960,000)
Net Ticket Sales	3,739,922,000	3,903,467,000	4,247,930,000
Retailer Fees	4,276,000	4,216,000	3,888,000
COAM Fees[1]	10,190,000	15,270,000	47,130,000
Other	77,000	69,000	76,000
Net Operating Revenue	3,754,465,000	3,923,022,000	4,299,024,000
Operating Expenses			
Prizes	2,413,844,000	2,528,871,000	2,745,570,000
Retailer Commissions	239,322,000	249,008,000	270,670,000
Contractor Fees	76,390,000	85,948,000	99,579,000
Advertising	19,563,000	31,868,000[2]	30,115,000
Salaries and Benefits	25,923,000	28,347,000	32,373,000
Retailer Merchandising & Marketing	19,532,000	6,401,000[2]	8,008,000
Other	13,086,000	14,170,000	15,380,000
Total Operating Expenses	2,807,660,000	2,944,613,000	3,201,695,000
Nonoperating Revenues (Expenses)			
Remittances to Lottery for Education	(945,097,000)	(980,501,000)	(1,097,567,000)
Other[3]	(3,601,000)	(420,000)	9,722,000
Total Nonoperating Revenues (Expenses)	(948,698,000)	(980,921,000)	(1,087,845,000)

[1] COAM revenue increases are attributed to implementation of a centralized accounting system, an increase in licensing revenues, and an increase in fees from fines and penalties.
[2] In fiscal year 2015, expenses from "Retailer Merchandising and Marketing" were moved to "Advertising". These adjustments were restated in GLC's fiscal year 2016 financial statement.
[3] Increase is due to an increase in the value of investments.
Source: GLC records

Other States

As of fiscal year 2015, 44 states operated a lottery. Six of the 44 are organized as corporations like Georgia, including Connecticut, Kentucky, Louisiana, New Mexico, Tennessee, and Wyoming. In the southeast, the following states operate a lottery: Florida, Kentucky, Louisiana, North Carolina, South Carolina, Tennessee, and Virginia.

We used all 44 states for comparison purposes when possible. We also selected 11 states for more detailed review. States were selected based on traditional sales, sales per capita, government transfers, transfers per capita, region, and population. The 11 selected were: Connecticut, Florida, Kentucky, Massachusetts, Michigan, New Jersey, North Carolina, Pennsylvania, South Carolina, Tennessee, and Virginia.

Of the 44 states, 9 offer additional forms of gambling, such as video lottery terminals and casino gambling. Where applicable, we have excluded them as necessary. We did not evaluate the impact of these additional types of gambling on lottery sales. When compared to other states that offer a lottery, Georgia has the:

- 6th largest traditional sales total
- 6th largest government transfers total among state lotteries that offer only traditional lottery games
- 3rd largest per capita government transfers among state lotteries that offer only traditional lottery games
- 2nd highest per capita traditional sales
- 12th highest prizes as a percentage of traditional sales
- 35th oldest lottery
- 10th highest retailer density

Data Source

Our primary source for data on other states was La Fleur's World Lottery Almanac, 2016 edition, which contains data on all world lotteries and is considered an authoritative source for this type of data. The data is compiled from surveys the organization sends to all lottery organizations. It is self-reported data. La Fleur's reports data on start-up history, a guide to product mix, and government profits earmarking. Each of the 44 states that has a lottery is profiled in La Fleur's. The state profiles compare current year to prior year results for sales by game and price point. The profiles also contain information on advertising and retailers. The data is considered proprietary.

Requested Information

Sales, Revenues and Transfers

To address the committee's question about how effective GLC has been at increasing sales from existing games and how GLC could increase revenues and enhance transfers, we analyzed both revenues and expenses because both impact transfers to the state. As discussed in the following findings, we analyzed revenues by reviewing GLC's current sales trends and its efforts to increase sales and compared those to efforts in other states. We analyzed expenses by assessing overall operating expenses and administrative expenses (including contracts and personnel expenses) and compared these expenses to those of other states. We also evaluated how GLC determines the prize payout rate, as this is the largest expense and, according to GLC staff, the primary driver of ticket sales. As such, it is critical to maximizing transfers to the state for education.

Finally, we identified additional issues and made recommendations related to operations that, while not directly impacting returns to the state, impact the efficiency and effectiveness of GLC's day-to-day operations.

It should be noted that we did not evaluate methods for increasing lottery sales through other types of gaming. Before considering introduction of other types of gaming, additional analysis would be necessary to determine the impact of the change. There is evidence to suggest that the introduction of other types of gaming could erode lottery ticket sales.

While GLC's nominal sales are growing, sales growth is slowing when adjusted for inflation and population growth.

GLC tracks sales year over year and reports growth in recent years. In fiscal year 2014, net ticket sales grew 2.9% over the prior year; the growth continued in fiscal year 2015, at a rate of 4.4% over the prior year. In fiscal year 2016, net ticket sales grew 8.8%. These increases reflect nominal growth.

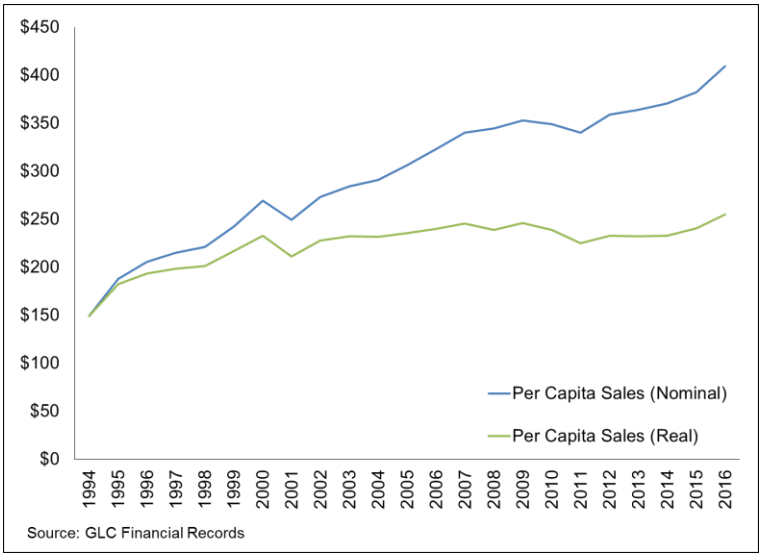
Nominal: value of the product at the time it was produced

Real: value of the product adjusted for inflation

Because of the changing value of the dollar over time, nominal year-to-year comparisons are not comparisons of equivalent units. Nominal sales figures are affected by inflation, which impacts both a player's perception of the value of a dollar and the purchasing power of the revenue received from these sales. Nominal sales may also be impacted by population growth in Georgia. As more people move into the state, potentially more players become available and sales increase. Moving to a per capita analysis also allows for a more accurate comparison to other states. Adjustments for inflation and population growth are intended to ensure that observed changes in sales are not due to artificial changes in purchasing power or population.

We analyzed real, per capita growth over time to assess GLC's sales trends. As shown in **Exhibit 5**, when adjusted for inflation and population change, sales growth has slowed, with percentage changes in sales trending lower now than in the past. In addition, more years show annual declines in sales when the series is adjusted for inflation and population.

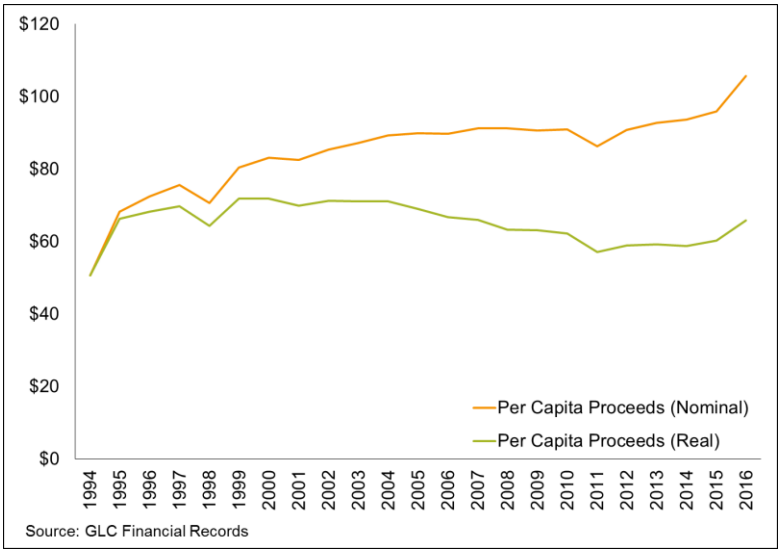
Exhibit 5
When Adjusted for Inflation and Population, Sales Growth has Slowed, 1994-2016



Ticket sales drive the amount available to be transferred to the state. Nominally, transfers to the state have been growing over time. For example, in fiscal year 2014 GLC returned $945 million. In fiscal year 2015, this amount increased to $981 million and in fiscal year 2016, it increased again to $1.097 billion. However, as shown in **Exhibit 6**, when adjusted for inflation and population growth, transfers to the state have declined since a peak in fiscal year 2000.

Overall, sales still show a positive growth trend. While transfers to education show an overall decrease since 2000, transfers for fiscal years 2015 and 2016 are trending upwards.

Exhibit 6
When Adjusted for Inflation and Population, Transfers have Declined Since 2000



When a product is introduced, it is not unusual to see high rates of growth initially, and it is not unusual to see that growth slow over time. We analyzed real per capita sales trends in 22 other states to determine if Georgia's pattern of slowing sales growth was typical. While there is not a single pattern that all states follow, Georgia's is not unusual compared to state lotteries of similar age.[2] In 11 of 22 states we reviewed, there was a pattern of continued growth during the first 1 to 16 years after their lotteries were introduced; growth then slowed or declined. We also saw periods of decline in other states (lasting from one to nine years). While Georgia's real per capita sales declined in six years (2001, 2004, 2008, 2010, 2011 and 2013), it has not shown a sustained period of decline.

In fiscal year 2015, Georgia ranked 2nd of 44 in per capita net sales (see **Exhibit 7**). During the same year, it ranked 3rd in per capita net proceeds returned to the state.[3]

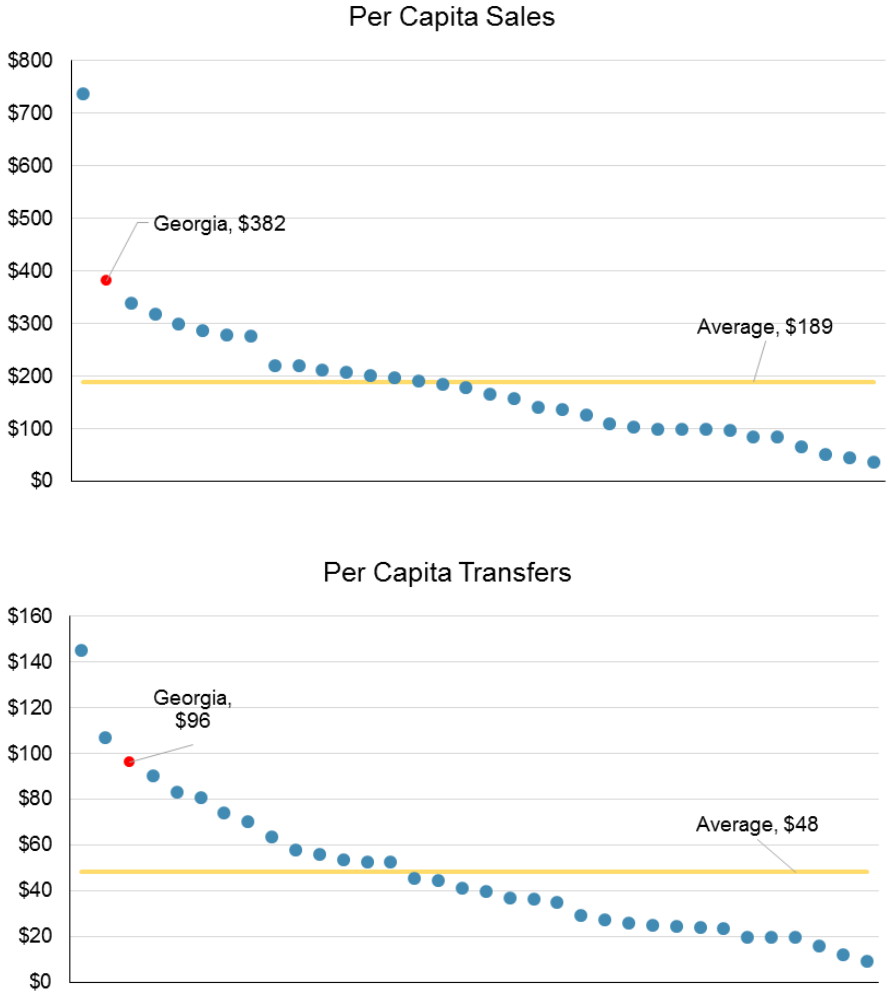
Other states that experienced a period of decline have, in some cases, rebounded to have an increase in sales. For example, Florida experienced a decline in sales through the 1990's (in real per capita dollars); it has rebounded in the last five years to see significant growth. A recent performance audit by Florida's Office of Program Policy Analysis and Government Accountability found Florida had taken steps to increase sales such as introducing higher priced games, families of games, and "one off" options.[4] Georgia has already taken these same actions as well as others, which are discussed in the following finding starting on page 14.

[2] We identified 22 other state lotteries of similar age (defined as starting between 1983 and 2003, 10 years either side of Georgia's 1993 start date).

[3] We identified 34 states for comparison on net proceeds returned. The remaining 10 states offer additional forms of gambling (e.g., casinos, horse racing, and casinos) or did not report returns to the state.

[4] If players' ticket numbers are one digit off the winning numbers, they can still win a prize.

Exhibit 7
Georgia Ranks High in Per Capita Sales and Per Capita Transfers[1]
Fiscal Year 2015

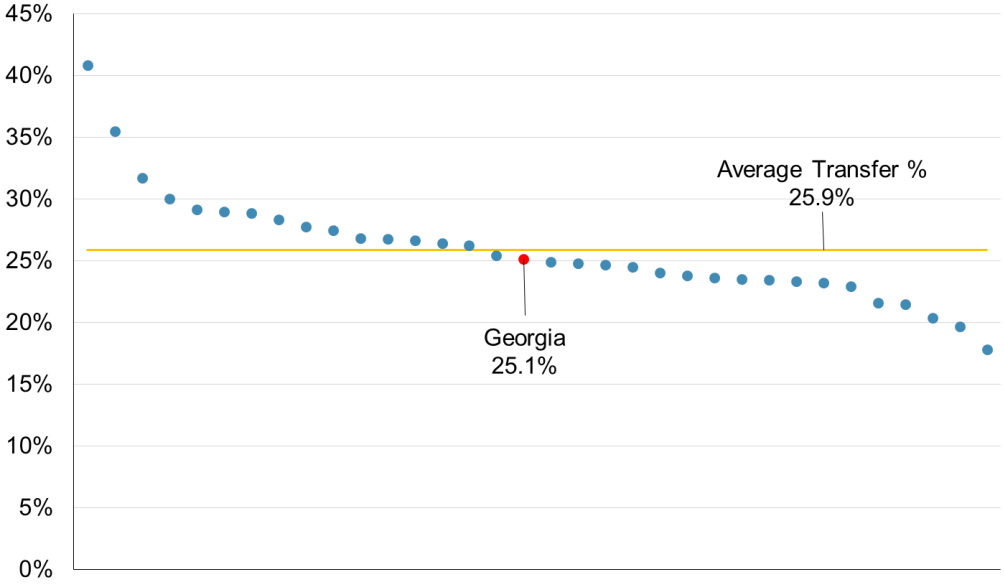


[1]Graphs exclude lotteries that receive revenue from other gambling sources, such as video lottery terminals or casinos. Wyoming was also excluded because it did not report any transfers for fiscal year 2015.

Source: 2016 La Fleur's World Lottery Almanac

In fiscal year 2015, Georgia ranked 17th of 34 lotteries in percent of lottery sales revenue returned to the state.[5] As shown in **Exhibit 8**, Georgia returned 25.1% of sales to the state, slightly below the average of 25.9%.

Exhibit 8
Georgia Ranks Near the Average in the Percent Returned to the State[1]
Fiscal Year 2015



[1]Graph excludes nine states with government transfers that include nontraditional lottery sales. It also excludes Wyoming, which started its lottery in FY2015 and did not report any transfers.

Source: La Fleur's 2016 World Lottery Almanac

GLC's Response: *GLC indicated it believes that inflation is not a relevant variable in this analysis since the GLC cannot raise ticket prices beyond the face value that existed in 2000. The price of a $1 ticket in 2000 is still $1 in 2015 and did not increase to an inflation adjusted price of $1.38." It also indicated that to assess the effect of inflation, one must "evaluate its impact on the fixed set of products that existed at the onset of the analysis." GLC indicated the percentage return to the state is affected by the product mix which is driven by market demand.*

Auditor's Response: *Inflation is a relevant variable; it allows the state to determine whether a higher reported nominal value now represents an improvement over a prior period given that the value of the dollar has changed over time. For example, $1 billion dollars returned to the state in 2015 does not go as far as $1 billion returned in 1994 due to the general rise in prices in the broader economy. We do not dispute that the product mix has changed over time and potentially added to the increase in nominal sales; however, nominal sales still need to be adjusted to allow for accurate comparison over time. Removing inflation and population as factors impacting sales and returns allows GLC to more accurately identify the drivers it can control.*

[5] 34 states were used for this comparison; the remaining 10 states offer additional forms of gambling (e.g., casinos, horse racing, and casinos) or did not report returns to the state.

GLC is taking action designed to increase sales.

According to staff, GLC is taking steps to increase sales. It has focused on game development, such as increasing the number of games available and the variety of these games (e.g., style of play and price point), as well as enhancing the players' experience. All of these approaches were identified by GLC and other states as effective strategies to increase sales. According to staff, GLC assesses proposals for new games or initiatives by determining whether implementation would help GLC reach new players, reach a sales goal, or improve security. Projects are ranked based on this assessment, and the highest ranked projects are given priority. Game development and player experience are discussed in more detail below.

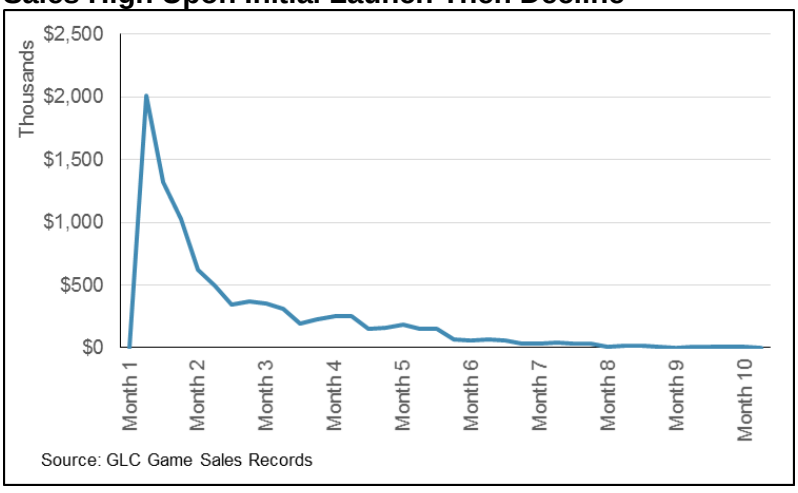
Game Development

According to GLC staff, frequently launching new games helps drive sales because variety appeals to players. GLC has worked to keep multiple varied game offerings on the market. In fiscal year 2014, it launched 57 new games; in fiscal year 2015, 54 games were launched. The lifecycle of games is short; 129 of 213 games (61%) we analyzed were sold for less than a year. Additionally, GLC offers seasonal games such as holiday- or sports-themed games with lifespans of approximately three months.

GLC staff indicated that new games are identified by researching what has worked in the past that could be replicated, game characteristics or concepts that work well in other states that Georgia could emulate, and brainstorming new game concepts with the help of its instant ticket vendor. Consideration is given to the mix of games by price point and the life cycle of games. GLC also uses focus group testing and retailer panels to assess the appeal of new games.

We analyzed 213 new games launched between fiscal year 2011 and 2015 to evaluate the frequent launch strategy. As shown in **Exhibit 9**, our analysis found that generally sales are highest after the initial launch followed by a pattern of declining interest (i.e., a short lifecycle) over the 10 month period. This pattern suggests the practice of introducing new games is an effective method for managing sales. Of the 213 games analyzed, 17 (8%) did not have sales that followed this pattern.

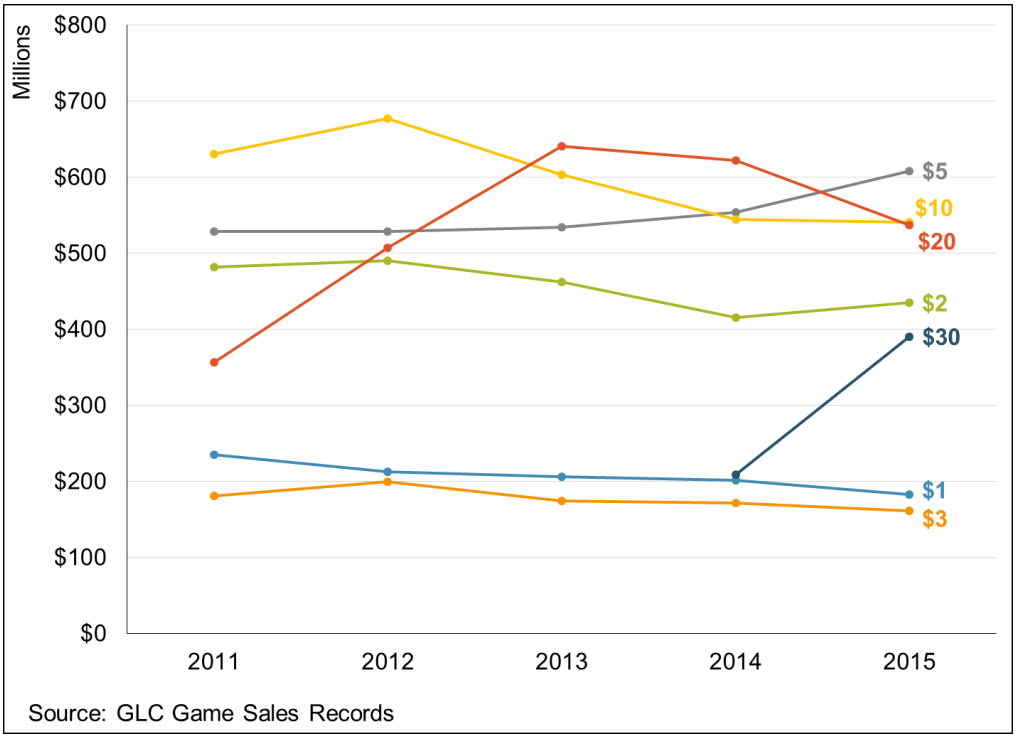
Exhibit 9
Example of Game Launch and Weekly Sales Over the Lifecycle, Sales High Upon Initial Launch Then Decline



GLC stated that its best-selling games such as Jumbo Bucks and X (times) the Money do not experience the same diminishing player interest. For example, when Millionaire Jumbo Bucks was introduced, it took approximately six months for sales to reach their peak; however, it experienced gradual sales decline and had a lifespan of over three years. The median value for the lifespan of all games was 42 weeks (approximately 10 months). GLC indicated it decides whether or not to continue (reorder) a game based on how sales compare to the average sales of other games at the same price point.

GLC has also introduced higher price point instant games to increase sales. In 2007, it introduced $20 instant game tickets and in 2014 introduced $30 instant game tickets. The inclusion of higher price point tickets is a general trend in the lottery industry. According to GLC, it has experienced incremental sales growth as a result of these higher priced ticket sales. It also noted the newer types of tickets have not cannibalized existing ticket sales. **Exhibit 10** shows the sales by ticket price point.

Exhibit 10
Instant Game Sales by Price Point, 2011-2015



Overall, the national trend, and the trend in Georgia, has been a change in player preference away from draw games and to instant games. Instant games have higher prize payout rates, so they have lower profit margins. In fiscal year 2015, GLC's product mix was 68.4% instant games and 31.6% draw games. GLC staff indicated that it has attempted to increase sales of draw games because these games offer higher profit margins. For example, GLC has added a one-off enhancement for Cash 3 and Cash 4 games, which allows players with numbers that are off by one from the winning number to win a prize. It has also introduced cross-promotional offers to link instant and draw games in an effort to increase draw game sales. An example of cross-

promotional efforts is the instant game versions of *Jumbo Bucks Lotto* and *Fantasy 5*, which offers a free ticket for the draw game as a prize in the instant game. Another example is *Five Card Cash*, introduced in April 2016, which offers players two chances to win on one ticket. The instant game component allows the player to immediately determine if he has won a prize, and there is an associated daily drawing where the player can match his card hand to win a prize.

Enhancing Player Experience

In addition to game development, GLC also indicated it focuses efforts on enhancing player experiences to improve sales. In 2008, GLC introduced the Players Club. Players can provide GLC with their email address and receive a daily email with winning draw numbers and monthly coupons (e.g., a buy-one get-one free offer). Members can also enter second chance drawings through the Players Club. For example, players of the *Mighty Jumbo Bucks* ($25 ticket) without a winning ticket can enter a drawing for a Kia Soul; *Ten Million Dollar Cash Spectacular* ($30 ticket) players without a winning ticket can enter a drawing for a ten million dollar prize; and *Let's Win This* ($3 ticket) players without a winning ticket can enter a drawing for a $20,000 home makeover or $500 gift cards from The Home Depot.

Members of the Players Club can also apply for an iHOPE Discover debit card which allows players to transfer funds to the card from their bank account. The iHOPE card can be used to purchase lottery tickets. Using the iHOPE card allows players access to additional on-line play opportunities such as Diggi games, which simulate instant games. Players can also buy draw game tickets on-line. Lottery winnings can be loaded back onto the card. It should also be noted that the iHOPE card is not limited to being used for purchasing lottery tickets; it can be used at any merchant that accepts the Discover card.

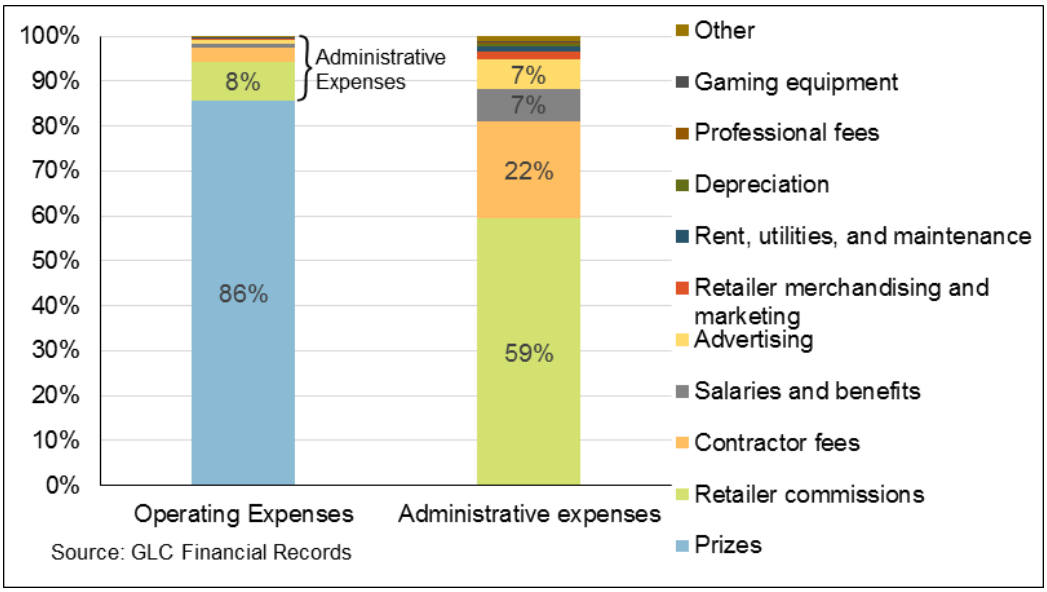
Other states

We reviewed strategies in 11 other states to compare their strategies to GLC's. Overall, we found many similarities among the states. For eight states that responded to our request for information, the average number of games introduced per year was 50, ranging from 34 to 85, where Georgia's was 54. The highest price point ticket offered in the 11 other states ranged from $10 to $30, with 7 states (64%) offering a $30 ticket. Michigan and Kentucky were the only other states we identified that offered games on their websites that simulate instant games (e.g., equivalent to GLC's Diggi games). Players clubs were also common across the other states we contacted, with eight states offering them. We did note one difference in that Georgia offers 11 draw games, which is more than the other 11 states, which offered between 6 and 10.

Operating expenses are primarily driven by prizes.

In fiscal year 2016, primary operating expenses are prizes ($2.75 billion), followed by retailer compensation ($271 million) and contracts with vendors ($100 million). Together, these three categories account for 97% of total operating expenses ($3.12 billion of $3.20 billion). Prizes, vendor compensation, and retailer compensation are all directly related to sales; as sales go up, so do these expenses. Personnel costs (salaries, bonuses, and benefits) represent 1% of operating expenses, and advertising costs make up another 1%. As shown in **Exhibit 11**, retailer compensation and contractor fees make up the largest portion of administrative expenses.

Exhibit 11
Prizes Make up the Largest Portion of Operating Expenses while Retailer Commissions Account for the Largest Portion of Administrative Expenses, Fiscal Year 2016



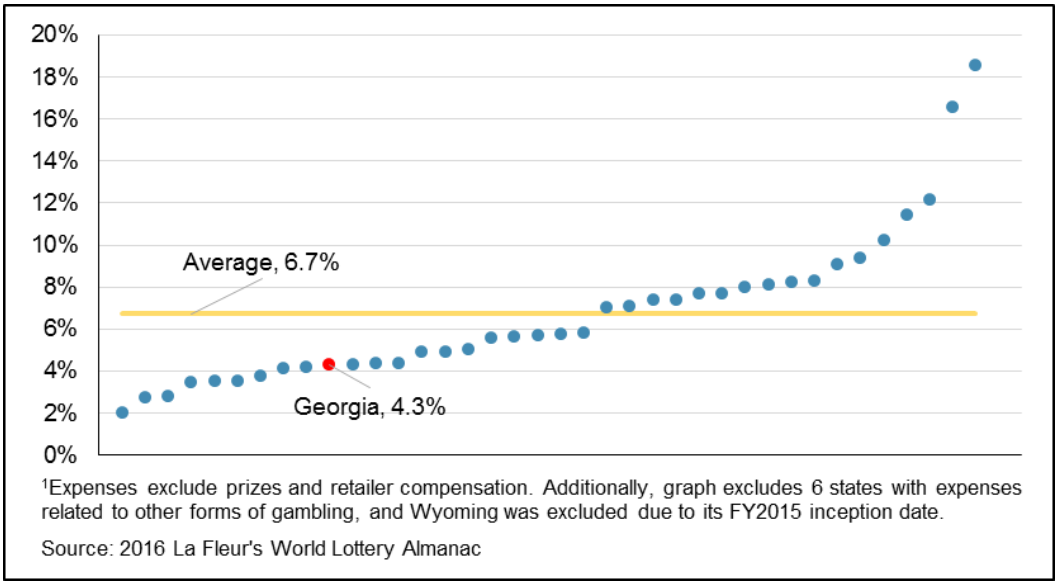
In fiscal year 2016, GLC's administrative expenses were approximately $456 million of its $3.20 billion (14.2%) in total operating expenses.

Administrative expenses are statutorily defined as operating expenses minus prizes.

The returns to the state are equal to net operating revenue minus operating expenses (which is made up of prizes and administrative expenses).[6] Because of the relative size of the administrative expenses, small changes to individual expense categories are unlikely to have significant impact on the amount or percentage returned to the state. The prize expense is the primary driver of operating expenses, and therefore, small changes in this category could have a significant impact on the bottom line. It should also be noted that changes in prize expenses (funds paid to players as prizes) could also impact lottery sales.

[6] Net operating revenue is gross ticket sales minus free ticket prizes plus other sources of revenue, including COAM revenue and retailer fees (see the Financial Section on page 6-7 for more detail).

Exhibit 12
Georgia Ranked 10th in Expenses as a Percentage of Net Sales Compared with Other States[1], Fiscal Year 2015



[1]Expenses exclude prizes and retailer compensation. Additionally, graph excludes 6 states with expenses related to other forms of gambling, and Wyoming was excluded due to its FY2015 inception date.

Source: 2016 La Fleur's World Lottery Almanac

GLC's expenses were comparable to other states. In fiscal year 2015, GLC's expenses, excluding prizes and retailer compensation, represented 4.27% of net sales, which ranks them 10th of 39 states (see **Exhibit 12**).[7]

The following findings, address prizes and administrative expenses, specifically contracts and employee compensation. Retailer compensation and advertising are discussed in subsequent sections beginning on pages 30 and 34, respectively.

GLC has elected to extend contracts with gaming vendors instead of rebidding them.

GLC has two primary gaming vendors, Scientific Games and IGT, currently under contract. Each is compensated based on a percentage of ticket sales. Both contracts were awarded following a request for proposal process in 2002. The original contract term for both vendors was seven years, from 2003 to 2010. Since then, neither contract has been rebid; rather, both have been extended three times. Both contracts are currently set to end in September 2025 (see **Exhibit 13**) resulting in a 22- year contract term.

GLC staff indicated that negotiating with the vendors directly has resulted in better rates under both contracts. Therefore, it believes rebidding the contract is an administrative exercise if the organization is not going to get a lower rate than can be achieved through negotiations. As shown in **Exhibit 13**, GLC did negotiate lower rates with each extension. However, there are items, such as ticket upgrades or additional equipment that are paid for outside the contract base rate. As a result, the impact of the negotiated lower contract rate is unclear. Additionally, because nominal sales have

[7] Georgia was compared to 39 states because, for five states, La Fleur's did not identify administrative expenses exclusive to traditional lottery sales. Because these five states offer additional types of gambling, the related administrative expenses are comprehensive and therefore not comparable to GLC.

increased over the period, lowering the percentage does not necessarily result in a lower payment overall.

Contract amendments have also expanded the scope of both contracts and provided for additional compensation without undergoing a formal bid process for the additional services. For example, in 2012, GLC and IGT signed an amendment that expanded the contract scope to include Interactive Voice Response (IVR) services, marketing services, a mobile app, and online lottery play. GLC pays IGT additional fees for each of the new services.

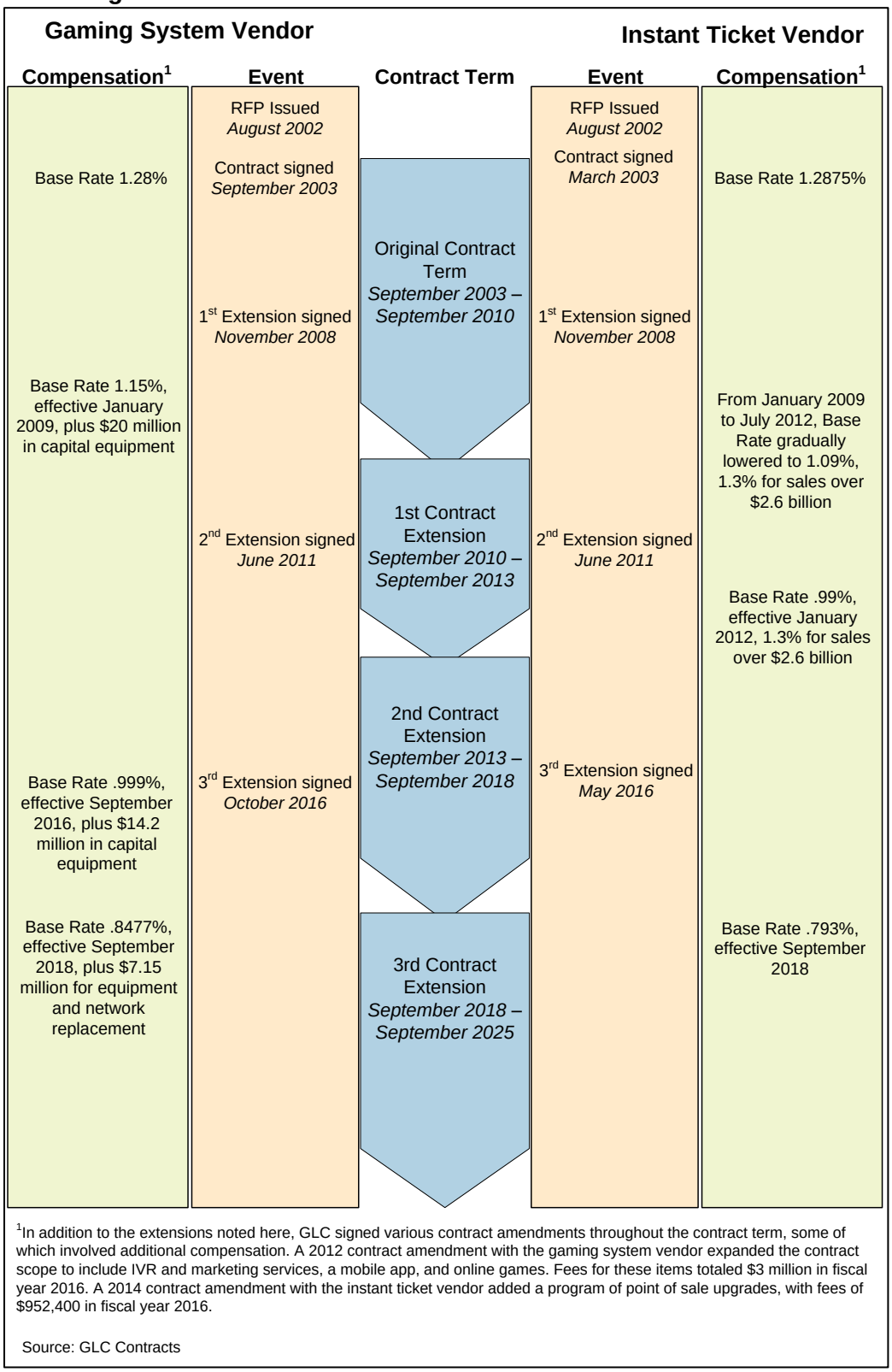
Currently, Scientific Games' base compensation is equal to 0.99% of tickets produced under the agreement and activated for sale and 1.3% of ticket sales greater than $2.6 billion per year. IGT's current base compensation is equal to 0.999% of net instant ticket sales and gross draw ticket sales. In fiscal year 2016, Scientific Games' base compensation amount was $32.2 million and IGT's was $48.4 million. Our review found that compensation based on sales was typical among other states.

We also reviewed expenditures from fiscal years 2014 to 2016 to determine how much was spent outside of the contracted rates for each vendor. There were significant amounts paid above the base contract rate. For example, the base amount for Scientific Games in fiscal year 2016 was $32.2 million; GLC paid an additional $8.0 million (25%) more for a sales program and game license fees.[8] For IGT, the base amount was $48.4 million, and GLC paid an additional $4.6 million (10%) for items such as an IVR system, equipment, and mobile services.

Because GLC is set up as a public corporation, and not as a state agency, it is not required to follow policies or regulations set by the Georgia Department of Administrative Services (DOAS). While not subject to DOAS polices, GLC's authorizing statute does state "Procedures adopted by the board shall be designed to allow the selection of proposals that provide the greatest long-term benefit to the state, the greatest integrity for the corporation, and the best service and products for the public." GLC does not currently have written policies or procedures adopted by the Board that address major procurements, which is defined by statute as having a value over $75,000. Additionally, GLC has an incomplete draft policy regarding contract initiation, execution, and maintenance. None of GLC's approved or draft policies specify how frequently contracts should be rebid (with the exception of blanket purchase orders, which are renegotiated annually).

[8] GLC pays license fees for certain games, such as Harley Davidson and Monopoly games.

Exhibit 13
Contracts Have Been Extended for a Total of 22 Years and are Based on a Percentage of Ticket Sales



[1]In addition to the extensions noted here, GLC signed various contract amendments throughout the contract term, some of which involved additional compensation. A 2012 contract amendment with the gaming system vendor expanded the contract scope to include IVR and marketing services, a mobile app, and online games. Fees for these items totaled $3 million in fiscal year 2016. A 2014 contract amendment with the instant ticket vendor added a program of point of sale upgrades, with fees of $952,400 in fiscal year 2016.

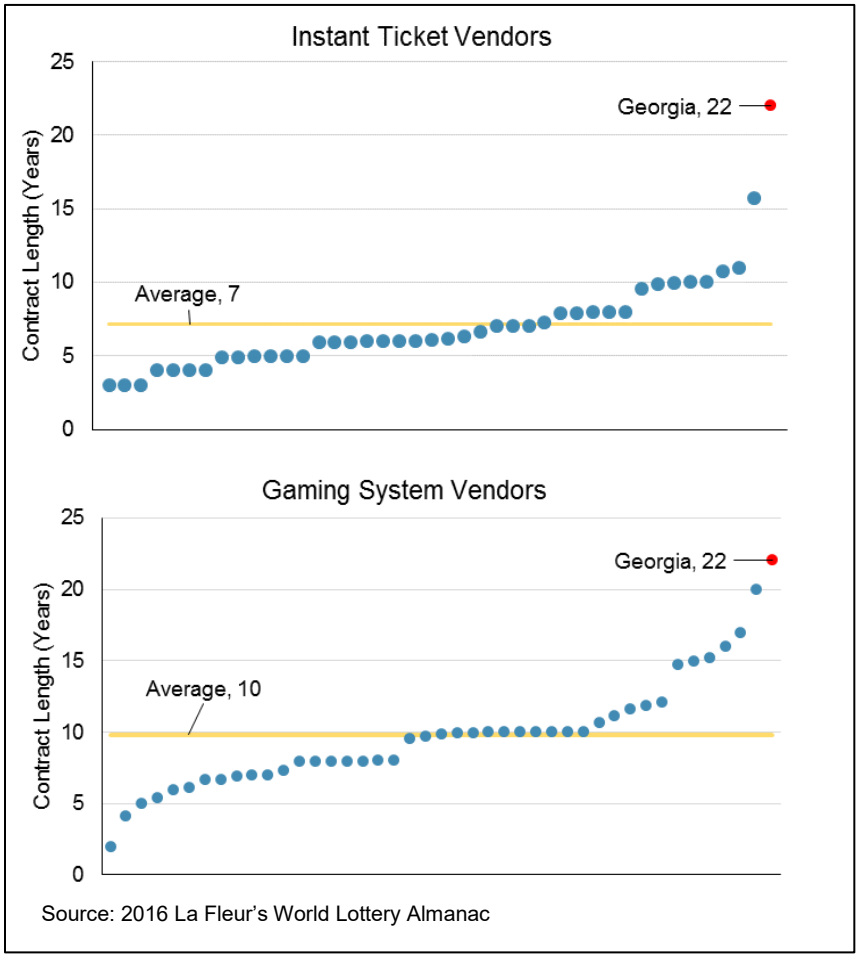
Source: GLC Contracts

Comparison with Other States

Using La Fleur's World Lottery Almanac, we attempted to compare GLC's contract rates to those in other states. However, the basis for the contracted rates varies from state to state (e.g., percentage of gross sales, versus a percentage of draw sales, versus a percentage of net sales, etc.). In addition, La Fleur's does not contain complete information on services provided by the vendors, so one is not able to determine whether the services are comparable across states. As a result, we were not able to determine whether other states' contracted rates included services for which GLC is paying out of pocket, or vice versa. So while it appears GLC has low rates compared to other states, verifying this fact would require obtaining and reviewing the contracts of all other states to control for the points noted above.

While GLC is not required to follow state procurement guidelines, policies set by DOAS and by the federal General Services Administration provide best practices for the length of time for a contract to be in place prior to being re-bid. Both indicate five years as the generally acceptable length for a contract. We also reviewed the length of contracts used by lotteries in other states and determined that Georgia's contract lengths were longer than all other states. As shown in **Exhibit 14**, the average contract length was 7 years for instant ticket vendors and 10 years for gaming system vendors. Georgia has the longest contract length for both types of vendors.

Exhibit 14
Georgia Has the Longest Contract Length Compared to Other States, Fiscal Year 2015



Source: 2016 La Fleur's World Lottery Almanac

RECOMMENDATIONS

1. GLC should establish a policy regarding major procurements, including bid frequency.

2. GLC should competitively bid the contracts for its gaming system and instant ticket services to ensure it is receiving the most competitive pricing and most advantageous services for the state.

GLC's Response: *GLC noted that it conducts "rigorous evaluations of contract proposals" prior to renegotiations. It indicated that "[u]sing national benchmarks, analyzing recent gaming contracts awarded in other lottery jurisdictions, calculating anticipated savings and evaluating market conditions are a few of the measures considered during the GLC's due diligence. In each negotiation, the GLC was prepared to send out an RFP if a more favorable agreement couldn't be renegotiated." GLC also estimated total savings for both contracts from fiscal year 2009 to 2025 at $352 million.*

Auditor's Response: *As acknowledged in the finding, GLC has lowered its base rate on these contracts. However, without rebidding the contracts in an open market, GLC cannot know whether it has gotten the best possible rate, goods, and services for the state. We were unable to validate GLC's estimated savings.*

GLC did not properly vet the study it commissioned on the prize payout rate.

The prize payout rate is the total prize expense divided by net ticket sales.

GLC's stated mission is to maximize revenues for HOPE and pre-kindergarten, which means maximizing returns to the state. GLC staff indicated, and other states' lottery personnel agreed, that higher prize payouts are the primary driver of higher sales, which in turn leads to a higher dollar amount returned to the state. For these reasons, identifying an optimal payout rate is critical. To identify the optimal prize payout rates for its games, GLC relies on private market research.[9] However, it has used this research in its decision making without properly vetting the study results. Our review found potential issues with the prize payout study conducted in 2013. In addition, our analyses indicate additional factors not included in the study, such as odds, may be impacting sales.[10]

If the target for the optimal prize payout is off, and the prize payout rate is a crucial driver of sales, GLC could be setting the payout rate higher or lower than the optimal rate and, as a result, missing the optimal profit maximizing point for the state. The prize payout rate has a significant impact on sales and returns to the state because it is the largest expense. For example, a 1% change in the prize payout rate represents $42.5 million in prize expense.

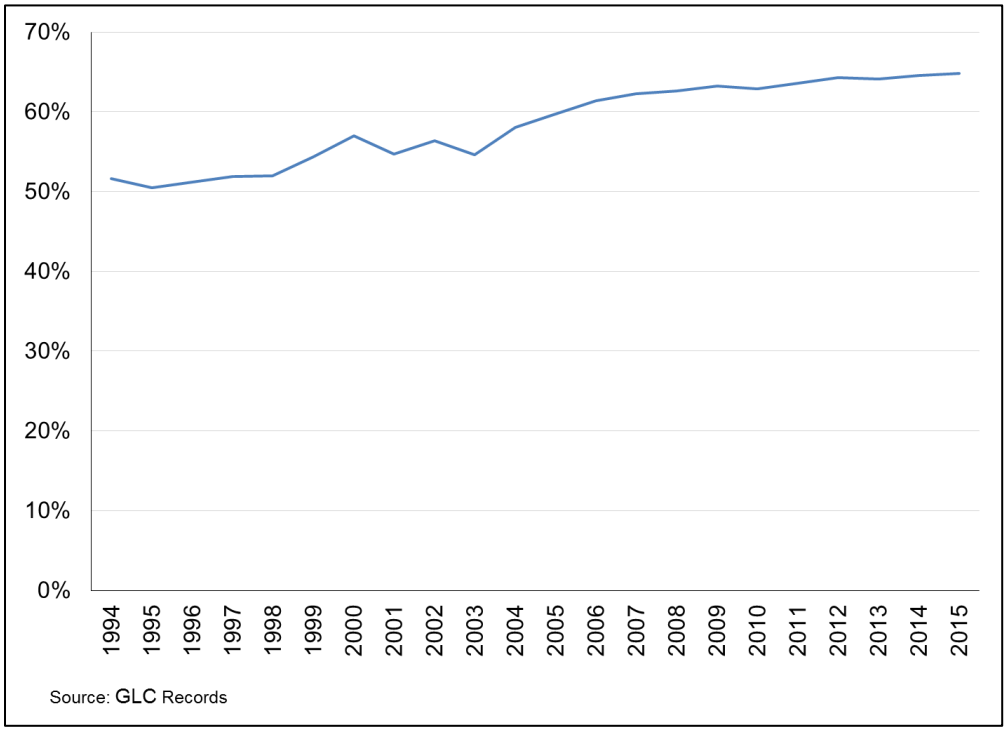
As shown in **Exhibit 15**, since the lottery's inception, the prize payout rate has increased from 51.6% in fiscal year 1994 to 64.8% in fiscal year 2015. By statute, GLC is directed to "as nearly as practical" pay out "at least 45%" of lottery proceeds in prize money. Increasing the percentage paid to players reduces the percentage available to cover operating costs and reduces the percentage available to return to the state for

[9] The prize payout study we reviewed was conducted in 2013. According to GLC, a new study was completed in November 2016. However, it was not available for review at the time of this review. The study is funded through an agreement with Scientific Games, who contracts with another firm for the actual analysis.

[10] According to GLC, odds has been included as a variable in the 2016 prize payout study.

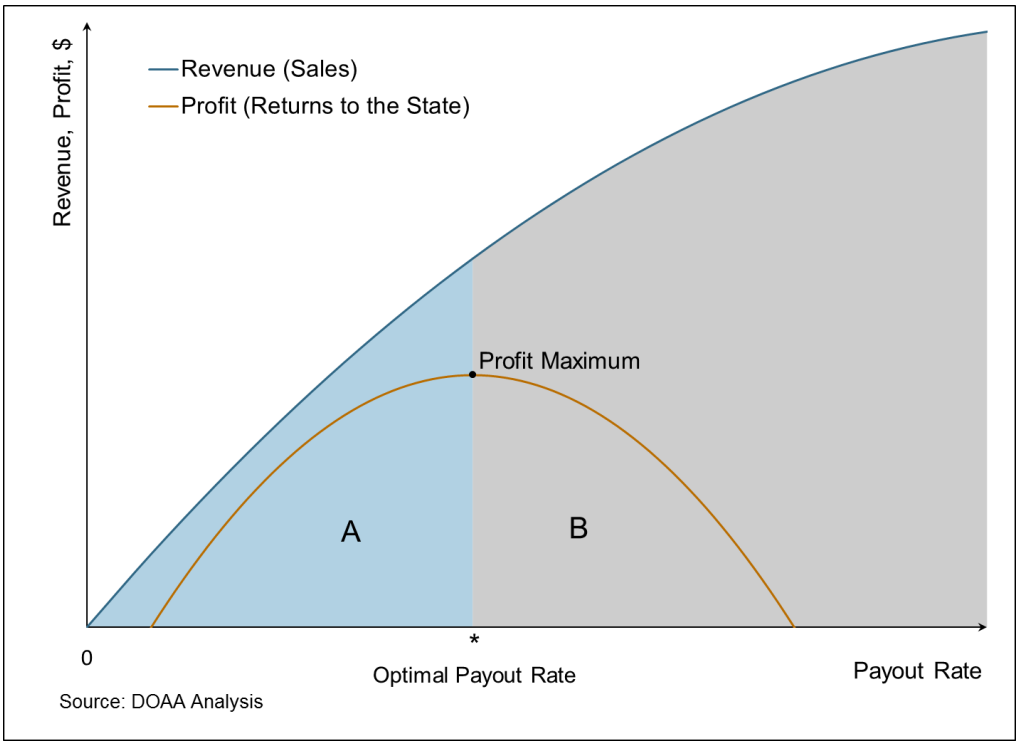
education. However, this scenario may be acceptable as long as increasing the prize payout rate generates sufficient additional sales to continue to increase the nominal dollar amount returned to the state.

Exhibit 15
Prize Payout Rate has Increased Over the Period, 1994-2015



There is also a point at which profits will begin to decline because the additional sales generated do not cover the additional expenses incurred and costs now exceed revenues. For example, as shown in **Exhibit 16**, if the prize payout rate is 100% – all revenue is paid out in prizes – sales will be very high; however, GLC would not be able to cover costs, and no funds would be returned to the state. Likewise, if the payout rate were 0%, no one would play, sales would decrease and no funds would be returned to the state.

Exhibit 16
Hypothetical Revenue and Profit Based on Prize Payout Rate



Following this theory, there is an optimal payout rate that maximizes profit. Even if an increase in payout rate always increases sales, those increases must be sufficient to cover the additional expenses of higher prizes and other costs, such as vendor and retailer fees. As shown in **Exhibit 16**, if GLC's current rate is below the optimal (within the ***A*** section of the graph), it should increase the prize payout rate to generate additional sales and profits. If its rate is above the optimal (shown as the ***B*** section of the graph), it should decrease the prize payout rate to reduce expenses and increase profits.

Identifying the Optimal Prize Payout Rate

To estimate the optimal prize payout rate, GLC has commissioned studies conducted by a subcontractor of a vendor. The 2013 study analyzed sales of individual instant games and how prize payout rate and other factors impacted sales.[11] It attempted to quantify the impact of changes to the payout rate on ticket sales and profit. The study states that, for example, a 1% increase in the payout rate should generate an additional $13.5 million in additional profit. Knowing this relationship allows GLC to identify

[11] Limiting the study in this way appears to be appropriate. Instant games represent 68% of lottery ticket sales. In addition, GLC does not have sole control over the prize payout rate for multi-state draw games (e.g., *Powerball* and *Mega Millions*). This leaves in-state draw games that are unique in terms of play style and various other factors that make the payout rate for those games potentially more unique to the individual game and therefore not worth the degree of work necessary to include them in the overall study.

where it is relative to the optimal point (see **Exhibit 16**). These points are discussed in the following sections.

About Statistical Analysis

Statistical models can isolate the relationship between a variable and an outcome, accounting for the fact that other variables may also contribute to the outcomes (i.e., there is a statistically significant relationship between the variable and the outcome). For example, a statistical model may be used to determine whether and to what degree more education results in higher salary.

Key variables need to be statistically significant to impact an outcome, which means there is a high probability that the estimated effect is correct, within the specified range. A non-significant result indicates that one cannot conclude that the effect is anything other than a chance finding.

Failure to account for additional relevant variables that contribute to an outcome can result in inaccurate results. For example, not accounting for area of the country in the previous example may lead to incorrect conclusions about the relationship between education level and income.

Study Development

GLC contracted for the 2013 prize payout rate study through its instant ticket vendor. However, consideration should be given to the fact that its vendors' incentives are not aligned with the state's. For vendors, points above the profit maximization point are beneficial because additional sales are generated and they are paid based on sales (see area ***B*** in **Exhibit 16**). However, for the state, points above the profit maximization point result in higher expenses that exceed the additional sales, reducing the returns to the state. As a steward of state funds, GLC has a responsibility to ensure the data upon which decisions are made is accurate and complete and not potentially compromised by such influences.

Study Reliability

Our review of the 2013 study found that 10 of the 12 key variables used in the model were not statistically significant.[12] As a result, it is possible that the changes in sales were a result of chance or other factors, and not necessarily because of changes in the payout rate. The relationships could also be indeterminate, which means that prize payout may not affect sales at all.

We also found the study omitted certain variables, such as odds, which could impact the results. In addition, the study did not remove the free ticket amounts from the total sales amount; therefore, the estimated profit maximizing point could be inaccurate. Finally, there is not one agreed upon way to define effective price, which is the only variable the study uses specifically to isolate how the payout rate impacts sales. While the model seeks to assess player behavior, the way it defines effective price may not reflect the way players see the price. There are other methods for defining effective price or for assessing players' view of the payout rate. It should be noted that we reviewed our analyses with an expert in statistics as it applies to economics, who corroborated our findings. We have shared our analysis with GLC.

Other states

Georgia's prize payout rate is in line with other states. The overall payout rate across all games averages 61% and ranges from 48% to 73%. Georgia is ranked 12th highest out of 44.

[12] In November 2016, a new study was completed; however, we were not provided the newer study because GLC indicated it was still in draft form.

Additional Factors Impacting Sales

We analyzed game sales to determine whether the prize payout rate was driving sales.[13] We found that, while payout rate does appear to be important, there are other factors that also appear to be potential drivers, including odds. Our analysis found that odds and payout had some evidence of influencing sales; however, it was not conclusive. For example, we conducted 17 comparisons of similar games where top prize was the same. In 5 of the 17, prize payout rate appeared to have a larger impact on sales; in 3 of the 17, odds appeared to have a larger impact. For the remaining nine comparisons, the results were indeterminate. In a separate analysis, we analyzed 25 individual games and found that, of the 17 that experienced changes to their payout rate, 1 showed a corresponding increase in sales.

We also tested ticket appearance and free ticket percentage[14] to determine if these factors affected sales. We did not find evidence to support that they do. Of the 25 games we analyzed, 10 games experienced a change to their appearance and none of these had an increase in sales. Six games experienced a change to their free ticket percentage. Of the six, regardless of whether the free tickets were increased or decreased, there was no corresponding increase or decrease in sales as would be expected if the percentage of free tickets were a driver of sales.

RECOMMENDATIONS

1. To ensure the reliability of the study being used to inform the optimal prize payout rate, GLC should analyze the study model to validate the results.

2. GLC should ensure all factors potentially impacting sales are accounted for in the optimal prize payout rate study.

3. GLC should ensure the optimal prize payout rate study is conducted by an independent entity to ensure incentives are properly aligned.

GLC's response: *GLC acknowledged that managing prize payouts is vital to maximizing revenues. It also reiterated that the prize payout study is "only one of many tools used by GLC for long-term instant prize payout planning." It indicated that prize optimization studies have been used as "directional indicators on price points where we could increase instant ticket payouts over time in order to maximize profits to education." It also noted that since these studies were begun in 2006, "the outputs have always remained consistent; recommending we move payouts to a higher level on all price points."*

Specifically regarding the 2013 study, GLC noted that "[i]n their 2013 study, Mather was initially unable to provide the Department of Audits and Accounts with the full regression output due to the age of the study. In the past weeks, Mather has completely reconstructed the full model, inclusive of all statistically significant variables, and the GLC is now having a 3rd party economist validate the robustness and completeness of the model. Additionally, we've commissioned an updated model for 2016 that includes odds as a variable of significance. From the preliminary reviews, it does appear that overall odds are very important and have a direct impact on sales; we will also have the 3rd party economist validate that study once it's complete. Although the 2013 Mather study indicated that GLC could increase (optimize) prize payouts and achieve higher revenues, GLC has kept overall instant

[13] Our analysis controlled for month of launch, price point, and length of lifecycle.
[14] Free ticket percentage is the percent of total tickets that are free ticket prize winners.

ticket payout relatively flat. Additionally, prize payout is continually evaluated by game, price point, game schedule, game prize structure, market research, historical and current sales trend (GLC and industry). Prize payout must be used judiciously and coupled with other strategies in order to insure future growth."

Regarding independence of the contractor, GLC noted that Mather worked directly with GLC and presented all findings to GLC. The study was funded with "research dollars included as part of the contract with Scientific Games."

Auditor's Response: *While GLC is reporting that Mather has since reconstructed the analysis, this does not alter the fact that GLC used the output in its decision making absent sufficient validation of its accuracy. As noted in the finding, because the prize payout study is informing GLC's decisions, it is important that GLC ensure the study include all the variables that may impact sales and that the study results be fully vetted. Based on interviews with staff and the materials Mather provided to GLC documenting the results of the 2013 study, we determined that GLC had not vetted the study at the time it was completed. We attempted to vet the study as we expected GLC to have done so we requested the regression model output; we were provided the regression output containing the same statistically insignificant variables discussed in the finding. We subsequently requested any additional documentation that supported or explained the results from both Mather and GLC and were informed that no additional documentation was available.*

Regarding the independence of the contractor, as noted in the finding, the appearance of a conflict could be alleviated by contracting directly.

Bonuses have been adjusted to reflect new statutory requirements.

In 2011, HB 326 was passed, which set new parameters for GLC's bonus structure. Under the new statute, bonuses are limited to 25% of base compensation, total bonuses awarded in a given year cannot exceed 1% of the net increase in returns to the state, and no bonuses may be awarded in years when there is no net increase in returns to the state. Additionally, employees must receive a "meets expectations" rating in order to qualify for a bonus; GLC indicated, however, that performance is no longer a factor in the bonus formula.

Since 2012, GLC has been compliant with the provisions of the new law. All individual bonuses have been below 25% of the total base salary; returns to the state have increased each year, and the total amount awarded in bonuses has been below 1% of the increase in returns to the state over the prior year. It should be noted that in 2011, GLC paid a pro-rated bonus based on its originally planned bonus structure. Because there was no increase in the returns to the state in 2011, had GLC applied the new law to the whole year, it would not have been allowed to award bonuses. (See **Appendix C** for bonus percentages by year and pay grade.)

As shown in **Exhibit 17**, the total amount spent on bonuses in fiscal year 2016 was $712,344, compared to $1.9 million in fiscal year 2010, prior to the statutory change. The amount of bonuses as a percentage of operating revenues was .02%, compared to .08% in fiscal year 2010. Due to the size of bonuses and salary in comparison to net operating revenues, these categories of expenses do not significantly impact returns to the state.

Apart from bonuses, between fiscal years 2011 and 2012, 156 of 163 staff (96%) received a pay increase. The average increase was 5% (range 1-36%). Of the 163 staff, 62 received a pay increase greater than 6%. GLC staff indicated that the Board decided to award salary increases in August 2011 to partially offset the decrease in bonuses and also awarded annual merit increases in May 2012, as is their practice.

Exhibit 17
Bonuses are Lower than Before the Statutory Changes in Fiscal Year 2011

	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
Net Operating Revenues	$ 3,392,442,000	$ 3,340,224,000	$ 3,564,315,000	$ 3,640,269,000	$ 3,754,465,000	$ 3,923,022,000	$ 4,299,204,000
Total Operating Expenses	$ 2,508,877,000	$ 2,494,293,000	$ 2,663,155,000	$ 2,712,992,000	$ 2,807,660,000	$ 2,944,613,000	$ 3,201,695,000
Salaries & Benefits							
Total Salaries & Benefits	$ 23,548,000	$ 23,670,000	$ 24,153,000	$ 24,694,000	$ 25,923,000	$ 28,347,000	$ 32,373,000
% of Net Operating Revenues	0.69%	0.71%	0.68%	0.68%	0.69%	0.72%	0.75%
% of Total Operating Expenses	0.94%	0.95%	0.91%	0.91%	0.92%	0.96%	1.01%
Bonuses							
Total Bonuses	$ 1,885,540	$ 710,704	$ 520,521	$ 237,316	$ 165,477	$ 324,093	$ 712,344
% of Net Operating Revenues	0.06%	0.02%	0.01%	0.01%	0.004%	0.01%	0.02%
% of Total Operating Expenses	0.08%	0.03%	0.02%	0.01%	0.01%	0.01%	0.02%
% of Salaries & Benefits	8.01%	3.00%	2.16%	0.96%	0.64%	1.14%	2.20%

Source: GLC Financial Records and Employee Bonus Records

Additional areas were noted where GLC could take steps to improve operations.

We identified issues related to operations that may not have a direct impact on transfers to the state but do impact the efficiency and effectiveness of GLC's day-to-day operations. GLC operates a player hotline that could benefit from additional guidance to staff and additional tracking of information to inform decision making. In addition, GLC has protocols governing topics ranging from rules for individual games to basic administrative operations. However, these protocols are not being routinely reviewed and updated to ensure they reflect current practices. Each of these topics is discussed below.

Retailer and Player Hotlines

GLC operates retailer and player hotlines designed to take calls and address questions and complaints. While the retailer hotline system tracks all calls and guides agents in responding to questions or complaints, the player hotline system does not.

The retailer hotline agents document the nature of the call in the system. When this information is entered, the system recommends a method for addressing the issue. For example, if a retailer states that an instant ticket vending machine is not functioning properly, the system prompts the agent with potential solutions such as rebooting the machine.

Conversely, player hotline agents do not have a central source of information for agents to use to address player issues. To address questions or complaints, agents use the website, emails from management, sample game tickets, and print outs from other sources posted at their desks to suggest a solution. There is no training manual or documented guidance on how to handle call topics. When agents begin work at GLC, they shadow other agents to observe how calls are handled. The lack of centralized written procedures allows for variation in how calls are handled, increasing the risk that calls may be handled incorrectly.

In addition, GLC tracks only those calls to the player hotline that require additional follow-up. Absent systematic tracking of all player hotline calls, it does not have complete data on which games players are calling about or the reasons for the calls. GLC is missing feedback on games and player experiences that could be used to inform decisions regarding game development and marketing. GLC could also use this information to identify frequently asked questions that could be added to its website.

Rules, Regulations and Policies

GLC has a number of rules, regulations, and policies (herein after referred to as protocols) that have not been updated in 10 or more years. For example, the employee compensation policy has not been updated since 2001, and the retailer regulations had not been updated since 2005. As a result, protocols contain outdated information or do not properly address the current environment.

GLC has created dozens of new and updated draft protocols that have not been approved. The draft protocols indicate that GLC identified various needs for new or updated protocols but did not complete the process of addressing the needed changes. As a result, GLC does not have approved protocols for areas such as facility access and major procurement.

We also found examples related to IT and procurement topics where approved protocols reference draft documents that have not been approved. In addition, there are some issues not covered by GLC's protocols. For example, Cash4Life and Georgia Five draw games do not have approved regulations. We also found one case where two sets of regulations that govern drawings provide conflicting information regarding who must be present for a drawing to take place.

Currently, GLC does not have a schedule in place to regularly review and update its protocols. Additionally, players, retailers, and vendors are subject to GLC rules and regulations; however, they are not posted publicly online.

RECOMMENDATIONS

1. GLC should develop and implement guidelines for player hotline agents.

2. GLC should monitor and track information on the calls received on the player hotline and use this information to inform decision making.

3. GLC should implement a standard procedure for regularly reviewing its rules, regulations, and policies to ensure that they are up to date and fully address the relevant issues.

4. With considerations for game security, GLC should consider posting applicable rules and regulations on its website to increase transparency to stakeholders.

GLC's Response: *GLC indicated it is implementing a system to log all incoming calls to the Player Information Department; completion is targeted for summer 2017. It also noted that it has initiated a "comprehensive effort to revise rules, regulations, policies and procedures."*

Retailers and Advertising

To address the committee's question regarding opportunities for operational improvements in working with retailers and advertisers, we surveyed retailers and reviewed GLC's advertising strategies. We also compared GLC's actions to those of other states.

While recent statutory changes reduced retailer compensation, it is in line with compensation practices in other states.

Prior to 2011, retailers were paid 5% of gross ticket sales, with the exception of Cash 3, which paid 7% due to its higher margins (according to GLC staff). In addition, retailers received a cashing bonus of 2% for cashing prizes of up to $600 and additional incentive payments. In 2011, HB 326 was passed, setting lottery retailers' compensation at 6% of gross ticket sales and eliminating the ticket cashing bonus and additional incentives. The changes to retailer commission put in place by HB 326 lowered retailer compensation as a percent of net ticket sales from approximately 7.1% to 6.4%. For fiscal year 2015, the reduction in retailer compensation reduced lottery expenditures by approximately $26.7 million.

The legislation also allowed GLC to provide additional compensation starting in fiscal year 2017. Any change would be in addition to the 6% sales commission; additional compensation would be an expense that would further reduce the amount of funds available to be returned to the state unless sales increased by an amount sufficient to cover the additional expense. According to GLC staff, there are no plans to increase retailer compensation at this time.

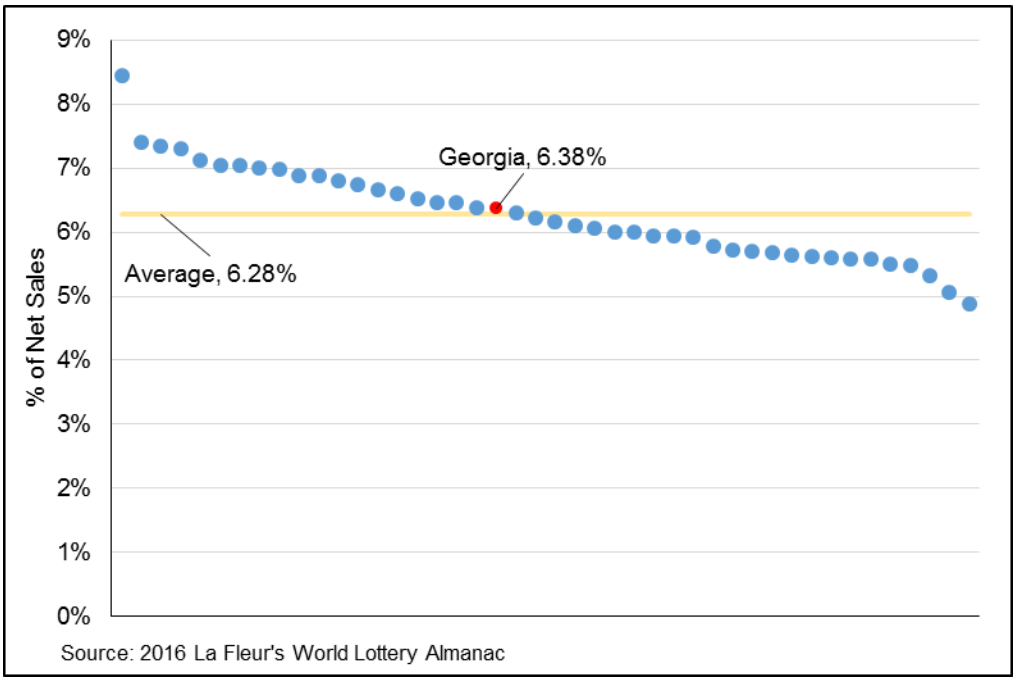
The retailers we contacted for feedback generally requested higher compensation, arguing that they do not make a sufficient profit on lottery ticket sales; however, Georgia's compensation appears to be in line with other states, as discussed below.

Other States

Other states use additional or different methods of compensating their retailers. To control for differences, we converted overall compensation to a percentage of net sales.

As shown in **Exhibit 18**, when retailer compensation is calculated as a percent of net sales, Georgia's rate is 6.38%, which is close to the average of 6.28% for the 44 states that have lotteries. The range for other states is from 4.89% to 8.44%.

Exhibit 18
Georgia's Compensation Rate is Close to the Average, Fiscal Year 2015



In addition, we also reviewed the types of compensation offered in 11 selected states. As shown in **Exhibit 19**, all 11 offer retailers commission on ticket sales, and each one also offers at least one other type of compensation.

Exhibit 19
States Offer Additional Types of Retailer Compensation

	Sales Commission	Cashing Incentive[1]	Sales Incentives[1]	Bonuses for Winning Tickets
States With Compensation	11	8	5	9
% of States Reviewed	100%	80%	50%	82%
Range of Compensation Rate	5-7%	1-2%	Varied	Varied

[1]Percentage excludes Virginia. We were unable to verify this information for Virginia.
Source: State lottery websites and interviews

The sales commission is currently the only type of compensation offered to Georgia retailers. Georgia does provide some non-cash prizes to retailers as part of temporary game promotions, such as offering gift cards for increasing sales numbers for specified games. However, GLC staff indicated it does not offer a true sales incentive program, nor does it offer bonuses for selling winning tickets as this incentivizes luck instead of sales.

We analyzed retailer density and per capita sales in relation to retailer compensation for all 44 states that currently have a lottery. We could not find evidence that increasing retailer compensation would result in an increase in the number of retailers or an increase in sales. In addition, retailer density was approximately the same in

fiscal year 2015 as it was in fiscal year 2009, prior to the statutory compensation changes. Therefore, changes in compensation do not appear to have negatively impacted the number of retailers in Georgia.

RECOMMENDATION

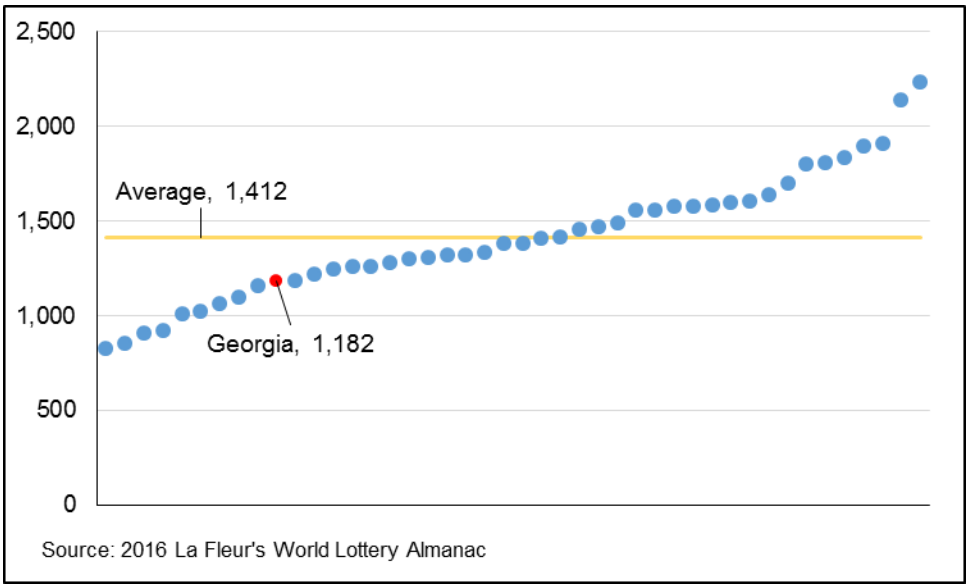
1. If GLC decides to reconsider offering additional compensation, it should first evaluate the impact of any change on sales and returns to the state.

Retailer density is better than the average compared to other states with a lottery.

As of July 2016, there were 8,625 active lottery retailers in Georgia. Of these, 2,025 (23.5%) were corporate accounts, such as Quik Trip or Kroger, while 6,589 (76.4%) were individually owned stores. Additionally, GLC operates 11 locations (0.1%), including kiosks at the Atlanta airport, the GLC corporate headquarters, and the GLC district offices. As of July 2016, retailer density equated to 1 lottery retailer for every 1,184 residents. Density ranged from 1:329 in Quitman County to 1:5,684 in Chattahoochee County.

As shown in **Exhibit 20**, according to La Fleur's data, which is based on fiscal year 2015 data, the Georgia Lottery had 8,644 retailers. This equates to 1 retailer for every 1,182 residents, which ranks them 10th best out of the 44 state lotteries.

Exhibit 20
Georgia Has Strong Residents to Retailers Ratio Compared to Other States, Fiscal Year 2015



We analyzed the relationship between per capita sales and residents per retailer. Our analysis showed that higher sales occur when there are fewer residents per retailer. Georgia ranked second in per capita sales in fiscal year 2015.

One area where GLC could have an impact on retailer density is in identifying reasons retailers voluntarily quit selling lottery tickets. We attempted to conduct this analysis; however, data was not maintained in a format that allowed for an accurate

analysis of retailers' reasons for leaving when they leave voluntarily. Since then, GLC has made changes to the system that allows it to better track the information and indicated it would begin to review the data to identify reasons for leaving.

RECOMMENDATION

1. GLC should continue with efforts to improve analysis of retailer termination and follow up with retailers who voluntarily leave to identify any actions they could take to keep retailers engaged.

Overall, retailers reported satisfaction with their interactions with GLC.

We surveyed 38 members of the Lottery Retailer Advisory Board (LRAB) to obtain feedback regarding how effectively the GLC works with lottery retailers.[15] We also contacted representatives from retailer industry organizations – including the Georgia Association of Convenience Stores (which contacted the Atlanta Retailer Association and the Horizon Retailer Association) and the Georgia Food Industry Association.[16] Overall, the respondents reported satisfaction with GLC. Responses from the retailer organizations were similar to these survey responses. Specific feedback is discussed below.

Problems with terminals impact both draw and instant games. Draw game tickets are sold through the terminals. In addition, terminals are used to activate new instant ticket packs for sale and validate winning tickets.

- 71% of respondents reported experiencing problems with the gaming terminals at least monthly. Respondents reported terminals freezing up or shutting down, which can hurt sales if players are unable to buy tickets. The reported time to resolve problems with the terminal also varied from less than an hour to 1 to 2 days. According to GLC, they are aware of these issues. Under the newly extended contract with the gaming system vendor, approximately 60% of the terminals will be replaced, and 25% of the communications network will also be replaced.
- 47% of respondents reported the lottery ticket ordering system was effective while 40% indicated it was not effective. Responses were evenly distributed across the rating scale. Respondents indicated that they did not receive the right mix of tickets, received too many tickets, or did not receive enough tickets.
- 67% of respondents indicated their sales representatives' visits were very useful. We also asked whether certain tasks GLC indicated should be performed were occurring during these visits; respondents overwhelmingly reported that they were.
- Respondents generally rated the retailer hotline well, although some respondents shared complaints.
- Most respondents (87%) reported a preference for a mix of sales commission and prize cashing incentive for compensation. Several requested additional compensation in various forms.

[15] Due to time constraints, we limited our survey to the 38 members of the LRAB for whom we had contact information (email addresses). Fifteen of 38 LRAB members (39%) responded to the survey.

[16] We also contacted the Georgia Retail Association; however, they did not respond to our requests for information.

It should be noted that, due to time constraints, we did not attempt to survey all lottery retailers or a statistically valid sample of all retailers. The LRAB is a statutorily required advisory board designed to offer a mechanism for retailers to have input into the lottery. GLC staff indicated that the members were selected by sales representatives and division managers.

RECOMMENDATION

1. GLC should continue with reported plans to address terminal issues.

Georgia's per capita advertising expenses are higher than most other states.

Georgia spends $3.12 per capita on advertising and the average across 42 states is $2.00.[17] As shown in **Exhibit 21**, Georgia is ranked 5th highest in per capita advertising expenses. As a percent of sales, Georgia has the 10th lowest advertising expenses at 0.8% versus the average of 1.4%.

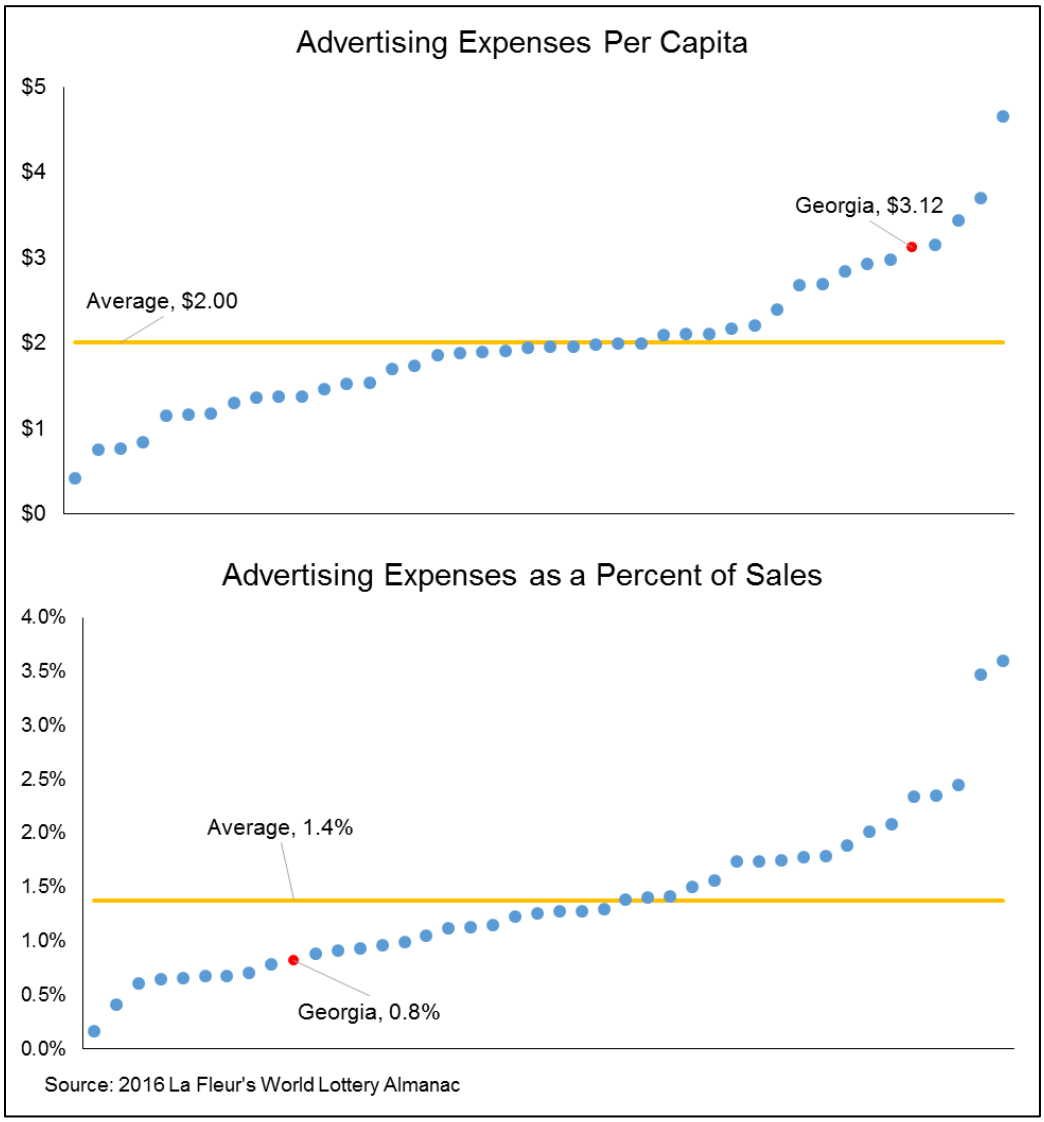
GLC describes its advertising strategy as "high reach" and "high frequency," "maximum exposure," and "always on," and staff indicated that the games require constant exposure. This approach seeks to expose a large number of consumers to advertisements (reach) frequently. GLC's advertising focuses on game launches and enhancements. According to staff, draw game promotions and enhancements receive particular emphasis because these games have higher profit margins.

GLC indicated that it had not commissioned a study regarding the optimal level of advertising. Its advertising agency analyzes the effectiveness of individual media types such as television or radio and computes a return on investment to help determine media buys.

The product development group develops a calendar for game launches and enhancements. This calendar is sent to the advertising and media buying agencies, which then evaluate costs for production, media buys, and sponsorships. The agencies provide recommendations to reach potential players and achieve GLC objectives for the year. GLC staff reviews and adjusts the expenses recommended by the agencies and then submits an advertising budget to the GLC Board for approval. This budget is developed into a marketing calendar. GLC has adopted several recommended advertising strategies, including its social media campaigns. For example, research shows that presenting winners to your players so they can see people can and do win is an effective tool. GLC lists winners and posts their pictures on its websites. It also posts the location where winning tickets were bought on Facebook and Twitter.

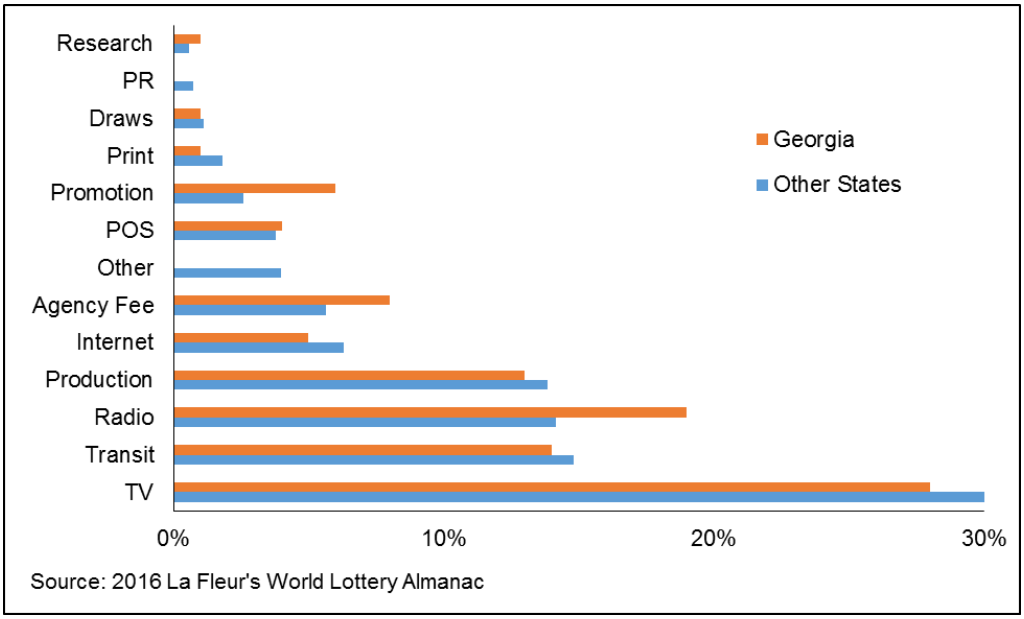
[17] No advertising information was available for Illinois, and Wyoming was excluded due to unusually high expenses, likely due to its fiscal year 2015 start date.

Exhibit 21
Georgia Ranks 5th Highest Among States in Advertising Expenses, Fiscal Year 2015



GLC's advertising across media types and game types was generally in line with other states. **Exhibit 22** shows the percentage of the advertising budget spent on each component. GLC percentages were higher for research, promotions, point of sale, agency fees (which is the payment to the advertising agency), and radio.

Exhibit 22
GLC's Spending Across Media Types Is in Line with Other States, Fiscal Year 2015



Source: 2016 La Fleur's World Lottery Almanac

Research and Analysis of Advertising

Two methods for assessing the impact of advertising expenditures are determining return on investment (ROI) and identifying an optimal level of advertising expenditures. ROI helps identify the benefit received for every dollar spent. The optimal level of advertising expenditures is the amount of spending on advertising that would result in the highest returns to the state. We found research conducted by other states related to both topics. However, results could not necessarily be extrapolated to Georgia.

- ROI Studies – Three (Michigan, Pennsylvania, and South Carolina) of the eight states contacted performed some type of ROI analysis. These focused on specific game campaigns or media types. The Michigan Lottery contracted for a regression analysis designed to assess ROI; it has funded four such studies since 1999, as required by its legislature. Pennsylvania and South Carolina lotteries conducted more limited reviews. These studies assessed marketing mix and promotions to evaluate the effectiveness of marketing channels and inform decisions on where to spend advertising dollars. These types of studies result in recommendations for where and what types of media campaigns are most effective. Therefore, the results are unique to the local consumer base and the local game mix. GLC's advertising agency conducts similar studies to determine ROI for media types.
- Optimal Level of Advertising Expenditures – None of the eight state lotteries we contacted have attempted to identify the optimal level of advertising expenditures. Two performance audits, in Florida and Washington, both found additional spending would be ineffective in increasing returns to the state.

We identified two academic studies related to effectiveness of advertising that both found positive relationships between advertising and lottery ticket sales; however, one found the effect was limited to instant games.[18] Zhang's study focused on three states where legislatures had reduced lottery advertising budgets significantly. This study found that lottery sales and returns to the state fell as a result. It estimated that a $1 decrease in advertising could cost the state $9-11 in revenue. Zhang did note that if the market is saturated (with sales), additional advertising is ineffective. Munoz's study analyzed Colorado Lottery sales and found that advertising will increase sales, but as advertising expenditures increase, the lottery will experience diminishing returns. The study also suggested that the sales-to-advertising relationship varied by game. In addition, earlier research shows that advertising quality can be more important than the level of expenditure.[19]

As noted earlier, GLC's advertising agency conducts comparative ROI analysis on media types. However, it has not been asked to perform research to identify the optimal level of advertising. In terms of assessing advertising quality, GLC conducts market research on individual campaigns and overall brand awareness.

It is unclear whether GLC would benefit from a study to determine the optimal advertising rate. The most important question to answer is whether there is additional opportunity to increase sales for every dollar spent on advertising versus being at the optimal level already. This analysis would seek to predict sales and returns to the state based on a variety of factors and introduce advertising as a variable to isolate the impact of changes in funding. This study would be similar to the prize payout rate study and could, potentially be added to this analysis. We did not conduct such an analysis due to time constraints.

RECOMMENDATION

1. GLC should assess the benefit of including advertising expenditures in the prize payout study to identify an optimal advertising expenditure level.

[18] Zhang, Ping (2004). *Economic Analysis of State Lotteries in the United States* and Munoz, Yuri (2009). *An Investigation into the Sales-Advertising Relationship: The State Lottery Case.*

[19] Hanssens, D. M., Parsons, L. J., & Schultz, R. L. (2003). *Market response models: Econometric and time series analysis (Vol. 12)*. Springer Science & Business Media.

Free Tickets as Prizes

To address the committee's question regarding whether GLC's practice of offering free tickets as prizes provided a positive return on investment, we calculated costs for free tickets and attempted to determine the value placed on free tickets by players. At the request of the committee, we also assessed the significance of accounting for free tickets as prizes.

Georgia offers "free tickets" as prizes that can be cashed in for another lottery ticket.[20] Approximately 1:10 instant tickets are free ticket prize winners. Fantasy 5 is the only draw game that offers free tickets as prizes. Its odds are 1:10.95. In fiscal year 2015, free ticket prizes represented approximately 7% of gross sales. GLC gave away approximately $292 million in free ticket prizes (face value of the free ticket the player claimed).

The return on the investment of free tickets is unknown.

In order to calculate the return on investment of free tickets, GLC needs to know the cost of offering free tickets as a prize and the additional sales generated by this prize. In order to quantify the additional sales, GLC would have to know how players value free ticket prizes. Absent data on the impact of free tickets on sales, it is not possible to calculate the return on investment. These two components of the return on investment calculation are discussed in more detail in the following sections.

Because there is a cost associated with free tickets, sales must increase sufficiently to cover these costs. Otherwise, the higher expenses from offering free tickets reduce returns to the state. Similar to the optimal payout rate (see finding starting on page 22), if free tickets are generating additional sales, there is an optimal rate at which free tickets should be offered as prizes. Currently, GLC offers free ticket prizes at a rate of 7% of gross sales, but does not verify if this is the optimal rate.

Cost of Offering Free Tickets

GLC has indicated that there is no cost associated with free tickets. However, there are two costs associated with the use of free tickets as prizes.[21] First, retailers are paid on gross sales, so 6% of the face value of free tickets is paid as sales commission to retailers. Second, the compensation for Scientific Games, GLC's instant ticket vendor, also includes free tickets. The vendor is paid .99% of the first $2.6 billion in instant ticket sales and 1.3% of sales above $2.6 billion. The printing costs associated with free tickets are included in Scientific Games' compensation, so GLC does not pay this cost directly. IGT, GLC's gaming system vendor, is paid on gross sales for draw games, such as Fantasy 5. IGT is paid .999% of ticket sales.

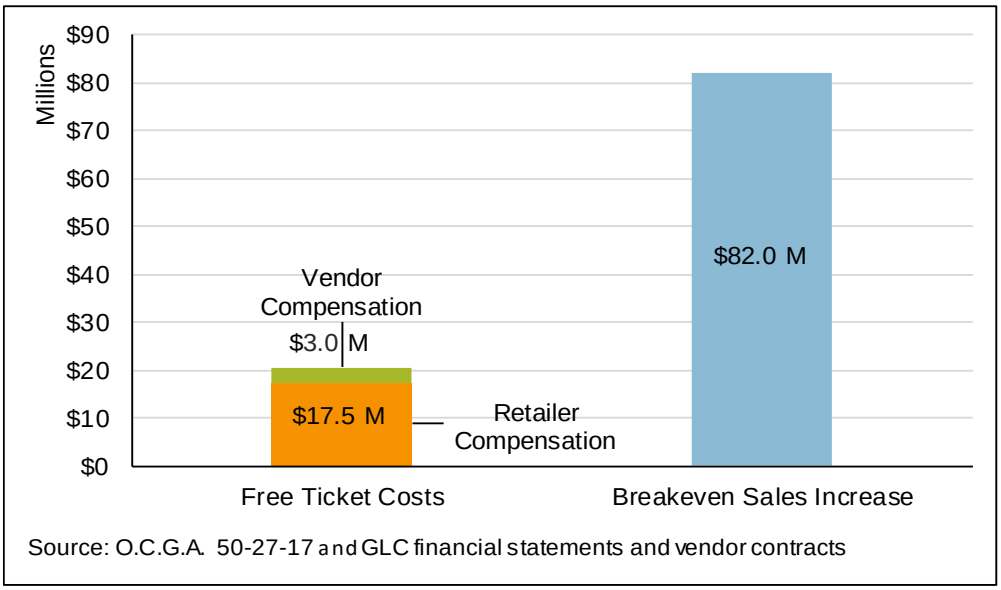
GLC gave away $291.7 million in free ticket prizes in fiscal year 2015. Based on identified costs, the total costs for free ticket prizes was approximately $20.5 million

[20] GLC also offers promotional tickets, such as "buy one, get one free" offers. We did not evaluate the use of such promotional ticket offers in our analysis.

[21] There may be additional costs that are not easily quantified, such as staff resources used. However, the marginal costs identified above likely represent the largest portion of free ticket costs.

in fiscal year 2015. As shown in **Exhibit 23**, retailers received $17.5 million (85%), and gaming vendors received approximately $3.0 million (15%).[22]

Exhibit 23
Free Tickets Need to Generate $82 Million in Additional Sales to Cover Costs, Fiscal Year 2015



Source: O.C.G.A. 50-27-17 and GLC financial statements and vendor contracts

Considering that GLC returns 25% of net operating revenue to the state, the use of free tickets would need to generate approximately $82 million in additional sales in order to cover the additional costs of free tickets. This increase in sales represents 28% of the value of free ticket prizes given away in fiscal year 2015.

Value Players Ascribe to Free Tickets

The benefits associated with offering free tickets are largely theoretical at this time. There is no empirical research on free ticket use in Georgia. GLC's position is that free tickets provide players with a "winning experience" that drives repeat buys. According to GLC, players' overall odds of winning a prize improve with the addition of free tickets as prizes, which drives higher sales.

Additional sales are potentially driven by the value players place on free tickets. Cash wins are likely the most valued prize because these winnings can be spent on any item desired by player, and a loss has no value. Therefore, a free ticket win likely has a value in between these two. The player receives a prize of another lottery ticket, which provides another chance at winning. Even if the face value of the free ticket has the same value as a cash prize, the free ticket prize can only be spent on another lottery ticket.

Alternatively, other players may not value free tickets the same way, or value them at all. Some players may use free ticket prizes to obtain tickets they would have otherwise bought (i.e., a substitution effect). For example, a player plans to spend $20

[22] We estimated Scientific Games' compensation at $2.88 million and IGT's compensation at $100,000.

on lottery tickets each week and wins a $2 free ticket one week. The player cashes in the free ticket the following week and decides whether to spend $18 of their own money on tickets or continue to spend $20 of their own money in addition to the free ticket prize. Currently, there is insufficient information to determine the prevalence of each decision.

We reviewed redemption rates for free ticket prizes and low tier cash prizes to determine if free ticket prizes were redeemed at comparable rates.[23] Overall, free ticket prizes had a relatively high average redemption rate, at 83.5%, across the reviewed games. **Exhibit 24** shows an example of one game comparison.

Exhibit 24
Free Tickets are Redeemed at a Similar Rate to Low Cash Prizes, 2016

Game 964	Face Value	% Cashed
Free Tickets	$10	97.67%
Tier 2	$10	98.64%
Tier 3	$15	98.83%

Source: GLC Prize Claim Data

While the analysis supported the conclusion that there is a value between $0 and face value because free tickets are redeemed at a relatively high rate, it cannot be used to confirm how free tickets are valued by players. Because the difference between Tier 2 prizes and Tier 3 prizes is comparable to the difference between free tickets and Tier 2 prizes even when the actual value is 50% higher for Tier 3 prizes, it is not possible to use this analysis to assign a specific valuation to the free ticket prize.

In addition, as noted on page 26, we analyzed 25 games, of which 6 experienced a change to their free ticket percentage. For all six, whether the free ticket percentage increased or decreased, we did not see a corresponding change in sales. As a result, we cannot confirm the effect the free tickets have on sales.

Other states

We reviewed 11 states and identified 7 (64%) that offer free tickets. We obtained the amount of free tickets offered in fiscal year 2015 for five of the seven states (Connecticut, Florida, Kentucky, Pennsylvania, and Tennessee) and calculated the rate at which free tickets are offered.[24] Rates ranged from .07% to 7.2% of gross sales. Of these, only Tennessee's rate of 7.2% was higher than Georgia's rate of 7.0%. All other state's rates were below 1.5%.

RECOMMENDATIONS

1. GLC should conduct research to determine how the use of free tickets impacts sales in Georgia.

[23] We analyzed 25 instant games that were active (on the market at the time of our analysis) and had been on the market for 20 months or more. We included games across all price points (e.g., $1 - $30). Tier 1 prizes are the free tickets, tier 2 prizes ranged from $2 -$40 and tier 3 prizes ranged from $3 - $50 depending on the game. GLC was unable to provide us with *Fantasy5* prize claim data.

[24] We were unable to obtain information on free ticket levels from Michigan and New Jersey. The rate of free tickets was calculated as a percentage of gross sales to standardize the point of comparison.

2. GLC should determine the optimal rate of free ticket prizes to ensure profit is maximized (i.e., costs are offset by additional revenues generated by new sales).

GLC's Response: *GLC reiterated its position that free tickets provide players with "winning experiences without impacting the profitability of a game." It noted that if free tickets were replaced with cash prizes, "prize payouts would have to be increased by 5-7%, for every game in order to keep the overall odds of the game constant and to provide the same winning experience to players." It also reiterated that odds are important to sales and that, if free tickets were removed, "overall game odds would increase by over 50%, meaning less frequent wins, less reinvestment of winnings, less churn." GLC indicated that odds have been included in the 2016 prize optimization study.*

Auditor's Response: *We have not recommended free tickets be eliminated. As noted in the finding, there is a cost to offering free tickets, and this cost must be offset by additional sales. Otherwise, the higher expenses from offering free tickets reduce returns to the state. We recommended that GLC determine how free tickets are valued and determine the optimal rate of free ticket prizes to ensure profit is maximized.*

GLC's current accounting practice regarding free tickets is reasonable.

GLC currently accounts for free tickets by treating them as "contra-revenue," which means subtracting the value of the free tickets from the total gross sales to calculate total net sales. GLC indicated that it accounts for free ticket prizes as a reduction in revenue because the free ticket is not technically a ticket sale.

There is not a specific accounting standard that dictates how to account for free ticket prizes. GLC's auditor pointed to the Governmental Accounting Standard's Board (GASB) Statement 62, which requires revenue to be reported net of any refunds, and stated that the free ticket prizes could be likened to a ticket returned for a new one. The Department of Audits and Accounts' representative contacted for guidance stated that there is a basis for accounting for free ticket prizes as contra-revenue. He pointed to GASB 34, which states that revenue for proprietary funds should be reported net of discounts and allowances. Although the definition of discounts and allowances is not clear, the free ticket prizes could arguably fit into that category. He also noted that using the correct accounting method does not necessitate the same method being used for management purposes. The accounting method GLC uses appears reasonable in light of accounting standards for similar items.

Of the 11 states we contacted, seven offer free tickets for one or more games. All seven account for free tickets in the same manner. We did not identify any states that account for free tickets as a prize expense.

Under the current accounting method, free tickets are subtracted from gross sales as part of the calculation of total net revenue. Prize expenses and other expenses are subtracted from total revenue to calculate net proceeds to education. As shown in **Exhibit 25**, if free tickets were accounted for as a prize expense instead of a reduction to gross sales, the net proceeds to education do not change.

Exhibit 25
A Change in Accounting Method does not Change Net Proceeds to Education, Fiscal Year 2015

Description	Current Accounting Practice	Alternative Accounting Method
Revenue		
Gross Sales	$ 4,195,151,000	$ 4,195,151,000
Less: Free Tickets	$ (291,684,000)	
Net Sales	$ 3,903,467,000	$ 4,195,151,000
Other Income	$ 19,555,000	$ 19,555,000
Total Revenue	$ 3,923,022,000	$ 4,214,706,000
Expenses		
Prize Expense	$ 2,528,871,000	$ 2,528,871,000
Plus: Free Tickets		$ 291,684,000
Total Prize Expense	$ 2,528,871,000	$ 2,820,555,000
Other Expenses	$ 415,742,000	$ 415,742,000
Proceeds		
Net Proceeds to Education	$ 980,501,000	$ 980,501,000

Source: GLC Financial Records

Appendix A: Table of Recommendations

Sales, Revenues, and Transfers
While GLC's nominal sales are growing, sales growth is slowing when adjusted for inflation and population growth. (p. 9)
No recommendations
GLC is taking action designed to increase sales. (p. 14)
No recommendations
Operating expenses are primarily driven by prizes. (p. 17)
No recommendations
GLC has elected to extend contracts with gaming vendors instead of rebidding them. (p. 18)
1. GLC should establish a policy regarding major procurements, including bid frequency.
2. GLC should competitively bid the contracts for its gaming system and instant ticket services to ensure it is receiving the most competitive pricing and most advantageous services for the state.
GLC did not properly vet the study it commissioned on the prize payout rate. (p. 22)
3. To ensure the reliability of the study being used to inform the optimal prize payout rate, GLC should analyze the study model to validate the results.
4. GLC should ensure all factors potentially impacting sales are accounted for in the optimal prize payout rate study.
5. GLC should ensure the optimal prize payout rate study is conducted by an independent entity to ensure incentives are properly aligned.
Bonuses have been adjusted to reflect new statutory requirements. (p. 27)
No recommendations
Additional areas were noted where GLC could take steps to improve operations. (p. 28)
6. GLC should develop and implement guidelines for player hotline agents.
7. GLC should monitor and track information on the calls received on the player hotline and use this information to inform decision making.
8. GLC should implement a standard procedure for regularly reviewing its rules, regulations, and policies to ensure that they are up to date and fully address the relevant issues.
9. With considerations for game security, GLC should consider posting applicable rules and regulations on its website to increase transparency to stakeholders.

Appendix A: Continued

Retailers and Advertising
While recent statutory changes reduced retailer compensation, it is in line with compensation practices in other states. (p. 30)
10. If GLC decides to reconsider offering additional compensation, it should first evaluate the impact of any change on sales and returns to the state.
Retailer density is better than the average compared to other states with a lottery. (p. 32)
11. GLC should continue with efforts to improve analysis of retailer termination and follow up with retailers who voluntarily leave to identify any actions they could take to keep retailers engaged.
Overall, retailers reported satisfaction with their interactions with GLC. (p. 33)
12. GLC should continue with reported plans to address terminal issues.
Georgia's per capita advertising expenses are higher than most other states. (p. 34)
13. GLC should assess the benefit of including advertising expenditures in the prize payout study to identify an optimal advertising expenditure level
Free Tickets as Prizes
The return on the investment of free tickets is unknown. (p. 38)
14. GLC should conduct research to determine how the use of free tickets impacts sales in Georgia.
15. GLC should determine the optimal rate of free ticket prizes to ensure profit is maximized (i.e., costs are offset by additional revenues generated by new sales).
GLC's current accounting practice regarding free tickets is reasonable. (p. 41)
No recommendations

Appendix B: Objectives, Scope, and Methodology

Objectives

This report examines the Georgia Lottery Corporation (GLC). Specifically, our examination set out to:

1. Review the effectiveness of GLC's efforts to increase sales from existing games and provide recommendations on increasing revenues and enhancing transfers.
2. Provide recommendations on Lottery operational improvements in working with retailers and advertisers.
3. Evaluate the return on investment from awarding tickets as prizes as a Lottery practice and review the significance of tickets as prizes as revenue.
4. Compare other state like-sized lottery returns and expenses, and provide any legislative recommendations that could enhance transfers and/or improve operational efficiency.

We did not include Coin Operated Amusement Machine (COAM) games as part of this review due to the short period of time under GLC's oversight.

Scope

This special examination generally covered activity related to GLC that occurred during fiscal years 2011-2015, with consideration of earlier or later periods when relevant. Information used in this report was obtained by: reviewing relevant laws, rules, and regulations; reviewing GLC contracts and financial data; interviewing GLC staff and subcontractor; analyzing data on game sales from GLC's central gaming system; reviewing existing studies conducted by subcontractors to GLC contractors; and surveying a sample of retailers.

We also analyzed data and reports from La Fleur's 2016 World Lottery Almanac to compare Georgia's lottery to lotteries in other states. The 2016 Almanac provides data on 44 state lotteries from fiscal year 2015, as well as some historical information. It is considered an authoritative source for this type of data. The data is compiled from surveys the organization sends to all lottery organizations. It is self-reported data. Finally, we identified 11 states – Connecticut, Florida, Kentucky, Massachusetts, Michigan, New Jersey, North Carolina, Pennsylvania, South Carolina, Tennessee, and Virginia – for additional review based on similarities to Georgia's lottery. Information collected from these interviews and analyses was used to address the fourth objective. The results of these analyses are included in answers to the other three objectives as these comparisons served as criteria for evaluating GLC's practices and outcomes and formed the foundation for recommendations for improvements.

Methodology

In reviewing the effectiveness of Lottery's efforts to increase sales from existing games and provide recommendations on increased revenues and enhanced transfers, we analyzed historical trends in sales and expenses, including returns to the state. Historical data from La Fleur's 2016 World Lottery Almanac was used to assess, on a real and nominal basis, the trajectory of lottery sales. Per capita sales data, on a real basis, was compared to the 22 states that launched lotteries within 10 years of the Georgia Lottery's inception to assess how Georgia compares to other states. We also reviewed available industry literature to identify industry trends and best

practices for increasing sales. In addition, we interviewed staff responsible for game strategies to understand how decisions were made regarding introduction of new games and cancellation of existing games.

GLC provided sales data by game for fiscal years 2011-2015. We analyzed 25 instant games that experienced changes in payout rate, top prize amount, free ticket percentage, and/or appearance to determine whether the changes made resulted in a discernible effect on sales patterns. Additionally, we analyzed 73 instant games where we could compare prize payout rate, top prize amount, and odds, factors identified as potentially influencing sales. We held constant price point, launch month, and weeks on sales, as well as two of the identified factors and compared game sales to determine which factor appeared to have the greatest impact. We also reviewed draw game sales over this period and assessed each game's profit contribution.

To analyze prize expenses, we utilized GLC's financial data to review historical trends in prize payout rates and returns to the state. We obtained research conducted, commissioned, or used by GLC to identify factors affecting lottery sales, such as optimal prize payout rates. We analyzed studies conducted by third parties to determine the scrutiny applied by GLC and to determine how the study results were being used. We reviewed our analyses with an expert in statistics as it applies to economics, who corroborated our findings.

Finally, we obtained data on administrative expenses, including contracts with gaming vendors, expenditures for retailers, and other operational expenses, including salaries and bonuses. We compared GLC's expenses, by type and overall, and the structure and length of the contracts to other states.

We assessed the controls over data used for this examination and determined that the data used were sufficiently reliable for our analyses.

To provide recommendations on Lottery operational improvements in working with retailers and advertisers, we surveyed members of the Lottery Retailer Advisory Board and interviewed representatives from retailer associations. We assessed retailer compensation by reviewing statutory requirements and GLC financial data. We also compared retailer compensation and retailer density (the number of lottery retailers per capita) in Georgia to that in other states using La Fleur's 2016 World Lottery Almanac.

We also interviewed GLC staff and reviewed documentation from GLC to identify current advertising strategies. Using GLC and La Fleur's data, we evaluated advertising expenditures and compared those to other states. We also reviewed available industry literature to identify industry trends and best practices.

To evaluate the return on investment from awarding tickets as prizes as a Lottery practice and review the significance of tickets as prizes as revenue, we interviewed GLC staff to determine the rationale for awarding free tickets as prizes. We also reviewed documentation and contacted staff in 11 other states to determine whether they employ the same practice.

We attempted to identify research on the value players place on free tickets to quantify their impact on sales. While one case study was identified, no empirical research was found. As a proxy measure, we obtained data on prize redemptions for

25 instant games and analyzed redemption rates for free tickets and low tier cash prizes. The games in our sample were active (on the market) at the time of our analysis and had been on the market for at least 20 months. GLC was unable to provide prize redemption information for inactive instant games or for Fantasy 5 games. As discussed on page 40, differences between redemption rates for the prize tiers were insufficient to use this data to estimate free ticket valuation.

We obtained financial data from GLC to assess the impact of classifying free ticket prizes as a reduction in revenue versus a prize expense. We reviewed how seven identified states[25] accounted for free ticket prizes in their financial statements. We also researched Governmental Accounting Standards Board (GASB) standards and consulted internal experts to determine if there was a generally accepted method for accounting for these types of expenses. Finally, we assessed the impact of accounting for these expenses as a prize expense instead of a reduction in revenue to determine the impact.

This special examination was not conducted in accordance with generally accepted government auditing standards (GAGAS) given the timeframe in which the report was needed. However, it was conducted in accordance with Performance Audit Division policies and procedures for non-GAGAS engagements. These policies and procedures require that we plan and perform the engagement to obtain sufficient, appropriate evidence to provide a reasonable basis for the information reported and that data limitations be identified for the reader.

[25] Of the 11 states reviewed, 7 offer free ticket prizes.

Appendix C: Bonuses by Pay Grade and Year

Pay Grade	Fiscal Year				
	2012	2013	2014	2015	2016
CEO	6.00%	0.00%	0.00%	2.50%	0.00%
Sr. VPs		2.50%	1.55%		
VPs					
14	4.50%				6.00%
13					
12					
11					
10					
9		2.00%			
8	3.00%				
7					
6					
5					

Source: GLC Records

The Performance Audit Division was established in 1971 to conduct in-depth reviews of state-funded programs. Our reviews determine if programs are meeting goals and objectives; measure program results and effectiveness; identify alternate methods to meet goals; evaluate efficiency of resource allocation; assess compliance with laws and regulations; and provide credible management information to decision makers. For more information, contact us at (404)656-2180 or visit our website at www.audits.ga.gov.