

February 26, 2013

Alice Garland
Executive Director
North Carolina Education Lottery
2100 Yonkers Road
Raleigh, NC 27604

Dear Executive Director Garland:

Delehanty Consulting LLC conducted a performance audit of the North Carolina Education Lottery (NCEL). The audit and the contents of this document are intended to meet the requirements of N.C.G.S §18C-122(d). The audit was not designed to determine compliance with regulatory requirements, but nothing came to our attention that indicated the lottery was not in compliance with regulatory requirements.

When the NCEL began in 2006, environmental factors such as restrictions on prize payouts contributed to sales and profitability that were significantly below that of its peers. However, the NCEL's ongoing performance has been exceptional. Of the six U.S. lotteries started since 2002, only the NCEL managed to increase profits every year. In fact, the NCEL is one of only three U.S lotteries to achieve profit growth every year from 2007 through 2012.

Although the NCEL ranks five of six in its peer group in profits per capita, the performance trends are quite positive. Sales, profits, number of retailers and sales per retailer have consistently increased from Fiscal Year 2008 through Fiscal Year 2012.

NCEL Trend Analysis Report Card
Selected Metrics

Lottery	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Sales (millions)	1,078	1,293	1,421	1,461	1,597
Profits (millions)	348	414	432	436	459
Profit Margin	32.3%	32.0%	30.4%	29.9%	28.8%
Number of Retailers	5,860	6,019	6,218	6,599	6,763
Average Weekly Sales per Retailer	\$2,935	\$3,538	\$4,132	\$4,396	\$4,540

In our opinion the cost controls and performance efficiency of the NCEL are adequate. The NCEL's exceptional success in consistently growing profits indicates a prudent cost-benefit approach to increasing expenditures.

The attached report contains an analysis of the NCEL product portfolio and an analysis of the NCEL social media program. Both analyses include ideas the NCEL may wish to consider to enhance its performance.

We recognize that the legal restrictions the NCEL must operate under are outside of its control, so we did not include recommendations related to changing legal restrictions. However, since this report must be presented to the Commission, the Governor, and the General Assembly, we believe we would be remiss if we did not point out that restricting the advertising budget to one percent of sales reduces the NCEL's ability to increase funding for education

Delehanty Consulting, LLC has been providing auditing and consulting services to the lottery industry since 2005. Our consultants have evaluated and consulted with more than forty government-sponsored lotteries on four continents since 1985.

Sincerely,

A handwritten signature in dark ink, appearing to read "Herb Delehanty", written over a light blue horizontal line.

Herb Delehanty
Principal

North Carolina Education Lottery Performance Audit

February 21, 2013

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EXECUTIVE SUMMARY

This performance audit was conducted to meet the requirements of the North Carolina Lottery Act, NCGS §18C-122(d), which requires the North Carolina Education Lottery Commission to engage an independent auditing firm that has experience in evaluating the operation of lotteries to perform an audit of the Lottery. The auditing firm, Delehanty Consulting LLC (DCLLC), and its staff have evaluated and consulted with more than forty government-sponsored lotteries on four continents. The audit was conducted in accordance with the Request for Proposal issued April 27, 2010 and DCLLC's proposal submitted on May 19, 2010.

Objective

The engagement's objective was to review and analyze the North Carolina Education Lottery (NCEL) performance in specific areas of operation, with emphasis on increasing revenues and efficiency, while keeping in mind various statutory and legal restrictions. Lotteries used for comparisons were chosen based on such factors as geographic proximity, population, years in business, and statutory provisions.

An additional objective, based on Delehanty Consulting LLC's proposal, was to facilitate the development of actionable plans to increase profits. This objective included an analysis of the NCEL's product mix and an evaluation of NCEL's social media program.

Methodology

To accomplish the engagement objectives DCLLC used the following approach:

- Develop performance metrics and identify appropriate peer group for benchmarking.
- Obtain performance and financial data from the NCEL and selected peers.
- Evaluate NCEL performance relative to its peer group.
- Evaluate current trends in NCEL performance.
- Analyze selected costs and program efficiency.
- Solicit input from all NCEL staff for ideas to increase revenue and decrease costs
- Evaluate the information available for managing the NCEL's business.
- Perform objective analyses of the NCEL's product portfolio and social media program.
- Develop draft results and recommendations for each area of the report.
- Deliver final report.

Field work began May 11, 2012 and was completed on January 31, 2013.

Peer Group

Comparing an organization against a peer group is a common approach for analyzing performance. The goal was to establish a peer group of at least four lottery jurisdictions so comparisons would be meaningful. In selecting the proposed peer group, six lottery jurisdictions in close geographic proximity to North Carolina were considered. Virginia, Tennessee, Georgia,

and South Carolina each share a border with North Carolina. Kentucky and West Virginia were considered to be close enough in proximity to also be included.

The West Virginia Lottery, unlike the other five lotteries within close proximity to North Carolina, offers video lottery games. Video lottery accounted for more than 85% of West Virginia Lottery's revenue in FY 2012. Hence, West Virginia was not included in the peer group.

As Table 1 shows, the remaining six jurisdictions in this proposed peer group have wide disparities in population and years in business. Two of the lotteries have been operating less than ten years and three have been operating more than nineteen years. Three states have 4.3 to 6.4 million people and three have 8.1 to 9.8 million people. Given these disparities, efforts were made to identify lottery jurisdictions that would be better candidates for inclusion in the peer group.

Jurisdiction	Years in Operation	Population
North Carolina	6	9,656,401
Tennessee	8	6,403,353
South Carolina	10	4,679,230
Georgia	19	9,815,210
Kentucky	23	4,369,356
Virginia	24	8,096,604

Table 1

U.S. lotteries were evaluated to determine which have been in existence more than two years but less than ten years. Lotteries reach a certain level of maturity after 10-12 years. They will have gone through the initial growing pains of the lottery start-up, stabilized the retailer network, and implemented a game portfolio consistent with their legal restrictions and policy guidelines. Lotteries that have been in existence less than six years have insufficient data for meaningful comparisons within a peer group.

There are only four other lottery jurisdictions in the U.S. that have been in existence for ten or less years: South Carolina (ten years), Tennessee (eight years), Oklahoma (seven years), and Arkansas (less than four years). Arkansas was excluded because it has not been in existence for at least six years. South Carolina and Tennessee are both much closer than Oklahoma in both proximity and population to North Carolina and are similar in age. Hence, Oklahoma was excluded from further consideration.

After a thorough analysis, the five other lotteries listed in Table 1 were determined to be the best peer group.

Areas Evaluated

This performance audit covered six distinct areas. Each of the areas covered are contained in its own section of the report.

Performance Report Card	This section includes a Peer Review Report that compares NCEL's performance against its peers and a NCEL Trend Analysis that evaluates NCEL's performance trend since the start of operations.
Management Information Program Review	This section reviews the management information available to various levels of management.
Cost Analysis and Program Efficiency Study	This section includes a financial analysis of the last four years. Variable costs are analyzed within the context of their relation to sales.
Product Portfolio Analysis	This section reviews NCEL's product portfolio and compares current sales levels and trends to peer group members and to the industry average. Recommendations are provided for the NCEL's consideration.
Social Media Program Review	The section reviews the NCEL's existing Social Media Program, reviews practices of high performing lotteries and provides recommendations.

Data Sources

The data used in conducting this performance audit and performing various analyses were obtained from the following sources:

- **NCEL financial data:** NCEL provided audited financial data for FY 2008 through FY 2012.
- **NCEL non-financial data:** NCEL operating metrics and statistics were obtained from NCEL staff.
- **Population data:** Population data for 2002 through 2011 presented in the report and used to calculate per capita statistics was obtained from U.S. Census Bureau, Population Division. July 1, 2011 population estimates from Table 1. Annual Estimates of the Resident Population for the United States, Regions, States and Puerto Rico: April 1, 2000 to July 1, 2011 (NST-EST2009-01). Population estimates for 2012 were calculated based on a state's compound annual growth rate from 2005 through 2011.
- **Data from Lotteries other than NCEL:**
 - Financial data and other statistics such as number of retailers were obtained from La Fleur's 2012 World Almanac Eighteenth Edition, TLF Publications-Boyd, MD (2012). This publication contains data through Fiscal Year 2011.
 - Additional financial data needed to calculate Gaming Revenue was obtained from the annual reports of the various lotteries.

- Financial data for Oklahoma Lottery was obtained from the Oklahoma Lottery's FY 2009 through FY 2012 annual reports.

Summary of Findings

The results of the audit indicate the NCEL continues to perform well given its environment and restrictions. Although it ranks fifth in its peer group in per capita profits, the NCEL has surpassed Tennessee since FY 2010 to move up from sixth.

Of the five lotteries started in the 2002-2006 timeframe, the North Carolina Education Lottery is the only lottery to increase sales and profits in each of its first six full years of operation and achieve per capita growth in sales and profits in five of its first six full years of operation.

Table 2, Peer Review Report Card, compares the NCEL against the other lotteries in the peer group. The NCEL ranks first in profit margin, third in gaming profit margin, and second in return on advertising investment. However, the NCEL ranks last in profits per capita, advertising investment per capita, and sales per retailer.

Peer Review Report Card¹
NCEL and Peer Rank (based on FY 2011)

Lottery	Profits Per Capita	Profit Margin	Gaming Profit Margin	Advertising ROI	Advertising Spend per Capita	Sales per Retailer
North Carolina	\$45.18	29.9%	73.1%	31.70	1.42	4,243
Georgia	\$86.20	25.4%	67.9%	40.04	2.15	7,554
Kentucky	\$49.53	29.5%	71.9%	23.81	2.04	4,854
South Carolina	\$58.00	25.9%	73.0%	30.49	1.90	5,377
Tennessee	\$43.75	26.6%	76.9%	31.23	1.47	4,511
Virginia	\$54.86	29.4%	73.8%	23.64	2.32	5,117

Table 2

The NCEL Trend Analysis shown in Table 3, demonstrates that the two most important performance metrics—profits and sales—are both on upward trends. *The NCEL is the only lottery to have begun in the 2002-2006 timeframe to achieve sales and profit growth in each of its first six full years of operations.* As illustrated in Table 3, the NCEL profit margins have been declining slightly as revenues and profits have increased. The NCEL has done an excellent job increasing retailer and employee productivity. Sales per retailer have increased 48% from 2008 to 2012; gaming revenue per employee has increased almost 27%.

¹ Profits Per Capita = Profits/Population (see Table 1-1); Profit Margin=Profits/Sales (see Table 1-2); Gaming Profit Margin=Profits/Gaming Revenue (see Table 1-3); Advertising Return On Investment (ROI)=dollars spent on advertising/Profits; Advertising Spend Per Capita=dollars spent on advertising/population; Sales per Retailer=Sales/number of lottery retailers (see Table 1-4)

**Trend Analysis Report Card
NCEL**

Lottery	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Sales (millions)	1,078	1,293	1,421	1,461	1,597
Profits (millions)	348	414	432	436	459
Profit Margin	32.3%	32.0%	30.4%	29.9%	28.8%
Return on Advertising	40.4	37.1	36.7	31.7	31.3
Retailers	5,860	6,019	6,218	6,599	6,763
Average Weekly Sales per Retailer	3,538	4,132	4,396	4,258	4,540
Gaming Revenue per Employee	2,149,351	2,463,575	2,575,768	2,561,096	2,725,131

Table 3

The NCEL's financial system is designed to provide financial reporting for government agencies and does not provide the robust reporting required by a business enterprise focused on profit generation. With the exception of financial reporting, the NCEL Management Information Program provides ready availability of the information and reports critical to manage and grow the Lottery's business. The program consists of a multi-tier reporting approach that provides actionable information.

The Cost Analysis and Program Efficiency Study revealed that the NCEL has done well containing costs as sales and profits have increased. Retailer commissions and product costs have stayed relatively consistent as a percentage of sales—increasing slightly from 8.64% in FY 2010 to 8.79% in FY 2012. Given the high return on advertising investment, the NCEL consistently spends as close to 1% of sales (the maximum allowed by statute) as possible to maximize the profits available for educational programs. Personnel costs decreased from 1.08% of sales in FY 2010 to 1.04% in FY 2012.

The Product Portfolio Analysis revealed that the NCEL has a very similar portfolio mix to that of its peers. The instant scratch-off category may have room for growth by reducing the number of games in certain price categories, changing to a once a month game launch schedule, and strengthening the brand equity for specific game families. Although small sales increases in games sold through the terminals may be achieved by new traditional games and extensions to existing games, major increases in sales would require introduction of social environment games such as keno and video lottery.

The Social Media Program Analysis indicated that the NCEL is one of the more active, and better performing lotteries in the United States. The NCEL could enhance its social media program by increasing its current activity and adopting some new practices. Additionally, expanding the use of social media to other business functions may increase the overall efficiency of the NCEL.

Part 1: PERFORMANCE REPORT

This Performance Report provides management and stakeholders with a snapshot of NCEL's performance relative to its peers, as well as a look at the NCEL's performance over the last four years. The Performance Report is comprised of two sections. The first section, Peer Review Report, compares a set of NCEL's key metric values to those of the selected peer group. The comparisons included in the Peer Review Report are limited to key metrics that can be readily compared to other lotteries. The second section, NCEL Trend Analysis, includes a larger set of metrics and analyzes NCEL's performance over the last five fiscal years (FY2008 –FY 2012).

Peer Review Report

The Peer Review Report uses Fiscal Year 2011 data to compare NCEL's performance with that of its peer group because 2012 data were not available during the performance review process. In addition to the NCEL, the peer group includes:

- Georgia Lottery Corporation (Georgia)
- South Carolina Education Lottery (South Carolina)
- Virginia Lottery (Virginia)
- Kentucky Lottery Corporation (Kentucky)
- Tennessee Education Lottery (Tennessee)

Profit Performance

Government-sponsored lotteries in the U.S. exist to raise funds for good causes. Therefore, the most important financial measurement of a lottery's success is money raised for the good causes. The populations served by lotteries can be vastly different, so comparisons of lottery performance should account for that. Hence, Profits Per Capita is a leading measure for assessing the overall financial performance of government-sponsored lotteries.

Profits: Total dollars raised for the good cause for which the lottery was established and available for transfer to the state.

Profits Per Capita (PPC): Profits divided by the state population.

Table 1-1 provides the FY 2011 PPC for the NCEL and its peers. At the end of FY 2011, NCEL's \$45.18 PPC placed ranked it sixth of the six lotteries. This was 48% below Georgia (the highest) at \$86.20 and 1% below Tennessee (the next lowest to the NCEL) at \$45.83.

**Financial Performance Comparison:
FY 2011 Profits Per Capita (PPC)
North Carolina Education Lottery and Peer Lotteries
(sales and profits in 000s)**

Lottery	Began	Sales	Profits	Population	PPC
Georgia ²	Jun 1993	3,335,615	846,110	9,815,210	86.20
South Carolina	Jan 2002	1,047,120	271,390	4,679,230	58.00
Virginia	Sep 1988	1,482,690	435,200	8,096,604	53.75
Kentucky	Apr 1989	719,296	212,250	4,369,356	48.58
Tennessee	Jan 2004	1,102,579	293,490	6,403,353	45.83
North Carolina	Mar 2006	1,461,107	436,241	9,656,401	45.18

Table 1-1

Comparing the financial performance of lotteries for a given year should be done with appropriate consideration for operating environmental factors outside of a lottery's control. A number of factors may contribute to sales and profit per capita variances between lotteries.

Propensity to Purchase Lottery Products: The people in one state may be more predisposed to purchase lottery tickets than the people in another state.

Populace Support of Lottery and Recipients of Lottery Proceeds: Populace support may impact sales by pressuring retailers to sell lottery products and news media to carry news stories. Also, the public may have more discussions about the lottery which increases awareness.

Legal/Policy Restrictions on Advertising and Marketing: Legal restrictions regarding lottery advertising may decrease the lottery's ability to generate sales, thus weakening its per capita sales and profits compared to other lotteries. North Carolina has two such restrictions. First, the NCEL cannot spend more than one percent of sales on advertising. Second, the North Carolina Education Law says that no lottery advertising shall have the primary purpose of inducing someone to purchase a ticket.

Legal/Policy Restrictions on Prize Payouts: Legal restrictions limiting a lottery's ability to increase prize payout percentages may impact sales by making games less attractive to players. The NCEL prize payout percentages were restricted until August, 2007. The impact of the legislative changes began to take effect in January, 2008.

Legal/Policy Restrictions Limiting Types of Games and Game Themes: Restrictions against running games with very frequent drawings such as keno may impact sales. Georgia is the only lottery in the peer group running a fast-action keno game (drawings every four minutes).

Years in Operation: A modern day, well-run lottery typically will experience approximately three to five years of growth as the lottery introduces new products and

² The Georgia Lottery Corporation is the only lottery in the peer group that sells a fast-action keno game in social settings. In Georgia, keno drawings take place every four minutes.

adds new distribution points. As shown in Table 1-1, the NCEL is the newest lottery in its peer group.

Although NCEL's financial performance as measured by Profits Per Capita for Fiscal Year 2011 ranked below all of its peers, the trend is positive.

Efficiency Performance

An organization's efficiency of operations is often measured by performance statistics such as operating margins, return on investment, and critical business drivers.

Profit Margins

Profit Margin, calculated as profits divided by sales, is a frequently used metric for measuring an organization's efficiency in generating profits. Table 1-2 contains profit margins for the NCEL and its peers for Fiscal Year 2011.

**Efficiency Performance Comparison:
FY 2011 Profit Margins
North Carolina Education Lottery and Peer Lotteries³
(sales and profits in 000s)**

Lottery	Sales	Profits	Profit Margin	Profits Per Capita
North Carolina	1,461,107	436,241	29.9%	45.18
Kentucky	719,296	212,250	29.5%	48.58
Virginia	1,482,690	435,200	29.4%	53.75
Tennessee	1,102,579	293,490	26.6%	45.83
South Carolina	1,047,120	271,390	25.9%	58.00
Georgia	3,335,615	846,110	25.4%	86.20

Table 1-2

For FY 2011, NCEL had the highest Profit Margin but lowest Profits Per Capita (PPC) among its peers. Conversely, the Georgia Lottery Corporation had the lowest profit margin and the highest PPC. Hence, for the lottery and gaming industry, the Profit Margin calculation used above is less meaningful than for other industries because a high percentage of the money spent to purchase tickets or place a wager is given back to players as prizes which they, in turn, may spend to purchase more tickets. This is particularly true for games such as instant tickets, keno, video lottery, and casino games where players know almost immediately if they have won. The prizes paid can skew the total amount played by the player⁴.

Therefore, lottery revenue is frequently analyzed net of prizes as opposed to total money wagered. The efficiency as measured by Gaming Profit Margins for NCEL and its peers is shown in Table 1-3. Gaming Revenue is Gross Revenue minus Prizes.

³ Sources: Census Data: U.S. Census; Lotteries' sales and profits from respective lotteries most recent financial statements

⁴ For a detailed explanation of why Operating Margin is less applicable in the lottery and gaming industry, see page 12, NCEL Performance Audit Report, November 29, 2009.

**Efficiency Performance Comparison:
FY 2011 Gaming Profit Margins
North Carolina Education Lottery and Peer Lotteries⁵
(gaming revenue and profits in 000's)**

Lottery	Gaming Revenue ⁶	Profits	Gaming Profit Margin	PPC
North Carolina	596,582	436,241	73.1%	45.18
Tennessee	381,608	293,379	76.9%	43.75
Virginia	601,660	444,210	73.8%	54.86
South Carolina	371,645	271,400	73.0%	58.00
Kentucky	294,597	211,948	71.9%	49.53
Georgia	1,245,995	846,106	67.9%	86.20

Table 1-3

NCEL’s gaming profit margin of 73.1% is nearly identical South Carolina’s 73.0%. It is higher than Georgia’s and Kentucky’s, but lower than Tennessee and Virginia. Comparing the two columns to the right indicates that no clear relationship exists when comparing Gaming Profit Margins and Profits Per Capita between lotteries within our peer group. For example, the Georgia Lottery Corporation has the lowest gaming profit margin and the highest PPC; Tennessee Lottery has the highest gaming profit margin and the second lowest PPC.

Return on Advertising Investment

Lotteries make a major investment in advertising dollars to generate profits for good causes. The return on that investment is a key performance measurement. Table 1-4 compares the Profits per dollar spent on advertising for the NCEL and its peer group.

**FY 2011 Profits Per Dollar Invested in Advertising
(ranked by Profits per \$ invested)**

Lottery	Advertising Investment (Millions)	Profits per \$ Advertising Investment	Advertising Investment Per Capita	PPC
Georgia	21.13	40.04	2.15	86.20
North Carolina	13.76	31.70	1.42	45.18
Tennessee	9.39	31.23	1.47	43.75
South Carolina	8.90	30.49	1.90	58.00
Kentucky	8.90	23.81	2.04	49.53
Virginia	18.79	23.64	2.32	54.86

Table 1-4

The profit per dollar of advertising investment is calculated by dividing total profits by total advertising investment. The average dollar invested in advertising in North Carolina generates \$31.70 of profits; this return exceeds all other lotteries in the group except Georgia.

⁵ Sources: U.S. Census; Lotteries’ sales and profits from respective lotteries most recent financial statements

⁶ Gaming Revenue = Net Sales minus Prizes. Net Sales= Gross Lottery Sales minus free tickets and bad/debts. Prizes = claimed plus unclaimed prizes.

Business Drivers

A key business driver for lotteries is the quantity and quality of retailers selling their products. The quality of retailers from a lottery perspective can best be measured by Sales per Retailer. Table 1-5 ranks the NCEL and its peers by FY 2011 Sales per Retailer.

Lottery	Average Weekly Sales Per Retailer	Profits Per Capita
Georgia	8,148	86.20
South Carolina	5,377	58.00
Virginia	5,117	53.75
Kentucky	4,853	45.58
Tennessee	4,357	45.83
North Carolina	4,155	45.18

Table 1-5

The NCEL's Average Weekly Sales Per Retailer of \$4,155 ranked last among its peer group. The Profits Per Capita shows a positive relationship with retailer productivity. With the exception of Kentucky, the lotteries rank by Average Weekly Sales Per Retailer is consistent with their ranking by Profits Per Capita.

Conventional wisdom in the lottery industry is that making lottery products more available to the public will lead to additional sales. Table 1-6 ranks NCEL and its peers by the number of retailers per 10,000 people.

Lottery	Retailers Per 10,000 People	Profits Per Capita
Georgia	8.7	86.20
South Carolina	8.0	58.00
Tennessee	7.6	43.75
North Carolina	7.0	45.18
Virginia	6.9	54.86
Kentucky	6.5	49.53

Table 1-6

NCEL ranks fourth of the six lotteries in retailer density as measured by Retailers Per 10,000 People. Retailer density indicates a positive relationship to Profits Per Capita. With the exception of Tennessee and Virginia, the higher the number of retailers per 10,000 people, the higher the profits per capita.

NCEL Trend Analysis

This Trend Analysis reviews NCEL's performance from FY 2008 through FY 2012 to identify trends. Long-term, sustained growth in profits requires continuous growth in revenue, therefore the analysis includes an examination of revenue growth during NCEL's first six full years of operation. In addition to revenue, this section reviews profits, gaming profit margins, return on

advertising investment, sales per retailer, and population per retailer. Lotteries that began operations since 2002 and have been in operation at least four full years were used for comparisons in this section. These lotteries include:

- South Carolina Education Lottery (South Carolina)
- Tennessee Education Lottery (Tennessee)
- North Dakota Lottery (North Dakota)
- Oklahoma Lottery (Oklahoma)

Revenue Trend

The NCEL generates over 99.5% of its revenue from the sale of lottery tickets. Table 1-7 contains operating revenues by source for Fiscal Year 2007 to Fiscal Year 2010. During its first four full years of operation, the NCEL increased revenue every year. This growth in revenue is important if the NCEL is to achieve long-term, sustained growth in profitability.

**NCEL Financial Trend 2007-2012
Operating Revenue (\$000's)**

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Sales and services	1,048,446	1,283,531	1,420,004	1,459,732	1,596,512
Fees, licenses and fines	4,783	4,663	4,859	5,061	5,381
Miscellaneous	(97)	(91)	(405)	(153)	(55)
Total operating revenues	1,053,131	1,288,103	1,424,458	1,464,640	1,601,838

Table 1-7

Lotteries are expected to grow revenue, especially during their early years of operation. The NCEL may have been hampered by the economic recession, but was also helped by its ability to increase prize payout percentages after August of 2007. Regardless, comparing NCEL’s growth rate to that of other recent lottery startups provides insight on NCEL’s performance. Table 1-8 shows the per capita sales for the first through sixth full years for U.S. lotteries that began operations since 2002 and have been operating for at least six years.

**Annual Per Capita Sales Years 2 through 6
Lotteries Beginning Operations Since 2002**

Lottery	Started	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
North Carolina	Mar 2006	\$97.70	\$116.60	\$137.85	\$149.06	\$151.31	\$163.11
North Dakota	Mar 2004	\$30.11	\$35.07	\$35.48	\$34.49	\$31.76	\$35.33
Oklahoma	Oct 2005	\$56.29	\$56.12	\$52.39	\$53.25	\$52.27	\$52.23
South Carolina	Jan 2002	\$174.68	\$226.12	\$224.84	\$263.77	\$211.18	\$209.58
Tennessee	Jan 2004	\$140.82	\$152.33	\$159.55	\$158.71	\$158.50	\$164.05

Table 1-8

Although higher than North Dakota’s and Oklahoma’s, North Carolina’s Year 1 per capita sales were 56% of South Carolina’s and 69% of Tennessee’s. By Year 6, North Carolina’s per capita sales were 78% of South Carolina’s and 99% of Tennessee’s.

Table 1-9 shows the percentage sales growth for each of the lotteries during their first six full years of operation. As can be seen, the NCEL's 67.0% was the highest growth in per capita sales from Year 1 to Year 6. South Carolina was able to increase per capita sales by an impressive 20.0% over the six year period. Over their first six years, Tennessee and North Dakota grew per capita sales by 16.5% and 17.3%, respectively. Oklahoma, challenged by a limitation on prize payouts, experienced a decline in sales between Year 1 and Year 6.

**Annual Per Capita Sales Growth Years 1 through 6
Lotteries Beginning Operations Since 2002**

Lottery	Started	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	1 to 6
North Carolina	Mar 2006	19.3%	18.2%	8.1%	1.5%	7.8%	67.0%
North Dakota	Mar 2004	16.5%	1.2%	-2.8%	-7.9%	11.2%	17.3%
Oklahoma	Oct 2005	-0.3%	-6.7%	1.6%	-1.8%	-0.1%	-7.2%
South Carolina	Jan 2002	29.4%	-0.6%	17.3%	-19.9%	-0.8%	20.0%
Tennessee	Jan 2004	8.2%	4.7%	-0.5%	-0.1%	3.5%	16.5%

Table 1-9

Profit Trend

Table 1-10 contains profits for fiscal years 2007 to 2012. During its first six years of operation, the NCEL increased profits every year.

**NCEL Financial Trend 2008-2012
Profits (000's)**

Year	Sales	Profits	% Change in Profits from Previous FY
FY 2007	885,575	315,562	
FY 2008	1,078,179	348,310	10.4%
FY 2009	1,293,111	413,929	18.8%
FY 2010	1,421,239	432,206	4.4%
FY 2011	1,461,107	436,241	0.9%
FY 2012	1,596,693	459,469	5.3%

Table 1-10

Table 1-11 shows the annual Profits Per Capita for U.S. lotteries that began operations since 2002 and have been in operation for at least six years.

**Annual Profits Per Capita Years 1 through 6
Lotteries Beginning Operations Since 2002**

Lottery	Start Date	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
North Carolina	Mar 2006	\$34.81	\$37.67	\$44.12	\$45.35	\$45.18	\$46.94
North Dakota	Mar 2004	\$10.17	\$10.87	\$10.65	\$9.23	\$9.33	\$8.28
Oklahoma	Oct 2005	\$21.21	\$20.29	\$19.38	\$18.35	\$18.44	\$18.29
South Carolina	Jan 2002	\$52.89	\$69.06	\$65.20	\$73.48	\$59.22	\$56.02
Tennessee	Jan 2004	\$39.08	\$45.62	\$46.05	\$45.85	\$43.75	\$44.70

Table 1-11

Table 1-12 provides the Profits Per Capita growth for U.S. lotteries beginning operations since 2002 and operating at least six years. As can be seen, South Carolina achieved the highest

growth rate from Year 1 to Year 4 despite a decrease of 5.6% from Year 2 to Year 3. The Tennessee Education Lottery had impressive growth between Year 1 and Year 2, followed by a year of anemic growth and a year of declining PPC. The North Dakota Lottery experienced growth from Year 1 to Year 2; this was followed by two consecutive years of decreases⁷. Oklahoma experienced declining per capita profits in each of its first four full years of operations.

The NCEL achieved 34.8% growth from Year 1 to Year 6. This growth exceeded all of its peers. Although Tennessee's Year 1 Profit Per Capita exceeded NCEL's by \$4.27 (\$39.08 versus \$34.81), the NCEL Profit Per Capita surpassed Tennessee's in Year 5.

**Annual Per Capita Profit Growth Years 1 through 6
Lotteries Beginning Operations Since 2002**

Lottery	Start Date	Year 1 to 2	Year 2 to 3	Year 3 to 4	Year 4 to 5	Year 5 to 6	Year 1 to 6
North Carolina	Mar 2006	8.2%	17.1%	2.8%	30.3%	3.9%	34.8%
North Dakota	Mar 2004	6.9%	-2.0%	-13.4%	-9.2%	-11.3%	-18.6%
Oklahoma	Oct 2005	-7.4%	-4.5%	-5.3%	-13.9%	-0.8%	-13.8%
South Carolina	Jan 2002	30.6%	-5.6%	12.7%	38.9%	-5.4%	5.9%
Tennessee	Jan 2004	16.7%	0.9%	-0.4%	17.3%	2.2%	14.4%

Table 1-12

Of the five lotteries started in the 2002-2006 timeframe, the North Carolina Education Lottery is the only lottery to have achieved per profit growth in each of its first six years of operation.

Profit Margins

Profit margins declined from 35.6% to 28.8% in the last six years. However, sales increased 80% and profits increased 46%. In FY 2011, profit margins within the NCEL peer group varied from 25.4% to 29.9% (see Table 1-2).

**NCEL Efficiency Trend 2008-2012
Profit Margin
(sales and profits in 000's)**

Year	Sales	Profits	Profit Margin
FY 2008	\$1,078,179	\$ 348,310	32%
FY 2009	\$1,293,111	\$ 413,929	32%
FY 2010	\$1,421,313	\$ 432,206	30%
FY 2011	\$1,461,107	\$ 436,241	30%
FY 2012	\$1,596,693	\$ 459,469	29%

Table 1-13

Table 1-14 shows net gaming revenue, profits, and gaming profit margin for NCEL for FY 2007 through FY 2012.

⁷ North Dakota is the only lottery in the U.S. that does not sell instant tickets. Instant tickets have been a dominant growth area for most lotteries since 2000.

**NCEL Efficiency Trend 2008-2012
Gaming Profit Margin
(net gaming revenue and profits in 000's)**

Year	Net Gaming Revenue	Profits	Gaming Profit Margin
FY 2008	\$ 459,961	\$ 348,310	76%
FY 2009	\$ 551,841	\$ 413,929	75%
FY 2010	\$ 584,699	\$ 432,206	74%
FY 2011	\$ 596,735	\$ 436,241	73%
FY 2012	\$ 634,955	\$ 459,469	72%

Table 1-14

Gaming profit margins declined from 76% to 72% in the past five years. However, net gaming revenue increased 38% and profits increased 32%. In FY 2011, gaming profit margins within the NCEL peer group varied from 67.9% to 76.9% (see Table 1-3).

Return on Advertising and Marketing Investment

The NCEL increased its advertising and marketing investment by \$7.4 million from FY 2008 to FY 2012. This increased investment resulted in an additional \$111.2 million in profits for education. Although the NCEL average return on a dollar spent on advertising and marketing is decreasing, the economic challenges in the U.S. during FY 2008 to FY 2012 have made it very difficult for lotteries to maintain profit growth. Forty-eight percent of the U.S. lotteries had lower profits in FY 2011 than they did in FY 2008. Many lotteries suffered multiple years of profit declines during this period. In fact, North Carolina, New Jersey, and Ohio were the only three lotteries in the U.S. to increase profits every year from FY 2007 through FY 2012⁸.

**NCEL Efficiency Trend 2008-2012
Return on Advertising Investment**

Year	Profits (000's)	Advertising Investment (000's)	Profit per Advertising Dollar
FY 2008	\$ 348,310	\$8,619	\$ 40.41
FY 2009	\$ 413,929	\$11,172	\$ 37.05
FY 2010	\$ 432,206	\$11,792	\$ 36.65
FY 2011	\$ 436,241	\$13,760	\$ 32.41
FY 2012	\$ 459,469	\$14,696	\$ 31.26

Table 1-15

Given the NCEL's return on advertising investment, the advertising limit of one-percent of sales is likely reducing the profits available for education. And, although falling sales would motivate most companies to increase advertising, the NCEL would have to decrease advertising if sales begin to fall. This could exacerbate the decrease in profits available for education.

⁸ With the addition of Arkansas in FY 2010, there were forty-four lotteries in the U.S. operating in the FY 2007 to FY 2012 period; 93% of these lotteries experienced at least one year of decreased profits.

Retailers

The quantity and quality of retailers are two of the most important drivers of lottery revenue. The Peer Review revealed that NCEL had the lowest producing retailers in the peer group and the second lowest number of retailers per capita. Table 1-16 provides the number of retailers, the average weekly sales per retailer, and the number of retailers per 10,000 people for the NCEL over the past four fiscal years.

**NCEL Business Driver Trend 2007-2012
Number of Retailers and Sales per Retailer**

Year	Number of Retailers	Average Weekly Sales Per Retailer	Retailers Per 10,000 People
FY 2008	5,860	3,538	6.34
FY 2009	6,019	4,132	6.42
FY 2010	6,218	4,396	6.52
FY 2011	6,599	4,258	6.83
FY 2012	6,763	4,540	6.91

Table 1-16

NCEL has grown its retailer base slowly but consistently over the past four years, achieving a total increase of 7% during the period. Simultaneously, the NCEL has achieved an increase in sales per retailer of almost 50% since FY 2007.

Employee Productivity

Consistent with the philosophy that Gaming Revenue is a better productivity measurement in the lottery industry than Gross Sales, employee productivity is measured as the gaming revenue generated per NCEL employee. Table 1-17 shows that as the number of employees has increased from 211 in FY 2007 to 227 in FY 2010, the productivity per employee has increased from \$1,942,574 in FY 2007 to \$2,573,985 in FY 2010.

**NCEL Employee Productivity
FY 2008-FY 2012**

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Gaming Revenue	\$459,961,137	\$551,840,793	\$584,699,298	\$596,735,464	\$634,955,413
Number of Employees ⁹	214	224	227	233	233
Gaming Revenue per Employee	\$2,149,351	\$2,463,575	\$2,575,768	\$2,561,096	\$2,725,131

Table 1-17

Source: North Carolina Education Lottery (FY 2012 figures are unaudited)

⁹ The NCEL budgeted headcounts for FY 2008 through FY 2012 were 227, 237, 241, 244, and 244, respectively. The average number of actual employees was used in this analysis. The NCEL experiences considerable employee turnover.

Performance Summary

The NCEL's performance has been exceptional. Although restrictions on prize payouts and advertising contributed to low sales initially and the advertising restrictions continues to reduce the NCEL's ability to generate additional profits, the NCEL has achieved six consecutive years of profit growth. Of the five lotteries that began operations in the 2002-2006 timeframe, the NCEL achieved the highest profit growth over the first six full years of operation and was the only lottery to achieve sales and profit growth in each of its first six full years of operations. The NCEL has increased sales by more than 60% in the last three years by increasing prize payout percentages, advertising and marketing investment, and expanding its retailer base.

PART 2: MANAGEMENT INFORMATION PROGRAM REVIEW

NCEL's management information program was evaluated to ascertain its capability to provide the necessary information and reports we believe are essential to manage and grow the Lottery's business. Specifically, the management information program was evaluated to determine if a multi-tier reporting approach provides management with actionable revenue, expense, profit, and metric information. The three tiers consisted of Executive, Management, and Sales Management levels.

The executive level information provides the NCEL Lottery Commission and NCEL executives with a concise snapshot of NCEL performance. Information includes high-level standard financial statements including income statements, statements of cash flows, and balance sheets. Additionally, financial reports such as product sales, sales by region, expenses by category, and contribution to good causes are available.

Management level information provides the NCEL executive and management staffs with critical information regarding NCEL performance. Information includes standard financial statements such as profit and loss statements and expense reports. Key business drivers are measured, reported, and reviewed regularly by management. These key drivers include such measurements as employee turnover, fleet maintenance and repair costs, and open requests for software services.

Financial Reporting

NCEL uses the State of North Carolina's financial system for budgeting and accounting. The system was not designed to handle a sales-based business enterprise such as a Lottery. For example, certain items, such as prizes expense, are lumped into operating expenses. Given that the prize expense is actually a cost of goods sold, inclusion of these costs in "operating expense" makes analysis of operating cost trends difficult without creating a manual system using spreadsheets and re-entering numbers. The system provides cost accounting by department and by accounts but does not provide activity-based cost accounting. Additionally, the system does not have the ability to simultaneously report profit and loss data in multiple formats such as by region and by product. Hence, the system does not provide the necessary financial and operational reports for the NCEL to properly evaluate its business performance.

NCEL staff re-enter various financial data from the state accounting system into spreadsheets and generate financial and operational information that can be used to properly analyze the business. By maintaining this data manually, NCEL financial staff must reconcile both sets of financial records to ensure the accuracy of information provided to management. The use of the state's financial system results in the inefficient use of human resources; staff spend significant time entering and reconciling information that a financial system designed for a business enterprise would provide automatically.

Sales Reporting

In 2010, the NCEL deployed a database system that receives transaction and sales data from the NCEL's Internal Control System and certain files from the gaming system. The implementation of this system provided the NCEL with a more robust and user-friendly reporting system. This system also frees the NCEL from reliance on its gaming vendors to create reports.

Standard marketing reports are generated from the database using SAS, and readily available to the appropriate staff through a user-friendly, browser-based system. The information in the standard reports is appropriate and sufficient for managing day-to-day sales and marketing efforts of the NCEL.

Additionally, NCEL has full-time staff dedicated to the reporting system, providing the NCEL the ability to create custom reports to meet analytical requirements and special reporting needs. This database system has significantly improved both the speed of creating special reports and the analytical capability of the NCEL.

Key Business Metrics

All NCEL departments measure key business drivers. Some of these measurements are captured and reported using enterprise-wide systems such as the Vendor Performance Evaluation Tool used by several departments responsible for measuring and tracking the performance of the NCEL's major gaming system provider. Other measurements and data are captured and reported using customized systems, databases, and spreadsheets developed for specific departments and functions.

Management Information Recommendation

The NCEL should obtain a flexible financial accounting system designed to support a business enterprise as soon as practical.

Part 3: COST ANALYSIS AND PROGRAM EFFICIENCY STUDY

Most organizations have areas where lower costs and greater efficiencies can be obtained. However, the NCEL, with its primary objective of generating profits for education, should be careful not to decrease spending in areas that may result in a decrease in profits. Additionally, it may be prudent for the NCEL to increase expenditures in areas that will increase profits and the funding available for education.

NCEL Financial Results 2008-2012
(\$000's)

	FY 2008	FY 2009	FY 2010	FY2011	FY2012
Operating Revenues	1,053,131	1,288,103	1,424,458	1,464,640	1,601,838
Change from previous year	21.6%	22.3%	10.6%	2.8%	9.4%
Operating Expenses	709,646	876,790	993,888	1,028,510	1,141,910
Change from previous year	27.8%	23.6%	13.4%	3.5%	11.0%
Operating Profits ¹⁰	343,485	411,313	430,570	436,130	459,928
Change from previous year	10.5%	19.7%	4.7%	1.3%	5.5%

Table 3-1

As can be seen in Table 3-1, operating profits have increased in each of the last five years. However, operating expenses are increasing proportionately faster than operating revenues. Given this trend, an analysis of the last five fiscal years' actual expenditures was performed. This analysis focused on the NCEL's cost trends and identified areas of possible concern and areas that may present opportunities. Given that the majority of the NCEL expenditures are strongly, if not directly related to sales, it was necessary to first analyze revenue and sales trends.

Revenue and Sales Trends

Lottery revenue can be reported and analyzed in a several ways. Lotteries frequently report Gross Sales. Gross Sales usually includes the retail value of every ticket purchased or received by players. A drawback to this measurement for inclusion in an efficiency study is that it includes the value of tickets a lottery gives away. NCEL follows this common lottery industry practice. Net Sales is equal to Gross Sales less tickets given away and tickets not paid for by retailers. Other things being equal, both Gross Sales and Net Sales can be increased by increasing prize payouts. Hence, the most important revenue statistic is Gaming Revenue which is derived by subtracting prizes from Net Sales.

The NCEL successfully increased Net Gaming Revenue in each of the past five years. Prize expenses increased 14.2%, 3.3% and 11.4% compared to net sales increases of 10.6%, 2.8%, and 9.4% from 2010 through 2012, respectively. Free tickets have dropped significantly since 2008

¹⁰ Operating profits exclude non-operating expenses and revenues.

when the NCEL began offering instant scratch-off games with break-even cash prizes in lieu of free tickets.

Table 3-2 shows NCEL sales and gaming revenue trends for FY 2008 through FY 2012.

**NCEL Sales and Gaming Revenue (000s)
FY 2008-FY2012**

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Gross Sales	\$1,078,179	\$ 1,293,111	\$1,421,313	\$1,461,107	\$1,596,693
Change from previous year	21.7%	19.9%	9.9%	2.8%	9.3%
Less: Free Tickets	\$29,733	\$9,580	\$1,309	\$1,375	\$181
Less: Bad Debt/Other ¹¹	\$97	\$91	\$405	\$153	\$55
Net Sales	\$1,048,349	\$1,283,440	\$1,419,599	\$1,459,578	\$1,596,456
Change from previous year	21.7%	22.4%	10.6%	2.8%	9.4%
Less: Prizes ¹²	\$588,485	\$731,690	\$835,304	\$862,996	\$961,556
Change from previous year	30.3%	24.3%	14.2%	3.3%	11.4%
Net Gaming Revenue	\$459,864	\$551,750	\$584,295	\$596,582	\$634,900
Change from previous year	12.2%	20.0%	5.9%	2.1%	6.4%

Table 3-2

The analysis of the NCEL operating cost trends over the previous five years evaluates costs as a percentage of revenue. Costs were grouped into four different categories based on relevance and cost drivers.

- Product and distribution costs
- Advertising and marketing investment
- Employee costs
- Other operating costs

The first two categories are highly related to sales and, therefore, were evaluated as a percentage of Gross Sales. The second two categories are costs that should be tightly managed and should not grow faster than Net Gaming Revenue; these costs were evaluated as a percentage of Net Gaming Revenue.

Product and Distribution Costs

Product and distribution costs are strongly related to sales. Retailer compensation includes commissions and incentives paid to retailers for selling top tier prize awards in the multi-state and Carolina Cash 5 games. Gaming system services and ticket costs include payments to the gaming system vendor for providing the system and services required to deliver tickets to the retail locations and include any special game fees. Retailer commissions are set by statute at 7% of sales.

¹¹ Includes retailer bad debt and damaged ticket charges

¹² Includes claimed and unclaimed prizes

Table 3-3 contains the product and distribution cost trends for the NCEL from FY 2008 through FY 2012. Retailer compensation increased from 6.99% in 2009 to 7.03% of Gross Sales in FY 2012 as a result of retailer incentives. Incentives of \$592,000 and \$609,000 were paid in 2011 and 2012, respectively to retailers for selling top tier winning tickets for multi-state games and Cash 5.

**NCEL Product & Distribution Costs (in 000s)
FY 2008-FY 2012**

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Retailer Compensation	\$75,371	\$90,366	\$99,733	\$102,719	\$112,233
% Gross Sales	6.99%	6.99%	7.02%	7.03%	7.03%
Gaming System Services & Ticket	\$17,287	\$21,243	\$23,119	\$24,141	\$28,187
% Gross Sales	1.60%	1.64%	1.63%	1.65%	1.77%
Total Product & Distribution Costs	\$92,657	\$111,609	\$122,852	\$126,860	\$140,420
% Gross Sales	8.59%	8.63%	8.64%	8.68%	8.79%

Table 3-3

The majority of the gaming system services and ticket fees are determined by a long-term contract with the NCEL's gaming system provider. The base fee is 1.599% of gross sales with certain provisions for additional fees and credits. Additional fees of \$145,000 and \$472,000 for new jackpot signs and ticket vending machines were incurred in 2011 and 2012, respectively. Intellectual property fees of \$644,000, \$479,000, \$660,000 and \$1,078,000 were incurred in 2009, 2010, 2011 and 2012, respectively, for instant games associated with licensed properties.

Advertising and Marketing Investment

Advertising and marketing investments are highly related to Gross Sales. The NCEL is limited to spending one percent of sales on advertising. As shown in Table 3-4, advertising and marketing expenditures increased from .99% in FY 2010 to 1.10% in FY 2011 and then decreased to 1.08% in 2012.

**NCEL Advertising and Marketing Investment (000s)
FY 2008 – FY 2012**

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Advertising	8,619	11,172	11,792	13,760	14,696
% Gross Sales	0.80%	0.86%	0.83%	0.94%	0.92%
Marketing	1,220	1,750	2,239	2,358	2,512
% Gross Sales	0.11%	0.14%	0.16%	0.16%	0.16%
Total Advertising & Marketing	9,838	12,922	14,031	16,118	17,209
% Gross Sales	0.91%	1.00%	0.99%	1.10%	1.08%

Table 3-4

Although gross sales increased only 2.8% from FY 2010 to FY 2011, advertising increased by 17%. Prior to FY2011 the NCEL maintained a significant contingency in its advertising budget

to ensure the amount spent remained below the statutory limit of one percent of gross sales. With more historical data available and greater certainty in projecting gross sales, NCEL has been able to decrease the contingency and invest closer to the one percent limit on advertising.

Employee Costs

Employee costs are the NCEL's largest operating cost category aside from the revenue-related costs discussed above. Employee costs include salaries, wages, and employee benefits.

**NCEL Employee Productivity (000s)
FY 2008 – FY 2012**

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Gaming Revenue	459,961	551,841	584,699	596,735	634,955
Number of Employees	214	224	227	233	233
Gaming Revenue per Employee	2,149	2,464	2,576	2,561	2,725
Salaries, wages, benefits	13,793	14,694	15,299	15,824	16,639
% Gaming Revenue	3.00%	2.66%	2.62%	2.65%	2.62%

Table 3-5

Employee productivity is best measured by the gaming revenue generated per NCEL employee. As the number of employees has increased from 227 in FY 2010 to 233 in FY 2012, the productivity per employee has increased from \$2,575,768 in FY 2010 to \$2,725,131 in FY 2012. During this same period, the employee costs remained 2.62% of Gaming Revenue and decreased from 1.08% to 1.04% of Gross Sales.

Other Operating Costs

The Other Operating Costs category is comprised of a number of miscellaneous accounts. These accounts represent 1.1% of Gaming Revenue and less than 0.5% of Gross Sales.

**NCEL Other Operating Costs (000s)
FY 2008-2012**

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Other Contracted services	1,396	1,487	1,766	1,695	1,715
Communications & Computing	708	1,032	1,328	1,093	1,250
Furniture, fixtures, and equipment	240	249	377	933	762
Depreciation	382	544	583	624	457
Other expenses	1,674	2,750	2,370	2,387	2,391
Total Other Operating Costs	4,400	6,062	6,423	6,731	6,575
% of Gaming Revenue	0.96%	1.10%	1.10%	1.13%	1.04%

Table 3-6

Total Other Operating Costs increased 2.4% from FY 2010 to FY 2012. Primary components of changes since 2010 are:

- **Communications and computing:** Telephone service was rebid which resulted savings of \$200,000 from FY 2010 to FY 2011. However, increased traffic on 1-800

lottery results number increased the total spending from FY 2011 to FY 2012 by \$160,000.

- **Furniture, fixtures, and equipment:** The \$556,000 increase from FY 2010 to FY 2011 was attributable to the purchase of ticket dispensers and replacement of personal computers and printers. The \$170,000 decrease from FY 2011 to FY 2012 was attributable to the decrease in the purchase of personal computers and printers. The NCEL's ability to manage Other Operating Costs resulted in a decrease from 1.10% of Gaming Revenue in FY 2010 to 1.04% in FY 2012.

Cost Analysis and Program Efficiency Summary

The NCEL continues to achieve year-over-year growth in Gross Sales, Gaming Revenue and Operating Profits. Gross sales increased by 12.4% from FY 2010 to FY 2012; Gaming Revenue increased by 8.7% and Operating Profits increased by 6.8% over the same period.

Sales-related costs increased from 9.63% of sales in FY 2010 to 9.87% in FY 2012. Product and Distribution costs have increased from 8.64% of Gross Sales in FY 2010 to 8.79% in FY 2012; this increase is attributable primarily to the jackpot signs, ticket vending machines, and intellectual property fees. Advertising investment increased from 0.83% of Gross Sales in FY 2010 to 0.94% in FY 2011; the increase is attributable to the NCEL's ability to decrease the advertising funds set aside to ensure the one percent advertising limit was not breached.

Employee productivity increased to \$2.7 million in annual Gaming Revenue per employee in FY 2012 and employee costs were 2.62% of Gaming Revenue in both FY 2010 and FY 2012. Other Operating Costs decreased from 1.10% of Gaming Revenue to 1.04% from FY 2010 to FY 2012.

Part 4: NCEL PORTFOLIO ANALYSIS

The North Carolina Education Lottery (NCEL) has a product mix that substantially mirrors those of other similar aged lotteries as well as those in its peer group. This product mix includes instant scratch off games as well as draw games (games for which the player must wait for drawing results to determine whether or not theirs is a winning ticket).

Instant Scratch-Off

The instant scratch-off product category typically has a higher overall payout than the draw game product category. Reasons for this difference include the frequency of play and the immediacy of the result. Players purchasing Instant Scratch-Off tickets can find out immediately if they have won; this product attribute allows for immediate gratification and is one reason that lotteries dedicate a larger share of the ticket price to prizes for these games as compared to the draw game category. Lotteries allocate a majority of the prize structure to lower level prizes (\$1 - \$100). This rewards players frequently and results in players reinvesting their winnings back into the product category. This reinvestment of small prizes creates a churning effect that leads to higher sales.

Draw games typically have a lower overall payout with draws that vary from twice weekly to every 5 minutes (keno). Games such as Powerball and Mega Millions offer multi-million dollar prizes twice weekly; games such as NCEL's Cash 5 game, which offers a beginning top prize of \$50,000 and typically grows to more than \$250,000 are drawn daily; other games, such as Pick 3 and Pick 4, with top prizes of \$500 and \$5,000 respectively are drawn twice daily.

One significant difference when the NCEL is compared to its peer group is that some jurisdictions have more draw games in their portfolio. The table below suggests that this may be due to a difference in the age of the lottery as those that have been in operation significantly longer are the ones that have more draw games available. Offering a variety of draw games appeals to a larger player base as win amount and win frequency desires can be more easily met.

**Number of Draw Games - Peer Group
Population and Years in Business**

Jurisdiction	Years in Operation	2012 Population	Draw Games
North Carolina	6	9,380,884	5
Tennessee	10	6,296,254	5
South Carolina	11	4,561,242	5
Georgia	21	9,457,857	9
Kentucky	25	4,314,113	7
Virginia	25	7,882,590	8

Table 4-1

Table 4-2 shows NCEL’s annual per capita Instant Scratch-Off sales compared to other jurisdictions in its peer group and the industry average. For the 5 year period ended June 30, 2012, NCEL lead its peer group in sales growth as calculated using the 5-year compound annual growth rate. In fact, NCEL’s growth rate is nearly twice that of its closest competitor, Tennessee; however, its annual per capita sales amount lags all peer group members as well as the industry average. All peer group members Instant Scratch Offs growth rate, excluding Kentucky & Virginia, equal or exceed the industry average.

**Annual Instant Scratch Offs Per Capita Sales
Ranked by 5-Year Compound Annual Growth Rate**

Jurisdictions	FY08	FY09	FY10	FY11	FY12	5-Year CAGR
North Carolina	\$68.77	\$85.14	\$89.73	\$89.28	\$98.97	13.96%
Tennessee	\$115.60	\$122.12	\$128.01	\$135.04	\$164.00	7.73%
Georgia	\$222.48	\$228.27	\$222.50	\$220.21	\$263.78	3.68%
South Carolina	\$138.31	\$142.51	\$139.70	\$149.23	\$161.40	2.95%
Virginia	\$89.14	\$87.58	\$88.88	\$93.48	\$103.96	2.82%
Kentucky	\$109.83	\$106.30	\$94.42	\$97.18	\$114.34	2.05%
Industry	\$106.64	\$104.12	\$104.73	\$108.64	\$121.12	2.95%

Table 4-2

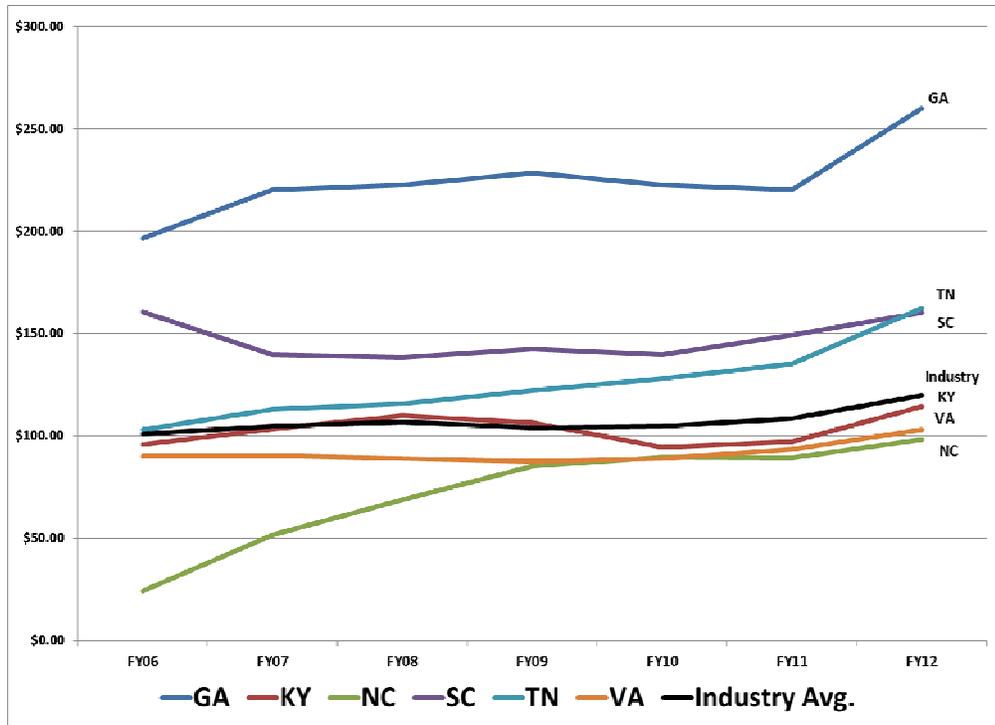
As shown in the following graph, the Georgia Lottery Corporation had substantial growth from 2011 to 2012. The Georgia Lottery attributes the increase to four primary factors:

- All instant scratch-off games launches now take place on the third Tuesday of the month. This allows the retailers and the Lottery to concentrate advertising and marketing efforts. Also, the practice of launching new games all the time resulted in newer games cannibalizing recently launched games before they have a chance to get established.
- Reduced the number of \$1 and \$2 games being offered. With more than 25% of instant scratch-off sales coming from \$1 and \$2 games, these price points are very important to the Georgia Lottery’s product mix. Offering a large number of games at lower price points results in these games competing for counter space and mind-share of other price point games. The Lottery no longer launches more than one new game per price point each month.
- Continued success and extension of the “X’s Money” and “Jumbo Bucks” game families. The Lottery offers five “X’s Money” games¹³ and offers at least one Jumbo Bucks game at every price point—with names varying from “Junior Jumbo Bucks” at \$1 to “Millionaire Jumbo Bucks” at \$20.

¹³ The Georgia Lottery Corporation limits the offering to one game per price point and increases the multiplier as the price point increases. Recent offerings were: \$1 for 5X The Money , \$2 for 10X The Money, \$5 for 20X The Money, \$10 for 50X The Money, and \$20 for 100X The Money.

- Large multistate game jackpots generated buzz that lead to an overall increase in lottery mindshare and sales.

Annual Instant Scratch-Offs Per Capita Sales



NCEL had exceptional growth from 2006 through 2009. The growth was primarily attributable to substantial increases in prize payouts and the newness of the lottery. In the past three years, NCEL has mirrored the industry average.

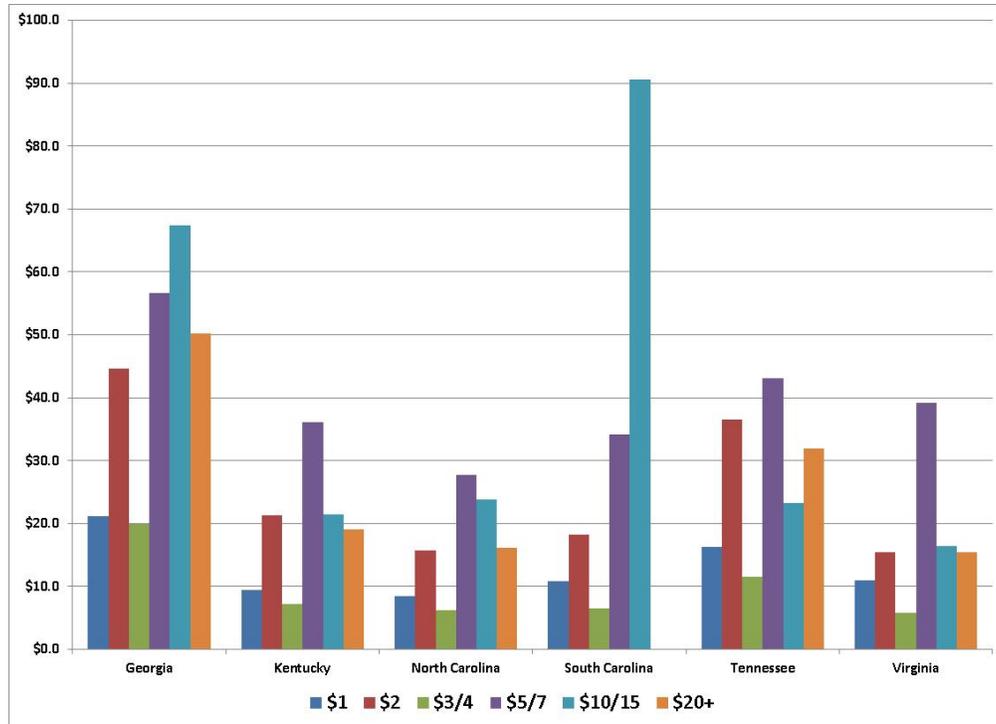
Table 4-3 illustrates Per Capita Instant Scratch Offs sales by price point for FY12. The NCEL price point offering mirrors the industry as well as its peer group members. South Carolina’s \$10/\$15 category is significantly higher than the other lotteries in the peer group; however, South Carolina does not offer games in the \$20+ category.

Per Capita Instant Scratch Off Sales by Price Point

Jurisdictions	\$1	\$2	\$3/4	\$5/7	\$10/15	\$20+	Total
North Carolina	\$8.5	\$15.7	\$6.2	\$27.7	\$23.8	\$16.2	\$98.1
Georgia	\$21.2	\$44.7	\$19.8	\$56.7	\$67.5	\$50.1	\$259.9
Kentucky	\$9.4	\$21.3	\$7.2	\$36.1	\$21.4	\$19.0	\$114.4
South Carolina	\$10.7	\$18.3	\$6.5	\$34.1	\$90.6	\$0.0	\$160.2
Tennessee	\$16.3	\$36.5	\$11.5	\$43.1	\$23.2	\$31.9	\$162.4
Virginia	\$10.9	\$15.4	\$5.7	\$39.1	\$16.3	\$15.4	\$102.9
Industry	\$10.1	\$21.3	\$10.6	\$33.5	\$24.7	\$19.1	\$119.3

Table 4-3

**Per Capita
Instant Scratch-Off Sales by Price Point FY12**



As shown in Table 4-4, the Georgia Lottery has significantly higher per capita instant scratch-off sales than the other lotteries in the peer group. Tennessee and South Carolina rank second and third, but are almost \$100 per capita lower than Georgia. Kentucky, Virginia and North Carolina are \$47 to \$62 lower than South Carolina.

Per Capita Instant Scratch-Off Sales Rankings

Jurisdiction	Pop (Millions)	2012 Annual Instant Sales Per Capita	2012 Instant Sales Per Capita Rank Industry
Georgia	9.80	\$263.78	2 of 43
Tennessee	6.40	\$164.00	6 of 43
South Carolina	4.70	\$161.40	7 of 43
Kentucky	4.40	\$114.34	18 of 43
Virginia	8.10	\$103.96	19 of 43
North Carolina	9.70	\$98.97	20 of 43
Industry	295.70	\$121.12	

Table 4-4

An analysis of the total number of active games and the number of active games by price point within the peer group revealed that the lotteries with the highest per capita instant scratch-off sales had the fewest active games¹⁴. However, an analysis of the lotteries with the highest per capita instant scratch-off sales in the industry did not indicate that this relationship was more than a coincidence¹⁵.

Recommendations for Instant Scratch-Offs

No specific areas instant scratch-off ticket attributes or processes were identified that could conclusively be linked to NCEL's performance relative to its peers. However, based on its performance relative to its peer group, the NCEL should consider implementing several changes consistent with the Georgia Lottery Corporation's recent success.

- Limit game launches to one per price point per month to reduce games from competing with one another.
- Reduce the number of \$1 and \$2 games being offered
- Set permanent launch schedule to a specific day of the month (i.e. 3rd Tuesday, 1st Thursday, etc.) to allow retailers and NCEL to concentrate marketing efforts and reduce newer games cannibalizing recently launched games before they have a chance to get established.
- Use specific themes such as Xs the Money and Jumbo Bucks to create and leverage theme equity across multiple price points.

Daily Number Games

There are 44 U.S. jurisdictions that sell lottery; of those 44 there are 39 that sell Pick 3; 33 of the 39 also offer Pick 4. These daily games typically offer a mid-day draw and an evening draw; wagers can be made for \$0.50 or \$1.00 with payout generally set at 50%. These games also offer a variety of wager types, allowing players to choose between prize amounts and win frequency. Table 4-4 below shows the industry average for this category has slightly declined over the past several years. There are some exceptions, and the NCEL is one of them; experiencing positive sales growth in both games. Many jurisdictions have experienced slow erosion in Pick 3 and Pick 4 sales; a few jurisdictions have had modest Pick 4 sales growth.

¹⁴ Georgia, Tennessee, and South Carolina had 59, 60, and 43 active games, respectively. Kentucky, Virginia and North Carolina had 86, 70, and 75 active games, respectively.

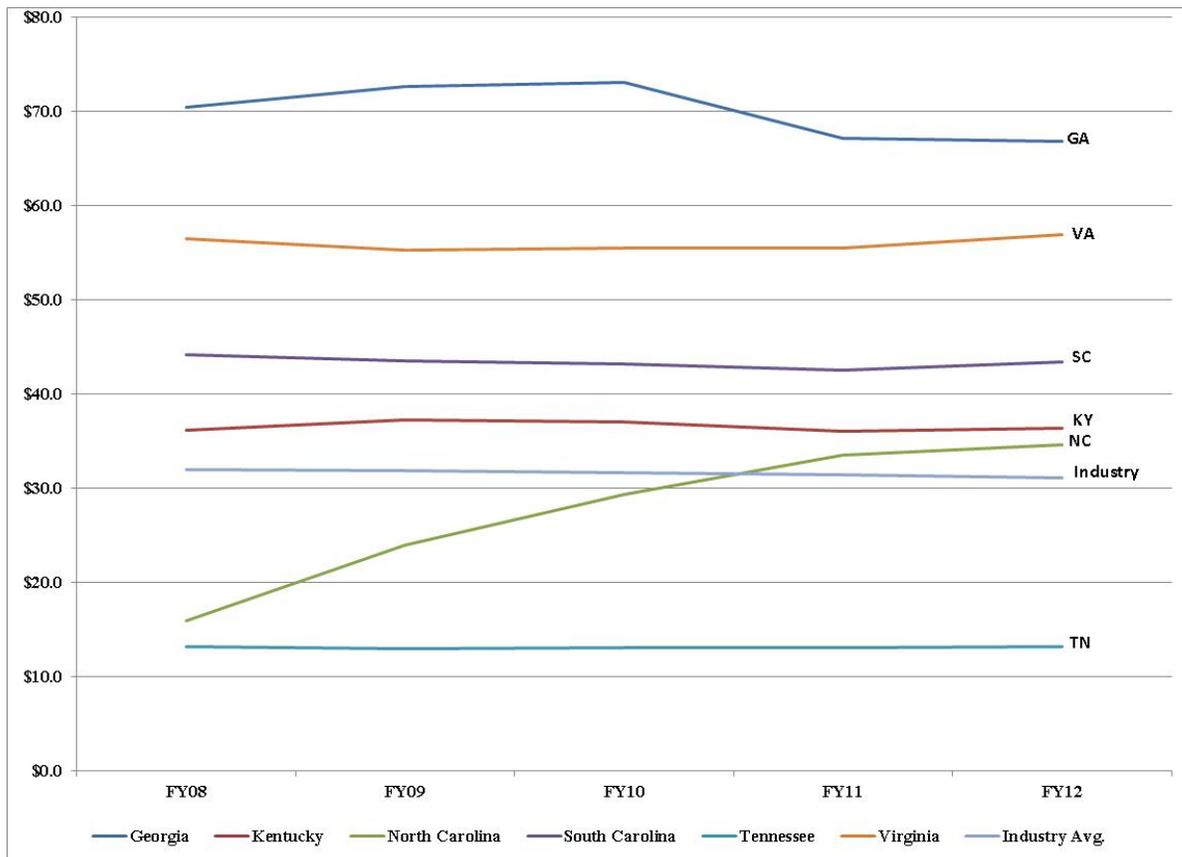
¹⁵ The number of active games offered by best performing lotteries based on per capita instant scratch-off sales are: 1) Massachusetts-95 game, 2) Georgia- 59 games, 4) New York-54 games, and 5) Connecticut-80 games.

Annual Per Capita Daily Number Games Sales

Jurisdiction	FY08	FY09	FY10	FY11	FY12	5-Year CAGR
North Carolina	\$15.9	\$23.9	\$29.4	\$33.5	\$34.7	16.85%
Georgia	\$70.4	\$72.6	\$73.1	\$67.1	\$66.8	-1.04%
Kentucky	\$36.1	\$37.2	\$37.0	\$36.0	\$36.3	0.11%
South Carolina	\$44.2	\$43.5	\$43.2	\$42.5	\$43.4	-0.36%
Tennessee	\$13.2	\$13.0	\$13.1	\$13.1	\$13.3	0.04%
Virginia	\$56.5	\$55.3	\$55.5	\$55.5	\$56.9	0.15%
Industry	\$32.0	\$31.9	\$31.7	\$31.4	\$31.1	-0.53%

Table 4-5

Annual Per Capita Daily Number Games Sales



Within the peer group, only South Carolina and Georgia have experienced an overall decrease in daily number game sales. As discussed below, Virginia’s growth in this category is attributable to strong Pick 4 sales.

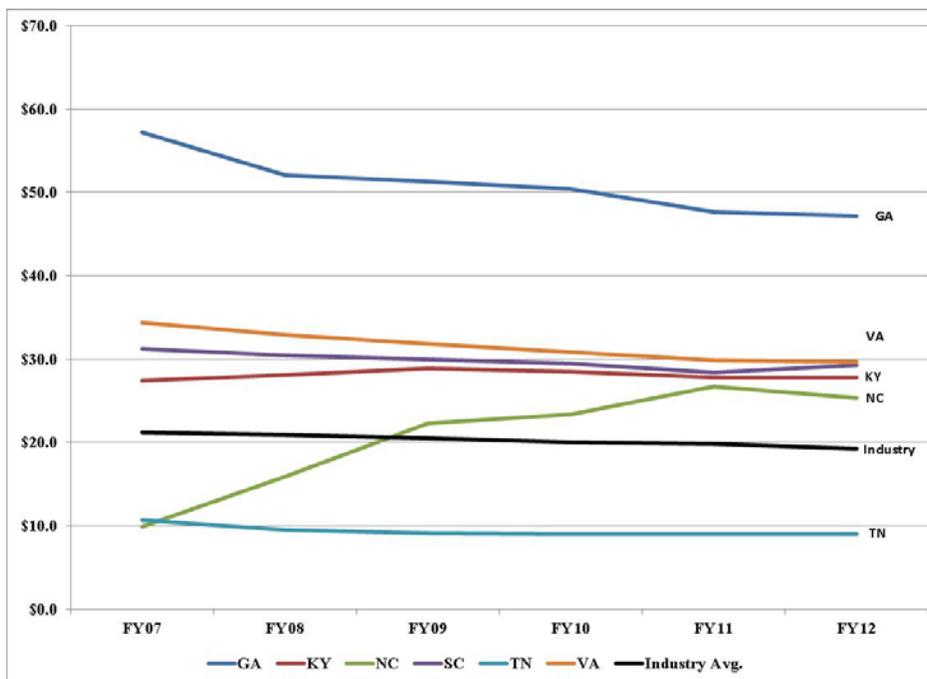
Pick 3

Table 4-6 below illustrates annual per capita Pick 3 sales for NCEL and its peer group as well as the industry average. NCEL’s 4-year CAGR dwarfs all other jurisdictions as well as the industry average. As a whole, the lottery industry’s 3-digit game sales have seen slow steady erosion over several years due to several factors; an aging player base, more exciting, fun, fast-paced Instant Scratch Off games and its top prize of \$500 is not seen as significant, even though the odds of winning this prize amount are far better in this game than they are for winning a similar prize in a Instant Scratch Off game. The NCEL experienced a slight decline from FY11 to FY12, as did the industry. Jurisdictions in the peer group that saw an increase from FY11 to FY12 include Kentucky (payout of 60%) and South Carolina.

Annual Per Capita Pick 3 Sales						
Jurisdiction	FY08	FY09	FY10	FY11	FY12	5-Year CAGR
North Carolina	\$15.9	\$22.3	\$23.4	\$26.8	\$25.3	16.98%
Georgia	\$52.1	\$51.3	\$50.4	\$47.6	\$47.1	-3.17%
Kentucky	\$28.1	\$28.8	\$28.5	\$27.8	\$27.9	0.25%
South Carolina	\$30.4	\$30.0	\$29.5	\$28.4	\$29.3	-1.08%
Tennessee	\$9.5	\$9.1	\$9.0	\$9.1	\$9.0	-2.95%
Virginia	\$32.9	\$31.8	\$30.9	\$29.9	\$29.7	-2.39%
Industry	\$20.9	\$20.5	\$20.0	\$19.8	\$19.2	-1.63%

Table 4-6

Annual Per Capita Pick 3 Sales



Pick 3 Annual Per Capita Sales Rankings

Jurisdiction	Pop (Millions)	2012 Pick 3 Sales Per Capita	2012 Pick 3 Sales Per Capita Rank Industry
Georgia	9.80	\$47.1	3 of 39
Virginia	8.10	\$29.7	9 of 39
South Carolina	4.70	\$29.3	10 of 39
Kentucky	4.40	\$27.9	13 of 39
North Carolina	9.70	\$25.3	14 of 39
Tennessee	6.40	\$9.0	20 of 39
Industry	295.70	\$18.0	

Table 4-7

Pick 3 Attributes

	North Carolina	Georgia	Kentucky	South Carolina	Tennessee	Virginia
Minimum Price	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
Draws per Week	14	14	13	14	14	14
Draw Times	3:00 pm 11:22 pm	12:29 pm 6:59 pm	1:20 pm 11:00 pm	12:59 pm 6:59 pm	12:28 pm 6:28 pm	1:59 pm 11:00 pm
Multi-Draw	14 draws	14 draws	7 draws	28 draws	14 draws	91 draws
Advance Play	6 days	6 days	7 days	6 days	None	91 draws
Cancellations	Yes	Yes	Yes	Yes	Yes	Yes
Entry Methods						
Verbal	Yes	Yes	Yes	Yes	Yes	Yes
Play Slip	Yes	Yes	Yes	Yes	Yes	Yes
Auto Pick	Yes	Yes	Yes	Yes	Yes	Yes
Wager Types						
Exact Order	Yes	Yes	Yes	Yes	Yes	Yes
Any Order	Yes	Yes	Yes	Yes	Yes	Yes
Exact / Any	Yes	Yes	Yes	Yes	Yes	Yes
Combo	Yes	Yes	Yes	Yes	Yes	Yes
Pairs	No	Yes	Yes	Yes	No	Yes

Table 4-8

NCEL’s game attributes are similar to those of its peers, but there are differences worth noting. NCEL conducts its day-time drawing at 3:00 pm. This is an hour or more later than its peers. Georgia, South Carolina, and Tennessee conduct their evening drawings around 7:00pm to 7:30 pm; Kentucky and Virginia hold their evening drawings at 11:00 pm. The Kentucky Lottery Corporation’s Pick 3 game has a 60% prize structure; the other lotteries in the peer group have a 50% prize structure. Kentucky only holds one drawing on Sundays.

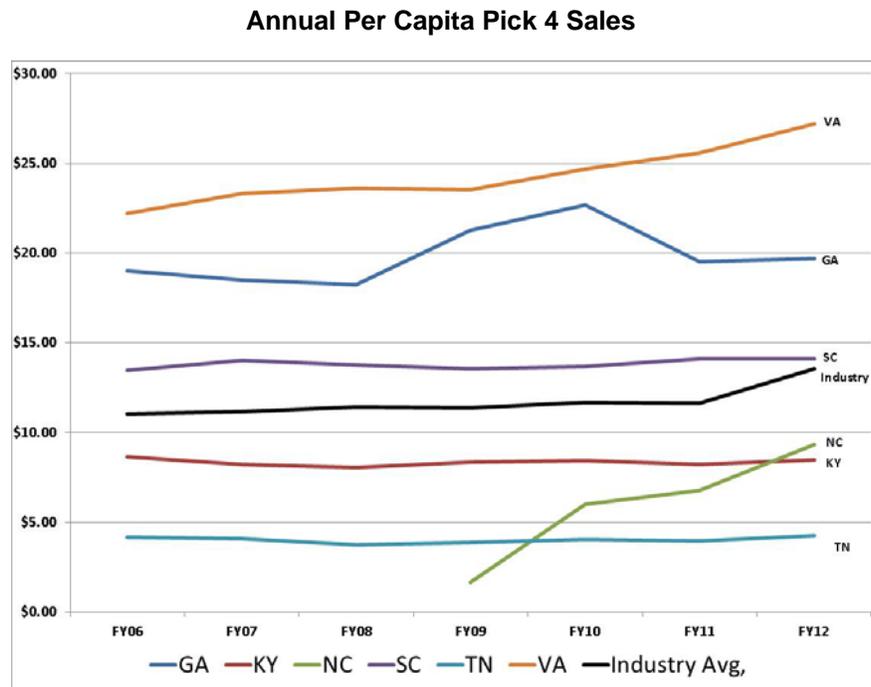
Pick 4

The table below illustrates annual per capita Pick 4 sales for the NCEL and its peer group members. Most likely, due to its lifecycle, the growth rate for this game in North Carolina far exceeds that of its peer group members as well as the industry average. Industry Pick 4 sales have experienced moderate growth over the past few years with no change to game parameters. Its odds and prizes are very competitive with Instant Scratch Off game offerings; in fact, the odds of winning \$5,000 playing Pick 4 are better than the odds of winning a similar prize playing Instant Scratch Off games. Both the NCEL and the Virginia Lottery have experienced Pick 4 sales growth that exceeds the industry average.

Annual Per Capita Pick 4 Sales

Jurisdiction	FY08	FY09	FY10	FY11	FY12	5-Year CAGR
North Carolina		\$1.7	\$6.0	\$6.8	\$9.3	24.64%
Georgia	\$18.2	\$21.3	\$22.7	\$19.5	\$19.7	1.04%
Kentucky	\$8.1	\$8.4	\$8.4	\$8.2	\$8.5	0.51%
South Carolina	\$13.8	\$13.6	\$13.7	\$14.1	\$14.1	0.07%
Tennessee	\$3.7	\$3.9	\$4.0	\$4.0	\$4.3	0.75%
Virginia	\$23.6	\$23.5	\$24.7	\$25.6	\$27.2	2.62%
Industry	\$11.43	\$11.38	\$11.69	\$11.63	\$11.93	1.08%

Table 4-9



2012 Pick 4 Annual Per Capita Sales Rankings

Jurisdiction	Pop (Millions)	Pick 4 Sales Per Capita	Pick 4 Sales Per Capita Industry Rank
Virginia	8.10	\$27.2	7 of 33
Georgia	9.80	\$19.7	11 of 33
South Carolina	4.70	\$14.1	15 of 33
North Carolina	9.70	\$9.3	17 of 33
Kentucky	4.40	\$8.5	18 of 33
Tennessee	6.40	\$4.3	22 of 33
Industry	295.70	\$13.54	

Table 4-10**Pick 4 Attributes**

	North Carolina	Georgia	Kentucky	South Carolina	Tennessee	Virginia
Minimum Price	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
Draws per Week	14	14	13	14	14	14
Draw Times	3:00 pm 11:22 pm	12:29 pm 6:59 pm	1:20 pm 11:00	12:59 pm 6:59 pm	12:28 pm 6:28 pm	1:59 pm 11:00 pm
Multi-Draw	14 draws	14 draws	7 draws	28 draws	14 draws	91 draws
Advance Play	6 days	6 days	7 days	6 days	None	91 draws
Cancellations	Yes	Yes	Yes	Yes	Yes	Yes
Entry Methods						
Verbal	Yes	Yes	Yes	Yes	Yes	Yes
Play Slip	Yes	Yes	Yes	Yes	Yes	Yes
Auto Pick	Yes	Yes	Yes	Yes	Yes	Yes
Wager Types						
Exact Order	Yes	Yes	Yes	Yes	Yes	Yes
Any Order	Yes	Yes	Yes	Yes	Yes	Yes
Exact / Any	Yes	Yes	Yes	Yes	Yes	Yes
Combo	Yes	Yes	Yes	Yes	Yes	Yes
Pairs	No	No	No	No	No	No

Table 4-11

All lotteries in the peer group hold their Pick 4 drawings in conjunction with their Pick 3 drawings and have 50% prize structures for the Pick 4 product. Kentucky only holds one drawing on Sundays.

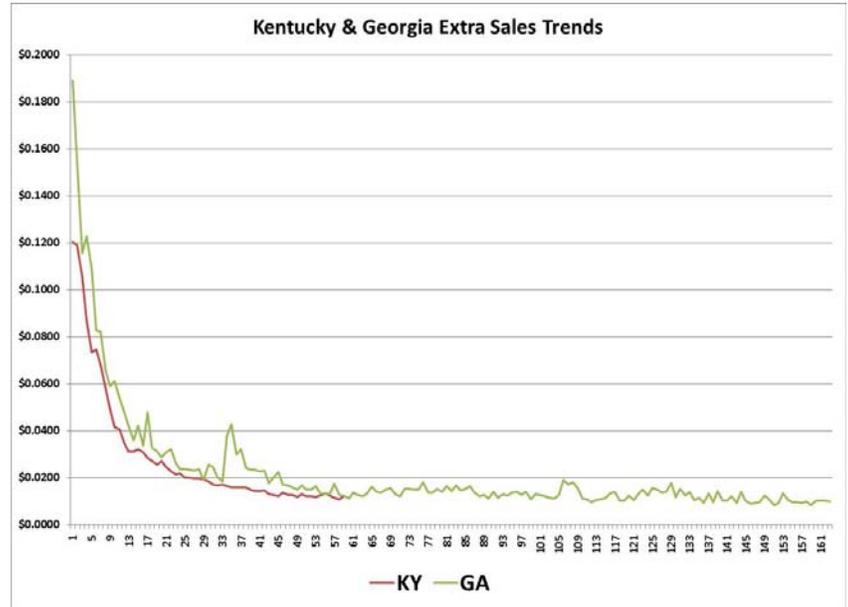
Recommendations for Daily Games

The NCEL should consider an add-on game such as eZmatch or Extra for its Pick 3 and Pick 4 products. Currently offered by several U.S. lotteries and previously offered by Kentucky, these games have been successful in contributing incremental revenues to lotteries. Add-on games, typically priced at \$1.00, are structured to provide an immediate winning experience to the player at the point of purchase. This instant gratification places cash immediately in the player's hands, at the point of purchase, many times results in reinvesting the win into additional lottery

games. With overall odds similar to instant scratch off games, these add-on games provide churn, helping to raise incremental revenues for good causes.

The graph illustrates historical per capita sales trends for Kentucky’s Extra game (added on to Pick 3 & Pick 4 in 2003; discontinued in 2004) as well as Georgia’s Fantasy 5 game (eZMatch added in 2009 and still offered).

Using these per capita sales trends (both of which have similar curves), and using NCEL’s population, the first 52 weeks of this add-on game to Pick 3 and Pick 4 could produce sales between \$10 million and \$20 million. Additional investigation of other jurisdictions’ sales of this add-on product and current sales trend analysis for NCEL’s Pick 3 and Pick 4 may result in a more robust and precise estimate.



Multi-State Large Jackpot Games

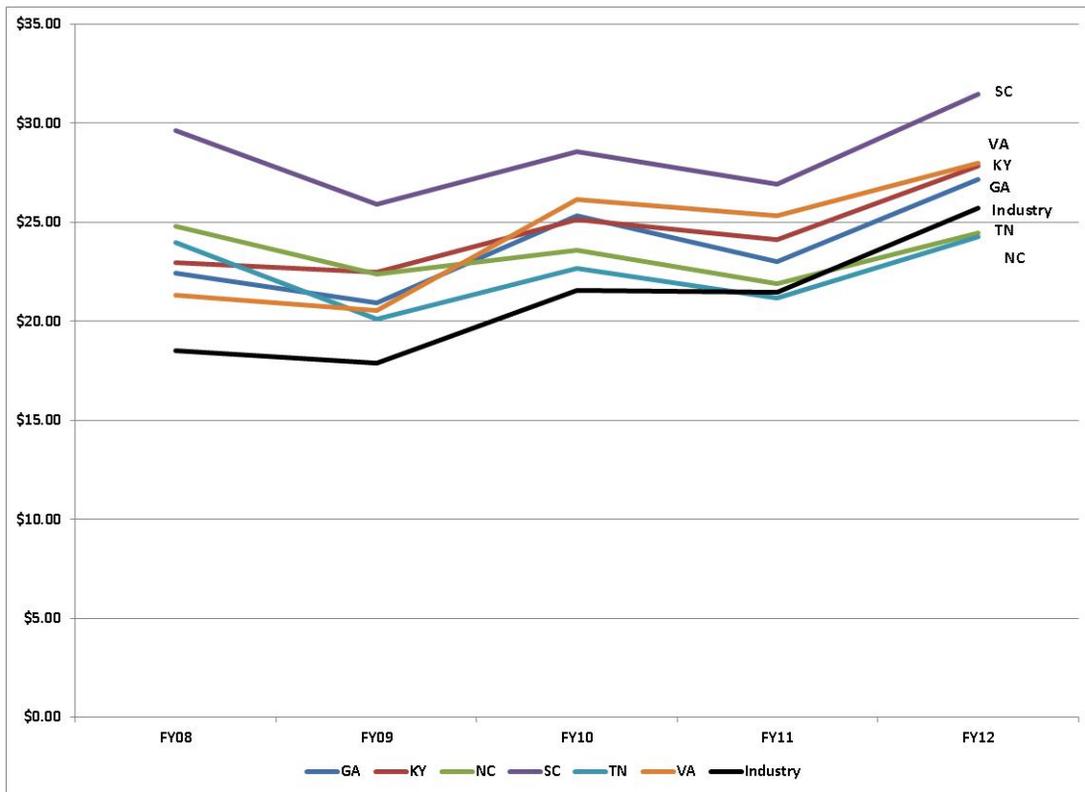
The NCEL and all members of its peer group participate in two multi-state games that are designed to generate very large jackpots. Recent changes to this product category include cross-selling of Mega Millions and Powerball and Powerball’s game changes which now include a \$2 price point and a revised Power Play feature. The table and graph below shows combined per capita sales for the two games over the past five years.

**Annual Per Capita Powerball and Mega Million Sales
Ranked by FY 12 Per Capita Sales**

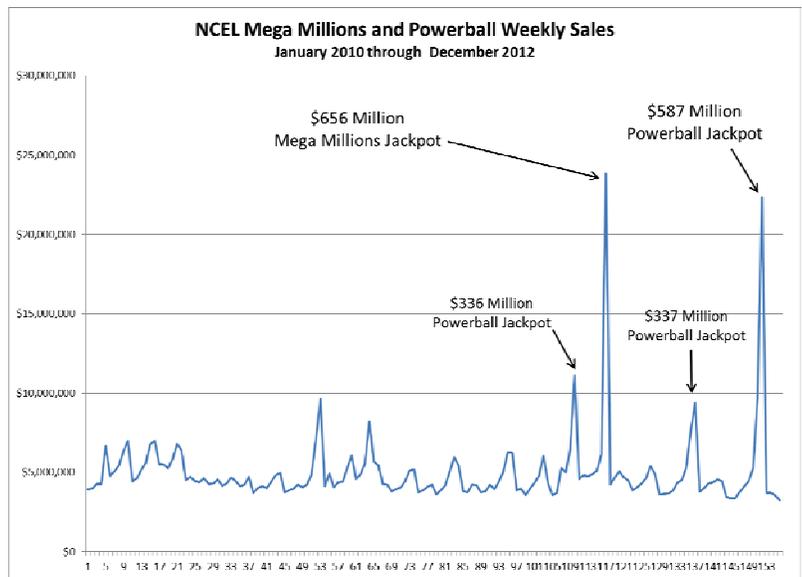
Jurisdiction	FY08	FY09	FY10	FY11	FY12	5-Year CAGR
South Carolina	\$29.64	\$25.91	\$28.55	\$26.93	\$31.48	0.6%
Virginia	\$21.31	\$20.56	\$26.18	\$25.33	\$28.00	8.8%
Kentucky	\$22.95	\$22.46	\$25.16	\$24.15	\$27.83	4.0%
Georgia	\$22.43	\$20.94	\$25.34	\$23.01	\$27.15	6.0%
North Carolina	\$24.79	\$22.36	\$23.57	\$21.90	\$24.47	-2.6%
Tennessee	\$23.95	\$20.13	\$22.66	\$21.19	\$24.26	-0.8%
Industry	\$18.49	\$17.91	\$21.57	\$21.47	\$25.74	6.5%

Table 4-12

Annual Per Capita Powerball and Mega Million Sales



Games with large, rolling jackpots are designed to attract players and increase sales when there is a large jackpot. The biggest issue with these games is that the players’ definition of “large jackpot” changes over time as the players’ experience larger and larger jackpots. A record Mega Millions jackpot of \$656 resulted in a one week Mega Millions sales total for the NCEL that exceeded \$20 million. The combined sales for Mega Millions and Powerball (including the PowerPlay feature sales) are typically below \$5 million per week. This means that the \$15 million in additional sales generated during the Mega Millions record jackpot increased the combined annual sales of Mega Millions and Powerball by approximately six percent. Annual revenue for these games is very difficult to predict because the sales of these games are very dependent on jackpots.



Powerball

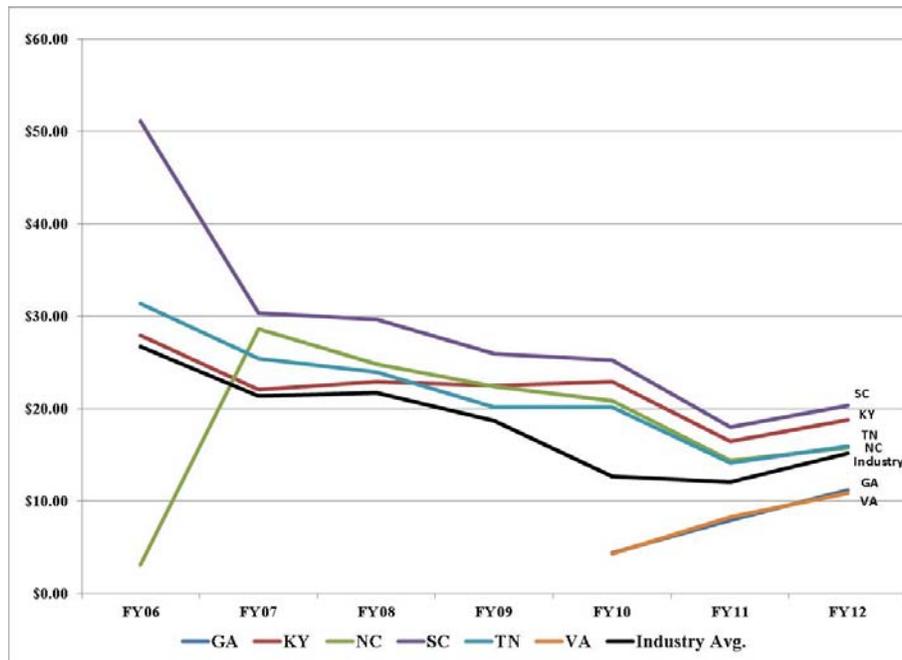
Table 4-13 illustrates annual per capita Powerball sales for the NCEL, its peer group members, and the industry average. After several years of declining per capita sales, FY 2012 sales were up for the NCEL, its peer group members as well as the industry average. The recent change to a \$2 price point and the resulting jackpots has increased sales for this game across most jurisdictions. Although the NCEL’s annual sales have not yet climbed back to the \$20 million range, the recent increase is encouraging.

Annual Per Capita Powerball Sales

Jurisdiction	FY08	FY09	FY10	FY11	FY12
North Carolina	\$24.79	\$22.36	\$20.84	\$14.36	\$15.72
Georgia			\$4.39	\$7.94	\$11.16
Kentucky	\$22.95	\$22.46	\$22.88	\$16.48	\$18.78
South Carolina	\$29.64	\$25.91	\$25.28	\$17.98	\$20.29
Tennessee	\$23.95	\$20.13	\$20.15	\$14.11	\$15.91
Virginia			\$4.32	\$8.23	\$10.87
Industry	\$21.74	\$18.68	\$12.63	\$12.05	\$15.13

Table 4-13

Annual Per Capita Powerball Sales



2012 Per Capita Powerball Sales Rankings

Jurisdiction	Pop (Millions)	Powerball Sales Per Capita	Powerball Sales Per Capita Rank Industry
South Carolina	4.70	\$20.29	11 of 44
Kentucky	4.40	\$18.78	15 of 44
Tennessee	6.40	\$15.91	20 of 44
North Carolina	9.70	\$15.72	25 of 44
Georgia	9.80	\$11.16	38 of 44
Virginia	8.10	\$10.87	39 of 44
Industry	295.70	\$15.13	

Table 4-14

Mega Millions

Table 4-15 below illustrates annual per capita Mega Millions sales for the NCEL, its peer group members and the industry

average. The NCEL has seen a steady increase in sales as has each of its peer group members and the industry average. The recent increase of Powerball’s price from \$1 to \$2 has positioned Mega Millions well; the \$600 million plus Mega Millions jackpot helped sales too.

Annual Per Capita Mega Millions Sales

Jurisdiction	FY08	FY09	FY10	FY11	FY12
North Carolina			\$2.72	\$7.54	\$8.74
Georgia	\$22.43	\$20.94	\$20.95	\$15.07	\$15.99
Kentucky			\$2.28	\$7.67	\$9.05
South Carolina			\$3.27	\$8.95	\$11.19
Tennessee			\$2.51	\$7.08	\$8.36
Virginia	\$21.31	\$20.56	\$21.86	\$17.11	\$17.13
Industry	\$17.09	\$16.47	\$11.46	\$11.90	\$13.40

Table 4-15

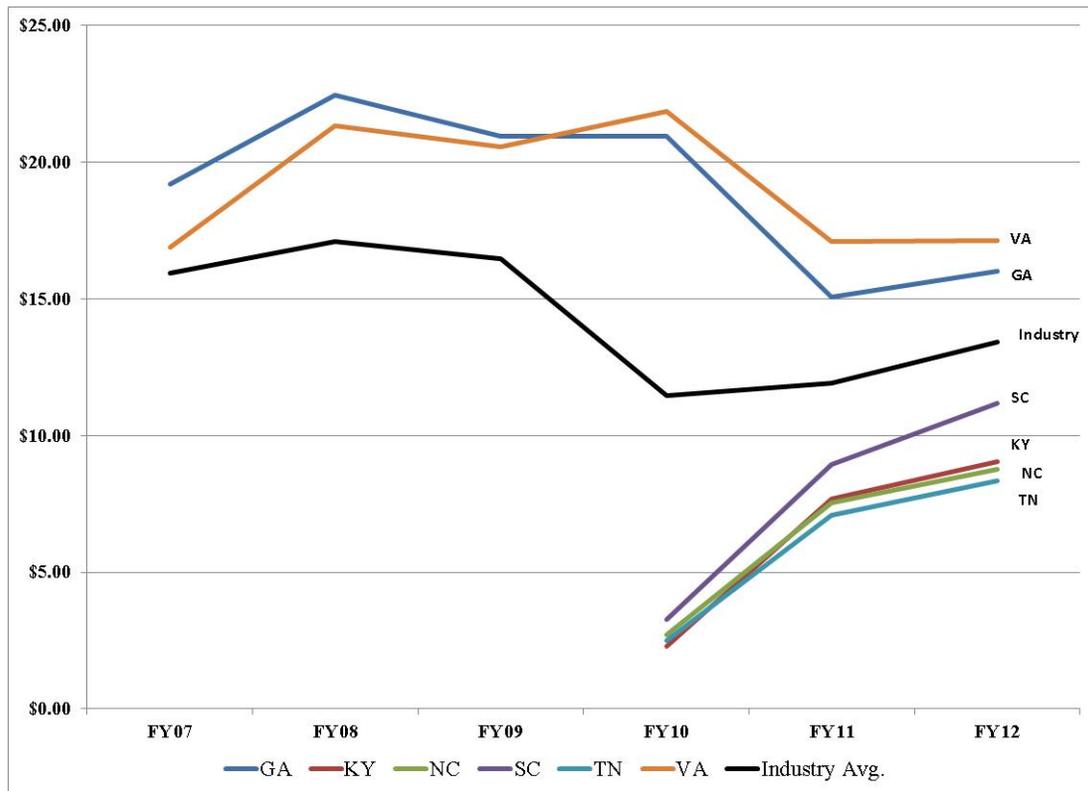
As this game offers a life-style changing prize, often at times when Powerball does not, it gives players two additional chances per week to dream “what if?”

2012 Per Capita Mega Millions Sales Rankings

Jurisdiction	Pop (Millions)	Mega Millions Sales Per Capita	Mega Millions Sales Per Capita Industry Rank
Virginia	8.10	\$17.13	7 of 44
Georgia	9.80	\$15.99	8 of 44
S. Carolina	4.70	\$11.19	17 of 44
Kentucky	4.40	\$9.05	19 of 44
North Carolina	9.70	\$8.74	22 of 44
Tennessee	6.40	\$8.36	26 of 44
Industry	295.70	\$13.40	

Table 4-16

Annual Per Capita Mega Millions Sales



Recommendations Multi-State Large Jackpot Games

From a product attribute standpoint, NCEL’s input and control over these games is limited to its input and vote as a one member of multi-member organizations. The NCEL should consider using these games as a promotional platform. Large jackpots could be used to get players to try other products or to push a communications/marketing message. For example, when the Powerball jackpot gets high enough to generate significant sales, the NCEL could immediately implement a promotion where every 200th Powerball ticket purchased generates a free Pick 3 ticket worth \$1. This strategy could be used to generate trial for any of the NCEL games.

The NCEL could also use changeable media to push marketing or a public relations message. The changeable media at the NCEL’s disposal include the electronic display message boards in retail locations, ticket messages, and social media. Only one message should be promoted for each jackpot. The message could be anything from “where the money goes” to promoting a instant game launch.

Carolina Cash 5

Table 4-17 below illustrates the NCEL’s annual per capita cash lotto sales, its peer group member sales as well as the industry average. Georgia is the only jurisdiction in the peer group

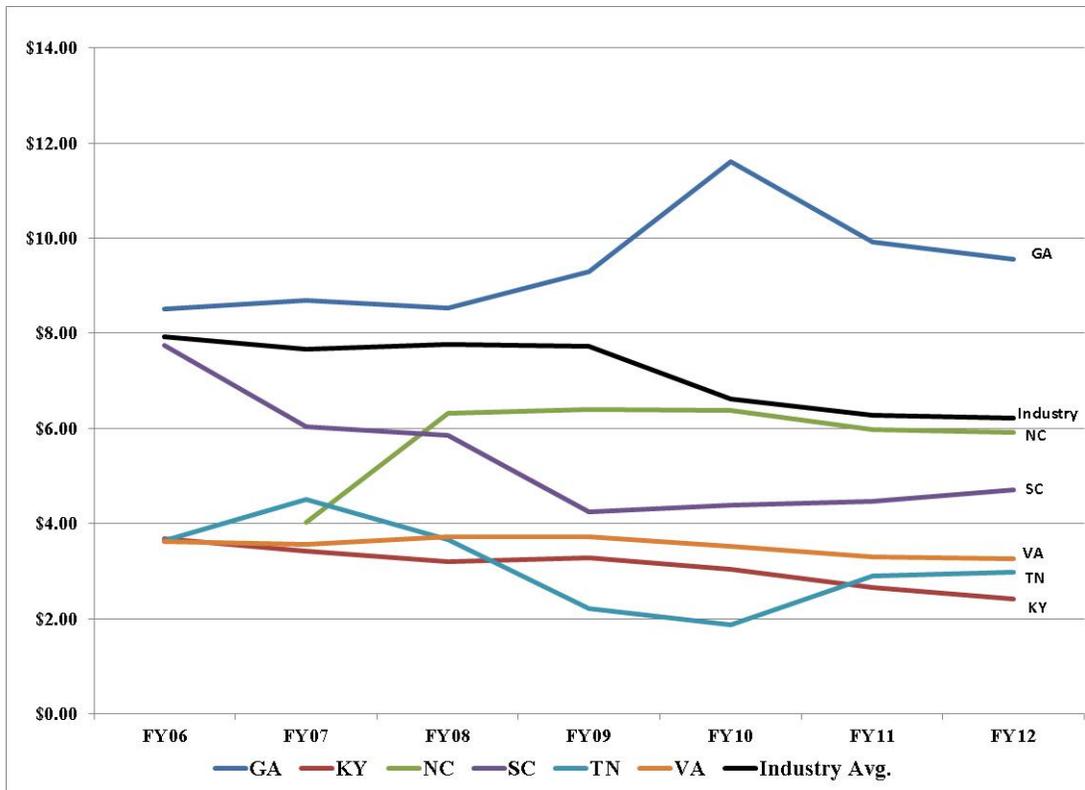
to have a positive CAGR since FY2008. North Carolina has experienced a slight decline, although much less than the industry average. Cash lotto games and their prizes are typically positioned between the daily games and the large multi-state multi-million dollar prize games, such as Powerball and Mega Millions. The prize, starting at \$50,000 in the case of the NCEL, is viewed as winnable and the player’s loyalty toward an in-state only game gives it a favorable niche. On the other hand, when compared to the life-style changing prizes offered by Powerball and Mega Millions, it does not have as broad as appeal as these games do, especially when those games’ jackpots often exceed \$100 million.

Annual Per Capita Cash Lotto Sales

Jurisdiction	FY08	FY09	FY10	FY11	FY12	4-Year CAGR
North Carolina	\$6.33	\$6.40	\$6.38	\$5.98	\$5.93	-1.31%
Georgia	\$8.54	\$9.30	\$11.62	\$9.92	\$9.55	2.26%
Kentucky	\$3.20	\$3.28	\$3.04	\$2.65	\$2.41	-5.53%
South Carolina	\$5.85	\$4.25	\$4.39	\$4.47	\$4.71	-4.25%
Tennessee	\$3.66	\$2.21	\$1.88	\$2.89	\$2.97	-4.11%
Virginia	\$3.72	\$3.71	\$3.53	\$3.29	\$3.26	-2.61%
Industry	\$7.76	\$7.73	\$6.63	\$6.27	\$6.22	-4.31%

Table 4-17

Annual Per Capita Cash Lotto Sales



2012 Per Capita Cash Lotto Sales Rankings

Jurisdiction	Pop (Millions)	2012 Cash Lotto Sales Per Capita	2012 Cash Lotto Sales Per Capita Rank Peer Group	2012 Cash Lotto Sales Per Capita Rank Industry
Georgia	9.80	\$9.55	1	6 of 41
North Carolina	9.70	\$5.93	2	9 of 41
South Carolina	4.70	\$4.71	3	16 of 41
Virginia	8.10	\$3.26	4	28 of 41
Tennessee	6.40	\$2.97	5	29 of 41
Kentucky	4.40	\$2.41	6	34 of 41
Industry	295.70	\$6.22		

Table 4-18

The NCEL's per capita cash lotto sales rank them 2nd in their peer group and 9th among the 41 jurisdictions that have a cash lotto game.

Cash Lotto Game Attributes

Game	NC	GA	KY	SC	TN	VA
Cash Lotto	Carolina Cash 5	Fantasy 5	Cash Ball	Palmetto Cash 5	Tennessee Cash	Cash 5
Game Structure	5 of 39	5 of 39 with eZmatch	4 of 33 + 1 of 31 with Kicker	5 of 38 with Power Up	5 of 35 + 1 of 5	5 of 34
Prize Structure	Pari-Mutuel	Pari-Mutuel	Set Prizes	Set Prizes	Pari-Mutuel	Set Prizes
Minimum Wager	\$1.00	\$1.00	\$0.50 or \$1 in Multiples of \$1	\$1.00	\$1.00	\$0.25, \$0.50 or \$1 in Multiples of \$1
Minimum Jackpot	\$50,000	\$50,000	\$100,000 or \$200,000	\$100,000	?	\$25K, 50K or \$100K Maximum
Overall odds	1 in 8.77	1 in 8.77	1 in 10.8	1 in 8.4	1 in 7	?
Draws	Daily	Daily	Monday - Saturday	Daily	Monday, Wednesday & Friday	Twice Daily
Draw Time(s)	11:22 pm	11:34 pm	11:00 pm	6:59 pm	10:30 pm	1:59pm & 11:00pm
Multidraws	28	14	14	12	12	91

Table 4-19

Recommendation for Carolina Cash 5

Consider an add-on game for Carolina Cash 5 – add-on games such as eZmatch or Extra; currently offered by many U.S. Lottery's and previously offered by its peer member Kentucky, have been successful in contributing incremental revenues to lotteries and winning experiences to players. These add-on games, typically priced at \$1.00, are structured to provide an

immediate winning experience to the player at the point of purchase. This instant gratification places cash immediately in the player's hands, at the point of purchase. With overall odds similar to Scratcher games, these add-on games provide churn, helping to raise incremental revenues for good causes.

Based on per capita sales trends in other lotteries, the first 52 weeks of this add-on game to Carolina Cash 5 could produce sales between \$7 million and \$15 million. Additional items to consider would include advertising support, promotional support and investigating other jurisdictions sales of this add-on product to obtain a more robust and precise estimate.

Keno

Fourteen U.S. lotteries offer keno games that are drawn every few minutes. These games frequently have substantial per capita sales. NCEL does not offer a keno product.

Jurisdiction	2012 Keno PC	2012 Keno PC Rank
Massachusetts	\$124.73	1
Rhode Island	\$74.82	2
Maryland	\$66.79	3
Michigan (EST)	\$53.37	4
New York	\$25.74	5
Oregon	\$23.97	6
D.C.	\$20.67	7
Ohio	\$18.89	8
Georgia	\$17.79	9
Missouri	\$10.90	10
Kansas	\$7.97	11
California	\$3.48	12
West Virginia	\$3.26	13
Washington	\$0.82	14
Total	\$24.61	

Table 4-20

Recommendation for Keno

The NCEL should consider introducing a fast paced keno game. This draw game offers significant opportunity to grow lottery sales. Typically sold in social environments and liquor-by-the-drink establishments, this product provides an opportunity to grow the retail base in a new environment, increasing the convenience of lottery products. This game also has product attributes similar to instant scratch off games, with many different prizes to play for and low overall odds. It gives players the opportunity to play for the prize and odds that meet their gaming desires. The churn created by this game causes players to reinvest in the game and also creates incremental food and beverage sales at these locations. It is a win/win for lotteries and

social environments as the keno product is known to cause patrons to stay longer and spend more in those locations that offer keno.

Based on the 2012 Per Capita Keno Rankings below and excluding Massachusetts (very high payout) and Washington (not a fast draw game), the NCEL could expect from \$32 million to \$150 million in annual sales. The scope of this document does not allow for a more precise estimate. Other items to consider in estimating sales for this product in North Carolina would include, but are not limited to, current liquor-by-the-drink laws, liquor-by-the-drink licensing laws, geographic penetration of liquor-by-the drink establishments, advertising support, promotional support, recruitment plans and support.

Other Games

Some of the NCEL's peer group members offer games that the NCEL does not. For instance, Georgia, Kentucky and Virginia offer Decades of Dollars (Arkansas is a 4th member). This game allows players to choose, for each \$2 play, 6 numbers from 1 – 47 and is drawn on Monday's & Thursday's. The top prize is \$250,000 per year for 30 years or \$4 million in cash. The top prize liability is \$10 million; this becomes effective if there are more than 2 top prize winners in a given draw. Other prize levels include:

- Match 2 of 6: A free Decades of Dollars play automatically generated by a lottery terminal (in Kentucky and Virginia); \$2 cash (in Arkansas and Georgia)
- Match 3 of 6: \$10 cash
- Match 4 of 6: \$100 cash
- Match 5 of 6: \$10,000 cash (liability limit \$250,000 across the four jurisdictions)

Another game offered by some peer group members, Virginia and Georgia, is called Win for Life; Arkansas also offers this game; Kentucky, formerly sold this game but subsequently dropped it when Decades of Dollars began. This game allows players to choose, for each \$1 play, 6 numbers from 1 – 42, plus a "Free Ball," and offers a top prize of \$1,000 per week for life; the game has seven other prize levels. Drawings are held Wednesday's and Saturday's.

Other Games Recommendation

The NCEL should consider a Win for Life Draw game. Prizes such as \$250,000 per year for 30 years or \$1,000 per week for life seem more attainable with much better odds than Powerball or Mega Millions jackpot prizes offer. A game such as this could generate from \$7 million to \$25 Million in annual sales. This estimate does not include an analysis of the impact on existing games.

Instant/On-Line Games

These games allow players to choose a terminal generated game that features an instant win component. Structured like Scratchers with respect to prizes and win frequency, these games

create churn at the terminal, with players typically reinvesting winnings into the same or other lottery products. Jurisdictions offering this type of game include Arkansas, Delaware, D.C., Minnesota, New Hampshire, Ohio, Vermont and Virginia. Virginia’s Fast Play games are included in Appendix X

Instant/On-line Games Recommendation

NCEL should consider Fast Play Instant Win Draw games. These games give players instant scratch off product features at the terminal without waiting for a drawing. Designed with prize structures similar to Instant Scratch Off games, with favorable overall odds, these games create churn at the point of sales, putting cash in player’s hands which is frequently reinvested in lottery products. If the NCEL were to offer an array of Instant Win Draw games, annual sales between \$5 million and \$18 million could be realized. This sales estimate does not include an analysis of the impact on existing games.

Summary of Recommendations

Table 4- 21 below summarizes the games offered by North Carolina and its peer group members. As can be seen, the NCEL offers games similar to its peer group members, although some variance does exist when compared to Georgia, Kentucky and Virginia. These jurisdictions offer more draw games than does the NCEL. More draw games with varying product attributes appeals to a wider cross-section of potential players, giving as many players as possible the chance to choose the prize(s) and game odds they deem to be most favorable. In addition, some jurisdictions in the peer group offer add-on games that are attached to base products, such as Georgia’s eZmatch on its Fantasy 5 game or Tennessee’s Lucky Sum games on their 3-digit and 4-digit games. These add-on games offer players, for an additional spend, typically \$1, an extra chance to win; some immediately and some based on the draw results. These game features produce incremental revenues and more winning experiences.

NCEL and Peer Group Product Portfolio Offering

Game	NC	GA	KY	SC	TN	VA
Scratchers	\$1, \$2, \$3, \$5, \$10, \$20	\$1, \$2, \$3, \$5, \$10, \$20	\$1, \$2, \$3, \$5, \$10, \$20	\$1, \$2, \$3, \$5, \$10	\$1, \$2, \$3, \$5, \$10, \$20	\$1, \$2, \$3, \$5, \$10, \$20
Multi-State						
Powerball	✓	✓	✓	✓	✓	✓
Mega Millions	✓	✓	✓	✓	✓	✓
Decades of Dollars		✓	✓			✓
Win for Life		✓				✓
3 – Digit	✓	✓	✓	✓	✓	✓
4 – Digit	✓	✓	✓	✓	✓	✓
Cash Lotto	Carolina Cash 5	Fantasy 5	Cash Ball	Palmetto Cash 5	Tennessee Cash	Cash 5
Other Draw Games		Keno & Georgia 5	5 Card Cash			Fast Play

Table 4-21

The NCEL is a relatively new lottery and has been successful in providing revenue to education. As the growth rate for many of its products illustrates, the NCEL is still growing and can continue to grow. As it continues to grow and mature there are additional products and game features to consider that may help the lottery continue to grow and provide additional revenue to education. The recommendations from the previous sections are summarized below:

- NCEL should consider the following changes to its instant scratch-off portfolio and business practices:
 - Limit game launches to one per price point per month to reduce games from competing with one another.
 - Set permanent launch schedule to a specific day of the month (i.e. 3rd Tuesday, 1st Thursday, etc.) to allow retailers and NCEL to concentrate marketing efforts and reduce newer games cannibalizing recently launched games before they have a chance to get established.
 - Reduce the number of \$1 and \$2 games being offered
 - Use specific themes such as Xs the Money and Jumbo Bucks to create and leverage theme equity across multiple price points.
- Consider an add-on game for Pick 3, Pick 4 and Cash 5 – add-on games such as eZmatch, currently offered by its peer member Georgia and previously offered by its peer member Kentucky, have been successful in contributing incremental revenues to lotteries and winning experiences to players. These add-on games, typically priced at \$1.00, are structured to provide an immediate winning experience to the player at the point of purchase. This instant gratification places cash immediately in the player’s hands at the point of purchase, and many times results in reinvesting the win into additional lottery games. With overall odds similar to Instant Scratch Off games, these add-on games provide churn, helping to raise incremental revenues for good causes.
- Consider using Powerball and Mega Millions as promotional platforms to get players to try other products. For example, when a jackpot gets high enough to generate significant sales, the NCEL could immediately implement a promotion where every nth ticket purchased generates a free ticket for a game the NCEL wants to promote. This strategy could be used to generate trial for any of the NCEL games.
- Consider a Win for Life Draw game – draw games with win for life prizes, such as Decades of Dollars and Win for Life offer life changing prizes that are perceived to be more winnable than are the large multi-million dollar prizes Powerball and Mega Millions offer.

- Consider 5-minute keno – this fast paced draw game offers significant opportunity to grow lottery sales. Typically sold in social environments and liquor-by-the-drink establishments, this product provides an opportunity to grow the player base in a new retail environment, thus widening the reach of lottery products. This game also has product attributes similar to Instant Scratch Off games, with many different prizes to play for and low overall odds. It gives players the opportunity to play for the prize and odds that better meet their gaming desires. The churn created by this game causes players to reinvest in the game and also creates incremental food and beverage sales at these locations. It is a win/win for lotteries and social environments as the product is known to cause patrons to stay longer and spend more in those locations.
- Consider Fast Play Instant Win Draw games – Instant win games sold at the terminal currently offered by Arkansas, Delaware, D.C., Minnesota, New Hampshire, Ohio, Vermont and Virginia, give players Scratch game product features, without waiting for a drawing. Designed with prize structures similar to Instant Scratch Off games, with favorable overall odds, these games create churn at the point of sales, putting cashing in player's hands which is frequently reinvested in lottery products.

Part 5: SOCIAL MEDIA PROGRAM ENHANCEMENT

The North Carolina Education Lottery is interested in ways it could enhance its social media program to further business objectives. This section includes four main areas.

1. Current social media efforts
2. Use of social media within peer group
3. Possible enhancements to meet existing objectives
4. Opportunities to expand social media beyond current objectives

Current Social Media Efforts

North Carolina

North Carolina Education Lottery's current Social Media Business Plan was developed in 2009. The objective of the social media plan at that time was to connect to the 18-34 year old age group. The plan includes Twitter, Facebook, and YouTube. The current efforts, by media type, are characterized in the Table 5-1.

Current Social Media Efforts

Medium	Objective	Typical Content
Twitter	Post Tweets, monitor responses and quantify "tweet effectiveness."	Game notifications, jackpots, and locations of winning ticket purchases.
Facebook	Engage with users, monitor lottery-related conversations, and identify communication trends concerning the lottery as they occur.	Game notifications, jackpots, and stories about winning ticket purchases.
YouTube	Give players another means for getting lottery news.	Game advertisements and lottery number drawings.

Table 5-1

Program activity is primarily performed by the full-time Social Media Specialist, with guidance and support from the Corporate Communications Director. The program is evaluated by a number of common metrics.

Current Social Media Evaluation Metrics

Medium	Metric
Twitter	<ul style="list-style-type: none"> • Followers • Retweets • Webpage hits
Facebook	<ul style="list-style-type: none"> • Fans • Hits • Likes
YouTube	<ul style="list-style-type: none"> • Number of videos posted • Number of hits to videos

Table 5-2

Peer Group

The comparison in Table 5-3 was based on a social media analysis of the six lotteries in the peer group. The table includes comments on what each lottery is doing well.

The Virginia Lottery and the Georgia Lottery Corporation have the most successful social media programs within the Peer Group. Both states have exceptional YouTube video channels with easy-to-find content and clearly identified headings. Virginia has the highest number of Facebook “likes” and Twitter followers among the peer group because they have committed to broadcasting a greater variety of content. Based on commonly used social media measurements, the NCEL ranks third in the Peer Group in overall social media performance; NCEL is fourth in Facebook, second in Twitter, second in YouTube.

Virginia and Tennessee include social media icons on their traditional advertising to promote their social media presence. Virginia also purchases social media advertising. Neither of these lotteries purchase sponsored links.

Social Media Usage Comparison

Lottery	Social Media Used
North Carolina	Facebook Twitter YouTube
Georgia	Facebook Twitter YouTube
Kentucky	Facebook Twitter
South Carolina	none
Tennessee	Facebook Twitter
Virginia	Facebook Twitter YouTube

Table 5-3

Facebook

Based on the presence of a Facebook link on their website homepages, eighty-four percent of the lotteries in the U.S. had a presence on Facebook as of June 30, 2012.

Peer Group Performance

As Table 5-4 indicates, Virginia, Georgia and Tennessee have more “likes” per capita and growth rates than the NCEL. There are a number of factors that may help these lotteries excel in Facebook penetration. First, all of these lotteries celebrate non-lottery events on their social

Facebook Overall – Peer Group

	NC	GA	KY	SC	TN	VA
Likes	24,282	34,521	2,625	N/A	22,699	70,378
Likes per 10,000 People	33.5	48.0	7.9	N/A	46.8	114.5
Like Growth ¹⁶	3,489	5,190	1,877	N/A	8,786	16,924
Growth %	16.8%	17.7%	N/A	N/A	63.1%	31.7%

Table 5-4

media sites. For example, Tennessee celebrates holidays; Georgia has a separate section for popular local Facebook “likes”; and Virginia posts the winner of the statewide “Super Teacher Award.” Second, Virginia has encouraged customer engagement through the use of a fictional

¹⁶ Growth from April, 2012 to December, 2012.

character called “Lady Luck” and created a separate Facebook account for the character. Finally, Virginia posts content in a “player friendly” manner (for example, it discusses large jackpots as if it were a player and not an authoritative entity (Ex. “We’re excited about tonight’s \$250 million Powerball Jackpot”). It allows users to suggest possible “winning” numbers (e.g. Delphine Timberlake’s Feb. 8 post under “Delphine’s Lucky Numbers” and Bruce Burton’s post from Nov.11). Potentially due to the player friendly way they engage their audience, the entire Facebook page is filled with player-to-player interaction.

Number of Facebook “Likes” by Category¹⁷

Category	North Carolina	Georgia	Kentucky	South Carolina	Tennessee	Virginia
Game/Lottery Promotion	2,080	3,413	NA	NA	4,190	2,026
Winner Stories	1,386	277	--	--	1,312	615
Jackpot	1,364	384	--	--	529	390
New Games	130	403	--	--	264	0
Other	254	365	--	--	695	715

Table 5-5

As Table 5-5 shows, Virginia and Tennessee rank higher in posts of non-lottery related content. Although the NCEL has a higher number of winner stories during the term of this study, Virginia and Georgia included more details in the stories about winners and the location of winning lottery tickets. These more inclusive stories draw more interest from users and create opportunities for future player engagement. For example, future posts could recall a previous winner if a player wins a jackpot in a neighboring area.

Additional High Performance Lotteries

The table below shows data for five states with greater Facebook penetration than the NCEL. It consists of two states with smaller populations than North Carolina (Colorado and Missouri), two states with similar populations (Michigan and New Jersey) and one state with a greater overall population (Illinois).

Facebook Overall – Other Lotteries

	CO	IL	MI	MO	NJ
Likes	29,450	75,849	58,726	31,839	72,957
Likes per 10,000 People	77.4	78.2	77.9	69.8	108.5

Table 5-6

The five states in Table 5-6 have higher Facebook penetration because they focus on user-friendly content. All make better use of the icon “buttons” underneath the profile picture with

¹⁷ Data from January 1, 2012 through June 30, 2012.

colorful invitations to click on everything from winning numbers to holiday specials to new games. Each state makes a committed effort to engage users with a variety of content. For example, Michigan includes frequent posts that ask for user feedback (for example, a December 18, 2012 post asking how users would spend a jackpot). Illinois includes pictures and stories about winners, a feature common among the lottery sites with the most Facebook likes (example, a December 18, 2012 post about David D.). In addition to including social media icons on its traditional advertising, the Colorado Lottery purchases social media advertising and sponsored links.

The New Jersey Lottery does an excellent job using Facebook to promote the lottery. It uses a wide-array of colorful photos that both support the lottery and encourage playing (ex. the profile picture on December 18, 2012 showed a lawn that grows \$100 bills) and non-lottery content (several icon “buttons” highlight holiday-related content). More than that, New Jersey uses the other “buttons” for events, winning numbers, and an interactive game that has been used as a second chance drawing. New Jersey creates fewer posts than some lotteries, but makes them bigger and more colorful to engage users. All of their non-game posts are designed to engage users (examples include posts from December 11, 2012 about winning ticket locations and December 7, 2012 that wished users a great weekend). They use catchy phrases to attract users even more (for example, a November 28, 2012 post that concludes with the phrase “Give Your Dreams a Chance.”). Content is designed to visually and emotionally attract viewers without overwhelming them.

Twitter

Based on the presence of a Twitter link on their website homepages, seventy percent of the lotteries in the U.S. had a presence on Twitter as of June 30, 2012.

Peer Group Performance

Twitter Overall - Peer Group

	NC	GA	KY ¹⁸	SC	TN	VA
Followers	4,294	3,885	1,281	NA	258	4,465
Followers per 10,000 people	5.9	5.4	3.9	--	0.5	7.3
Follower Growth ¹⁹	410	723	133	--	258	961
Growth	10.6%	22.9%	11.6%	N/A	N/A	27.4%
Tweets (Nov 2012)	4,720	1,094	148	--	299	11,532

Table 5-7

With almost six followers per 10,000 people, North Carolina ranks second behind Virginia in the Peer Group as shown in Table 5-7. Virginia’s higher Twitter numbers may result from its greater

¹⁸ Kentucky’s Twitter numbers included in the table reference the corporate account only.

¹⁹ Growth from April, 2012 to December, 2012.

emphasis on “user relevant” content. The Virginia Twitter page uses a picture of the crowd at a local college football game as the background, which serves as a visually appealing connection to local fans.

The Virginia Lottery places a high emphasis on Twitter, tweeting at a much higher rate than any of the peer group lotteries. The majority of tweets consist of winning lottery numbers, but the next highest category of tweets are those celebrating winners or local successes, such as the Redskins making the playoffs. The Virginia lottery promptly answers most tweets, which is vital to engaging the public on social media platforms.

But it isn’t just the content and number of tweets where the NCEL can improve its Twitter use. Several lotteries have separate Twitter accounts for different lottery games. For example, the Kentucky Lottery Corporation has a corporate account (<http://twitter.com/kentuckylottery>) and unique KLC accounts for eight games that have drawings. These accounts appeal to customers who just want winning numbers for specific games. The main KLC account follows the additional accounts to help users find them. A list of Kentucky Lottery Corporation accounts is in Table 5-8.

KLC Twitter Accounts

Account	Twitter User Name	Followers
Corporate	@kentuckylottery	1,281
KY 5 Card Cash	@KY5CardCash	60
Decades for Dollars	@KYDecofDollars	134
KLC MegaMillions	@KYMegaMillions	250
KLC Powerball	@kypowerball	1,347
KY Win For Life	@KYWinForLife	761
KY Cash Ball	@kycashball	815
KY Lottery Pick 4	@KYLOTTERYPICK4	838
KY Lottery Pick 3	@KYLOTTERYPICK3	844

Table 5-8

Additional High Performance Lotteries

NCEL fares very well against the five high performing lotteries discussed in the Facebook section. Only Illinois and New Jersey have higher Twitter penetration rates than NCEL.

Twitter Overall – Other Lotteries

	IL	NJ
Followers	10,611	4,235
Followers per 10,000 people	10.9	6.3
Tweets	4,775	2,651

Table 5-9

Still, there are features of these Twitter pages that could improve the NCEL’s overall Twitter presence. Illinois and New Jersey include a mix of game promotions and winner pictures on the

main Twitter page; whereas Virginia and Georgia limit their main pages to winner stories and NCEL limits its main page to game promotions.

YouTube

Based on the presence of a YouTube link on their website homepages, forty-eight percent of the lotteries in the U.S. had a YouTube channel as of June 30, 2012.

Peer Group Performance

YouTube Overall – Peer Group

	NC	GA	KY	SC	TN	VA
Subscribers	169	385	NA	NA	NA	222
Video Views	380,504	467,768	--	--	--	145,175
Playlists	10	7	--	--	--	7

Table 5-10

In regards to YouTube use, Table 5-10 shows that the NCEL is one of the top lotteries in the Peer Group. Like Peer Group leaders Georgia and Virginia, the NCEL has its own channel for more direct contact with players and it has more categories of content for users to view. It has more playlist video segments than any lottery and gets an impressive number of video views. The Georgia Lottery received more views primarily because of the playlist for the Lottery’s “American Idol” type contest. That playlist alone accounted for more than 60,000 views. Virginia may have more subscribers due to its focus on user-friendly content.

YouTube Playlist Content (with title)

	NC	GA	VA
Commercials	Infomercials	Commercials	Commercials
Drawings	Drawings	Win for Life Drawings	NA
Events	Events	Events	Special Events
Winners	Winners	Georgia Lottery Winners	Virginia Lottery – Winners Room
Others	-Beneficiary -Play Responsibly -About the Lottery -TV Spots -Feature -Facebook	-Powerball: Lights, Camera, Action -GLTV -All Access Music Search: Top 12	-Lady Luck -PSA’s -Community Service -Super Teacher

Table 5-11

The peer group members with a YouTube presence have similar playlist categories. The NCEL has more playlists than the other lotteries in the study, which may have a negative impact.

YouTube visitors who find a large number of playlist categories may lose interest before finding the content that would keep them engaged. For example, the NCEL has a playlist category named Play Responsibly that includes 11 videos and a total of 488 views. The NCEL’s video of Powerball winner Jeff Wilson received 374 views alone. The Beneficiary category only has 129 views. Compare that total to the almost 1,900 views that a winter-themed New Jersey Lottery advertisement for lottery games received recently or the Virginia Lottery’s SuperTeacher playlist where several individual entries achieved at least 300 views with many reaching 800 to 1,500 views. It may be better to have a limited number of playlist titles and include less entertaining videos (such as Play Responsibly and Beneficiary) in a playlist with a general heading.

More importantly, all lotteries studied have a significant advantage over the NCEL in regards to YouTube accessibility. The YouTube lottery channels for Georgia and Virginia can be found easily by typing “Georgia Lottery” or “Virginia Lottery” in the YouTube search bar. However, potential viewers attempting to find the NCEL YouTube channel from the YouTube will have difficulty. The official NCEL channel will only show up on the first page of the search results if the potential viewer types the exact phrase “NC Education Lottery.” Even the phrase “North Carolina Education Lottery” leads to inconsistent results and includes a selection that looks like the official NCEL YouTube channel. For example, one query resulted in an advertisement listed under Trailblazerstudios with the NCEL logo and two channels with the NCEL logo on the front. This is a significant problem in consumers’ ease of use.

Additional High Performance Lotteries

You Tube Overall – Other Lotteries

	CO	IL	MO	NJ
Subscribers	41	86	91	416
Video Views	78,737	175,601	498,618	184,802
Playlists	8	0	0	0

Table 5-12

The NCEL looks strong in comparison to the other non-peer group lotteries displayed in Table 5-12 in terms of YouTube use. In this comparison, New Jersey is the only lottery with more subscribers and Missouri, whose YouTube site is branded as “Captain Lotto,” is the only lottery with more video views. Of the 10 lotteries discussed (including the peer group), Georgia is the only one with both more subscribers and video views than the NCEL indicating that the NCEL is one of the more advanced lotteries in YouTube utilization.

There are aspects of other lottery channels that might make the NCEL’s YouTube more attractive to viewers. Like the peer group YouTube channels, all the above mentioned channels can be easily accessed when viewers type in the name of the state and the word “lottery” in the search box. Similar to how Virginia has created its “Lady Luck” character, Missouri has created “Captain Lotto” to promote its YouTube channel. In terms of content, Missouri gives users a greater option of videos on the main page of the channel, including a video highlighting its

scholarship program. As for the key features of other lotteries, Illinois emphasizes videos of winners on its front page, including four of the top six featured videos and the main video. New Jersey has easy-to-find links to its Facebook and Twitter accounts from the main page of its channel and Michigan includes a comment section on its main page.

Effective Social Media Guidelines and Practices

The use of social media in the lottery industry is not mature enough to define a set of “best practices.” However social media activities of the better performing lotteries and companies in other industries, revealed guidelines and practices consistent with high performance. The NCEL has adopted many of these practices. However, the NCEL could enhance its social media program by increasing its current activity level of the practices it has already implemented and adopting some additional practices. This may require additional resources to be allocated. The best practices have been grouped according to specific objectives the NCEL may wish to achieve.

Objective: Acquire new social media visitors

Social media sites will not provide any benefit to the Lottery if no one visits the sites. Increasing social media site traffic will increase the medium’s value as a communications tool. Possible methods for increasing site traffic for Facebook, Twitter, and YouTube include:

1. Promote social media by providing easily identifiable links
 - a. Large icon for each social media homepage at top of webpage.
 - b. Hyperlinks to social media homepages in publications that are available electronically.
2. Include at least one social media address and website address on each instant scratch-off and terminal-generated ticket.
3. Link every social media site to each other (e.g. Facebook page includes links to website, YouTube and Twitter) using easily seen and identified icons.
4. Purchase social media advertising.
5. Promote the existence of specific social media presence
 - a. Include social media logos or QR codes on lottery tickets (could be limited to one logo per ticket; could be on back of ticket).
 - b. Include social media logos on print advertising including point-of-sale signage.
 - c. Create specific point-of-sale piece that provides QR codes or URLs for social media.
 - d. Pass out cards/flyers with QR codes or URLs for social media during promotional events.
 - e. Include QR codes pointing to YouTube videos of second chance drawings on instant scratch-off tickets that can be used to enter the drawing
6. Encourage visits to website instead of simply listing the website.

Objective: Encourage engagement and provide value

Users who do not find social media sites interesting will move on. The success of a lottery’s social media is primarily a function of the extent to which it engages visitors and provides value.

Value can be provided in entertainment and/or useful information. A number of methods and practices appear to encourage engagement and provide value:

1. Focus on being friendly.
2. Be a “member” of the community Use the group’s language, do not force your language on participants..”
3. Keep information fresh and up-to-date.
4. Design social media to be interactive and invite posts and comments. Use active monitoring and remove inappropriate comments.
 - a. Encourage Facebook users to comment on content by posting funny articles, offering polls and surveys about local and national events, and other similar content (more interesting content tends to get sent or linked to other Facebook “friends”).
 - b. Post content meant to engage users in a conversation.
 - c. Encourage users to engage in player-to-player conversations regarding direct and indirect lottery content.
 - d. Allows users to post content regarding potentially “lucky” numbers for game playing.
 - e. Include a comment section to encourage user feedback on videos.
 - f. Invite users to post to YouTube channel. Posts could include what people would do with winnings or how people choose their numbers. Posted content should be screened by lottery staff and removed if inconsistent with the lottery’s image.
 - g. Conduct contests meant to encourage views and viewer comments.
5. Take advantage of opportunities to reward people for participating. Rewards can include acknowledgements such as friending, following, and re-tweeting.
6. Add more content relevant to the 18-34 year-old demographic on Facebook page. Content could include lottery related references to popular movies or music; solicit their opinions on the content to help determine their interests. Two-way communication is crucial to attracting the key 18-34 year olds.
7. Include more posts consisting of a greater variety of content. Lottery could commit to posting content on a variety of issues on a regular basis, such as winning numbers, location (city) of winners, etc.
 - a. Celebrate significant local achievements and events, such as statewide spelling bee winners, state teachers of the year, etc.
 - b. Celebrate non-lottery events on social media (holidays, local teacher awards, local sports successes, etc.)
8. Use slogan or theme for all social media content.
9. Create fictional character(s) to represent the Lottery in a more relatable manner. Character could be suggested and voted on through social media.
10. Reward users for “liking” Facebook page, with promotions or coupons.
11. Review new followers and follow those that are appropriate..

Objective: Increase winner awareness

Winner awareness is a key to a lottery's overall success. Players must believe they can win if they are to continue to buy tickets. Awareness of "real" people winning is essential.

1. Encourage winners of any amount to send a tweet to the lottery or post on the lottery's Facebook page.
2. Post pictures of recent winners right on the Twitter account main page and congratulate them with tweets.
3. Personal stories about winners
4. Identify locations of winning tickets.
5. Include winning numbers and jackpots for a lottery-promoting slide show.
6. Easier to find game winner videos.

Objective: Support Games, promotions, and promotional events

Social media can serve as a method for communicating information regarding new games, promotions, and promotional events. However, such communication must be consistent with the purpose of the social media being used—attempting to use social media as free advertising is not successful.

1. Post information regarding new games. Keep post entertaining and short—provide link to website for additional information.
2. Use Facebook and Twitter to generate interest a few days prior to a promotional event.
3. Use Facebook and Twitter and provide short stories and photos from recent promotions. Use Twitter to post videos.
4. Use Twitter to generate interest during promotional events.
5. Shoot "Home-made" videos at promotional events and post on YouTube for short periods of time. Tell event participants where to find the videos on YouTube.
6. Include second chance promotions on front page of site, possibly with icon buttons.
7. Celebrate seasonal events, with icon buttons.

Objective: Promote beneficiaries—where the money goes

Social media is another communication tool the Lottery can use to stress its mission and provide information regarding the beneficiaries of Lottery profits.

1. Post content that highlights specific beneficiaries of lottery disbursements, whether they are college scholarship winners or local school projects. Postings would require permission from subjects.
2. Enhance beneficiary webpage to include interactive icons, such as a 3-D map of state where a scroll of a county produces content related to how the lottery has helped county.
3. Create a separate icon that highlights college scholarships or college education opportunities made possible through lottery funding. This is critical to attracting the 18-34 year old demographic.
4. Feature videos of students helped as lottery beneficiaries.

Objective: Increase site “stickiness”

Social media sites and websites need to be designed and organized to maximize the time visitors spend on the sites and the frequency with which visitors return once they have left. Sticky sites are aesthetically pleasing, easy to navigate, and organized in such a way that the desired content can be quickly found.

1. If potential users have distinctly different interests, consider providing distinctly different channels/social media sites.
 - a. Establish individual Twitter accounts for communicating results for each draw games. Users can sign up to receive only the numbers for the games they play
 - b. Establish separate social media accounts for the general public for providing beneficiary information.
2. Establish separate social media accounts for retailers to provide “how to” information and communicate current events relevant to the retailers.
3. Organize YouTube into a few key playlists and make them clear to users. A “general” category could include the “Play Responsibly” theme in addition to other themes with limited entertainment value.
4. Include visually appealing photos.
5. Post catchy phrases.
6. Post content regarding holidays and non-lottery events.
7. Include background picture on main Twitter page to make more active and alive.

Expansion of Social Media

In 2009, North Carolina Education Lottery deployed social media as a program within its Corporate Communications function with the objective to connect to the 18-34 year old age group. This has been an excellent first step and has provided an opportunity for the NCEL to become familiar with social media. However, the NCEL should consider expanding the use of social media to improve the efficiency and effectiveness of business functions outside of Corporate Communications. Although Marketing and Advertising are obvious functions for the expansion of social media, other business processes may be able to use it as well. Any expansion of social media will require additional resources, policies, and processes.

Marketing, Promotions, and Advertising

The Marketing, Promotions, and Advertising department can leverage social media as another tool to meet certain business objectives. Existing programs should be evaluated to identify areas where social media can increase effectiveness and efficiency. Several programs may benefit from the use of social media.

- **Promotional Events:** The NCEL participates in promotional events including sporting events, fairs, festivals, and racing events. Promotions are listed on the NCEL’s website but have little or no presence in NCEL’s social media. Promotional events could be

promoted using social media and also serve as a tool to promote the NCEL's social media sites.

- NCEL promotion specialists could tell event participants where to find event pictures on Facebook.
- Although the NCEL has a few YouTube videos from promotional events, most of the videos are several years old.
- **Product Promotion:** The NCEL occasionally incorporates a brand that its customers identify with into its lottery games. Examples include NASCAR, Wheel of Fortune, Three Stooges®, and Bass Pro Shop®. The game themes offer obvious opportunities to engage players. Questions could be posted on Facebook asking NASCAR fans to name their favorite driver or the most memorable race they ever watched, asking Three Stooges® fans what their favorite movie or character was, and asking Bass Pro Shop® fans what they would buy with a \$1,000 gift card. The NCEL could consider incorporating references, links, re-tweets, and other avenues for strengthening the link between a brand and the NCEL.
- **Winner Awareness:** Staff at the Lottery's Regional Office's and Claim Centers could provide instructions on post card or business size cards for how winners can post to Twitter, Facebook and YouTube.

Other Business Processes

Social media sites are two-way communication tools. Most lotteries utilizing social media focus their efforts on public relations and marketing. Opportunities to increase efficiency by utilizing social media to support other business processes may exist as well.

Social media may be useful in any business process that includes outbound communication and would benefit from social interaction. Business processes that involve answering questions and providing information via telephone are likely candidates. Activities that include some repetitive communication may benefit from the use of social media as well.

Hotline/Telephone-based Services

The NCEL has three business processes that involve significant communications via telephone, email, conventional mail, or a combination of those.

The Sales Division's Retail Sales group makes phone calls to retailers to assist them with ordering instant tickets. This group has eleven retail sales specialists and one manager. The group receives approximately 2,100 calls per week from retailers who are placing orders for instant scratch-off tickets.

The Communication Division's Player Communication group receives inbound calls from players and public. This group has four Player Communication Representatives and a Player Communications Supervisor. In addition to approximately 380,000 calls handled by an

Interactive Voice Response (IVR) unit, approximately 1,000 calls per week are handled by the Player Communication's staff. Many of these calls are people looking for drawing results. Staff could explain to players how they could receive winning numbers via Twitter immediately after each drawing.

The Administration Department's Retailer Services²⁰ group receives inbound calls from retailers. The group consists of six Retailer Services Representatives and a Retailer Services Coordinator. The group receives approximately 375 calls per week. These calls are usually regarding issues specific to the retailer. Retailer issues include questions about the retailer's account, requests for adjustments to account, and service issues. A retailer channel or playlist could be established on YouTube to handle questions that are frequently asked. However, many of the questions handled by Retailer Services are specific to the retailer making the call.

Sales and Retailer Staff

NCEL could create a YouTube channel or a playlist specifically for retailers with information on how to perform certain functions. For example, videos could show how to apply for credit for a misprinted ticket or how to properly face an instant scratch-off ticket dispenser. Sales Representatives and Corporate Account Representatives could have cards or literature that included QR codes that direct retailers to specific content on web pages, YouTube, Facebook, or Twitter.

Resourcing Social Media Expansion

The NCEL could not expand its social media efforts and implement a significant number of the social media practices without increasing the resources allocated to such an effort. Although some of these activities could be implemented using existing resources, significant enhancements in the NCEL's social media program would require additional resources to be allocated.

The average number of hours the NCEL devotes to social media in a typical week is unknown, but is likely less than fifteen per week. One person has a social media title but is called upon to meet other business needs that arise.

If the NCEL adopts social media as a method of communicating, as opposed to a "program," the NCEL should be able to increase the depth and breadth of its social media presence without increasing the number of staff dedicated to social media. If the NCEL incorporates social media into additional business processes, they should utilize existing staff to handle the majority of associated social media tasks.

Table 5-13 provides several examples of how social media could be expanded throughout the organization. If the NCEL embraces social media as a communication tool, the staff may find

²⁰ Note: In January 2013, Player & Retailer Services were combined into Customer Service.

additional processes and programs that could be made more efficient and effective through the use of social media.

Possible Social Media Roles

Staff	Roles
Advertising/ Marketing	<ul style="list-style-type: none"> • Provide <i>social media-ready</i> content for new advertising campaigns • Create campaign/theme with specific plan for implementation
Product Management	<ul style="list-style-type: none"> • Incorporate social media strategy into branded games when appropriate • Respond to product-specific questions received via social media channels
Promotions	<ul style="list-style-type: none"> • Use social media to inform public about promotions • Provide social media information to the public during promotional events • Post pictures and comments during, or after, events • Encourage promotion participants to post pictures and comments
Player Communication	<ul style="list-style-type: none"> • Develop relevant FAQ information based on calls • Respond to player questions received via social media channels • Provide players with information on accessing NCEL social media
Sales	<ul style="list-style-type: none"> • Develop information that would be beneficial to wide range of retailers and retailer employees. • Provide retailers with information on accessing NCEL social media
Regional Claims	<ul style="list-style-type: none"> • Provide social media information to players and public who visit claim centers • Post social media stories on winners • Encourage winners to post pictures and comments
Security	<ul style="list-style-type: none"> • Develop information for retailer channels regarding retailer security and player protection • Respond to security-related questions received via social media channels when appropriate
Retailer Services	<ul style="list-style-type: none"> • Develop relevant FAQ information based on calls • Respond to generic retailer questions received via social media channels
Systems/ICS	<ul style="list-style-type: none"> • Administer social media accounts • Manage social media accounts that must be shared (if any) • Capture metrics and develop reports

Table 5-13

Social Media Expansion Challenges

Expanding the use of social media to other parts of the organization will require the NCEL to adopt policies, procedures, and training for participating staff.

Social media needs to appear personal, fresh, and dynamic to be effective. This poses new challenges for lotteries because it is impractical to review every communication prior to being released. Expanding the number of staff involved in social media will increase the lottery’s risk. Setting specific policies and procedures for staff involved in social media and ensuring staff is trained will mitigate the risks.

Social Media Recommendations

The NCEL is one of the more active and better performing lotteries in the U.S. From an advertising and marketing perspective, the NCEL could increase the reach and impact of social

media by increasing the resources allocated to social media and adopting a number of the effective social media guidelines and practices discussed above. Specific practices should be adopted based on objectives, resources, ease of implementation, and anticipated impact.

The NCEL should consider addressing the YouTube name search issue. Consider creating accounts for “North CarolinaLottery,” “NCLottery,” “NCEducationLottery,” and “NCEL.” Current YouTube channel (NCEduLottery) is difficult to find for users by searching in the YouTube domain.

NCEL should identify existing staff whom are avid social media users and utilize their familiarity and knowledge of social media to assist management in determining whether there are opportunities to increase the effectiveness of functions outside of marketing through the use of social media.