

Maximizing State Lottery Dollars for Public Education: An Analysis of Current State Lottery Models

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Abstract

Today, it is increasingly difficult for states to adequately satisfy the demand for well-funded and quality public services, such as K-12 education by relying exclusively on traditional, broad-based taxes for fiscal support. State sponsored lotteries are an increasingly popular, non-traditional revenue stream for public education. There is in many cases, however, a gap between their promoted benefit to public K-12 schools and the actual fiscal support they provide. This article examines the efficiency of 42 U.S. state lotteries and the District of Columbia in transferring funds to public education programs. Historical and geographic trends are identified that have influenced the design of state lottery revenue allocation policies.

Introduction

State governments face escalating pressure to adequately fund public education while supporting demands for growth in other services. Lawmakers, loath to increase traditional, broad-based taxes for fiscal support, seek out creative solutions to this dilemma. Just as local education agencies have turned to non-traditional revenue sources to supplement tax revenue, so too have state governments in the form of education lotteries (Pijanowski & Monk, 1996). While lotteries generate, on average, less than 3% of total state revenues, the sale of lottery tickets is arguably the most visible and controversial revenue-generating activity in which state governments participate (Clotfelter & Cook, 1989).

Over the last five decades, state-run lotteries have weathered their fair share of critics, but they have never been more popular than they are today. As of 2007, only eight states: Alabama, Alaska, Arkansas, Hawaii, Mississippi, Nevada, Utah, and Wyoming have not adopted a lottery (Coughlin, Garrett, & Hernandez-Murillo, 2006). Forty-two states as well as the District of Columbia currently have lotteries. Consequently, lotteries play an ever increasing role in how the nation funds public programs. This is particularly true of their role in funding public education.

Government sponsored lotteries are a controversial source of public finance, largely because they constitute not only the fastest-growing revenue source for states, but also spark debate concerning the appropriate role of government participation in commercialized gambling. While some policymakers promote state-run lotteries as modern-day fiscal panaceas, opponents have long argued that lotteries are a regressive form of taxation that disproportionately places a higher fiscal burden on poorer residents (Clotfelter, Cook, Edell, & Moore, 1999). Perhaps the greatest source of contention in this debate is the efficiency of lotteries and their fiscal impact on specific publicly funded programs, such as K-12 schools.

The purpose of this article is to identify those state lotteries that maximize financial resources targeted to public education. We will explore the various ways in which state lottery polices are constructed with an eye towards understanding best practices and barriers to optimizing the efficiency of education lotteries. Dynamic growth in the use of lotteries to fund education, coupled with limited and outdated research examining economically efficient state lottery models, serve as the impetus for this study.

Building a More Efficient State Lottery

State sponsored lotteries are the most popular form of commercialized gambling in the United States. In 2004, for example, lottery ticket sales in the U.S. surpassed \$48 billion, with state governments acquiring nearly \$14 billion in gross lottery revenues (Coughlin, Garrett, & Hernandez-Murillo, 2006). In 2002, the average American spent more money on lottery tickets than reading materials or movie tickets (Hansen, 2004).

Today, U.S. state lotteries are one of the fastest growing segments of the legalized gambling industry. Between 1976 and 1997, revenue generated

from legalized gambling increased dramatically by approximately 1,600% and expenditures more than doubled as a percentage of personal income (Clotfelter et al., 1999). The use of legalized gambling, including state lotteries, has been marketed to the public as a mechanism to offset the rising costs of public education to taxpayers (Mikesell & Zorn, 1986; Miller & Pierce, 1997; Rodgers & Stuart, 1995; Spindler, 1995).

Moreover, state lotteries are often seen as a “voluntary tax” because individuals have the choice of whether or not to purchase lottery tickets compared to a mandatory, government imposed tax (Berner, 2001; Bracey, 1995; Brent, 2000; DeMitchell, 2000; Jones & Amalifitano, 1994). The emerging growth in state lotteries, particularly in the last 25 years, has coincided with changing public attitudes toward legalized gambling, growing state and local government expenditures, and increasing public opposition to new and increased rates for existing taxes (Bledsoe, 1994; Borg, Mason, & Shapiro, 1991; Fisher, 1996; Herring & Bledsoe, 1994).

In a relatively short period, revenue generated from lotteries in the U.S. has grown rapidly. The actual percentage of lottery contributions going directly to state budgets, however, is quite minimal (Kearney, 2005). In 2001, for instance, contributions of lottery funds across 37 states averaged only 0.71% of total budgetary amounts. Specifically, state lottery contributions ranged from a low of 0.28% in Montana to a high of 8.27% in Delaware (U.S. Census Bureau, 2004). While lottery revenues constitute only a small percentage of total public educational revenues, some argue that the percentage of lottery proceeds that eventually does reach public education significantly helps improve education funding problems (Odden & Picus, 2000).

A popular strategy for garnering support of state lotteries has been to earmark lottery profits for a particular public service program. One of the most popular public service programs earmarked for state lottery profits is public education (Borg & Manson, 1990; Evans & Zhang, 2005; Garrett, 2001). Of the 42 states and the District of Columbia presently with lotteries, 23 states currently earmark lottery profits specifically for public education. In this article, we specifically focused on identifying state lotteries that are economically efficient at channeling monies toward public education.

Efficiency was measured as the percentage of total lottery revenue that was transferred to K-12 public education programs. The data in this study was gathered from multiple sources, including state annual financial reports,

independent audits, and state budget allocation reports for each state with a lottery for the fiscal year ending in 2005.¹ The efficiency measure tells us how well state lotteries capture the revenue generated for supporting public K-12 education. It does not speak to how well states maximize the total revenue generated through legalized gaming. It was essential to triangulate the data using multiple layers of fiscal reporting data to tease out different types of education targets and identify siphons on the revenue stream as it flowed from the lottery commissions to its eventual goal.

Based on our research, we identified three broad categories of revenue allocation patterns that illustrate how state lottery policy affects the flow of money to K-12 public educational programs. These three categories of state lottery revenue allocation patterns include: (a) lotteries for non-education programs, (b) general fund lotteries, and (c) public education lotteries.

Lotteries for Non-Education Programs

The first category of state lottery allocation patterns, reflect 11 states that predominantly earmark revenue for programs other than K-12 public education. These states currently include: Arizona, Colorado, Kansas, Massachusetts, Minnesota, New Jersey, New Mexico, Pennsylvania, South Dakota, Wisconsin, and Indiana. As Table 1 indicates, two of the states in this subgroup, Colorado and New Jersey, do divert some funds for public education, but overall the state lotteries in this subgroup of 11 provides the least fiscal benefit for K-12 public education programs.

In 2005, for example, New Jersey allocated approximately \$95 million dollars to K-12 public education programs out of \$2.3 billion in total revenue. There is no requirement in New Jersey's lottery legislation that K-12 public education in the state receive lottery funds, but it is one of several state programs eligible to receive lottery money each year. Colorado legislation requires that the Great Outdoors Colorado Fund receive 50% of lottery proceeds up to a cap of \$35 million in 1992 dollars (adjusted for inflation). If the 50% dollar amount exceeds the cap, the remainder goes to underfunded public school districts to address school facility safety issues.² In 2005, this resulted in a \$1.7 million dollar transfer to K-12 public education in Colorado.

The most unique state lottery allocation policy is found in Massachusetts, which also offers a benefit to K-12 public education, although none of the

revenue is directed to the state education fund. The Massachusetts state legislature establishes a formula for directing lottery revenue to local municipalities where it is used to support a variety of government services, including K-12 public educational programs. Measuring the use of these funds at a local level is beyond the scope of this study, but further research in this area would help us better understand how local choice affects the allocation patterns of state lottery proceeds.

States earmarking funds for programs other than public K-12 education represent a broad geographic and program variability, but programs do tend to reflect older, established state lotteries. For example, all but 1 of the 11 states (New Mexico), has a lottery system older than 15 years and the most recently established state lottery in this group has an education focus. New Mexico's lottery, founded in 1996, directs all lottery proceeds to fund Lottery Success Scholarships. Following new legislation passed in 2001 (effective in 2002) all lottery profits were earmarked for the Lottery Success Scholarships (Coughlin, Garrett, & Hernandez-Murillo, 2006). Prior to 2002, lottery proceeds were divided between public school capital outlay and a tuition program. As subsequently discussed, the focus on educational scholarship programs is a trend that has dominated the most recent states to have adopted lotteries.

General Fund Lotteries

The second category of state lottery allocation patterns entails those states that transferred lottery proceeds to their general fund. Eight states (Connecticut, Delaware, Iowa, Maine, Maryland, Montana, North Dakota, and Rhode Island) and the District of Columbia drive revenue to their state's general fund, and these lotteries are spread throughout the country. However, they tend to be states with older lotteries. With the exception of North Dakota's lottery, founded in 2004, the other seven state lotteries in this category are a minimum of 20 years old, and the majority of them are over 30 years old. Many of the state lotteries in Table 2 market their benefit to public K-12 education programs and go so far as to advertise the percentage of the general fund allocation patterns to represent the lottery allocation pattern in support of public education. However, since lottery revenue is rarely tracked beyond the general fund, there is little data to support how much lottery money actually supports K-12 public educational programs. It is particularly difficult to

Table 1

States Earmarking Funds for Programs Other Than K-12 Public Education

State	Year of Lottery	Primary Allocation	Revenue generated in 2005
Arizona	1981	Local Transportation fund. County Assistance fund. Economic development. Heritage fund.	\$116,392,900 distributed to the state. \$398,520,200 in total lottery revenue. ³
Colorado	1983	Great Outdoors Colorado. The Conservation Trust Fund. Colorado Division of Parks and Outdoor Recreation.	\$1,700,000 to K-12 education. \$444,500,000 in total lottery revenue. ⁴
Kansas	1987	Economic development. Prison construction. Juvenile detention facilities. Problem gambling assistance.	\$15,409,441 distributed to the state. \$207,772,207 in total lottery revenue. ⁵
Massachusetts	1972	Direct local aid is distributed according to a local aid formula established by the legislature.	\$936,133,995 in direct local aid. \$4,482,911,000 in total revenue. ⁶
Minnesota	1990	Environment and Natural Resources. Trust Fund. Game and Fish Fund. General Fund.	\$59,000,000 distributed to the state. \$381,489,741 in total lottery revenue. ⁷

Table 1 (continued)

New Jersey	1970	Higher Education. Human Services. K-12 Education. Veteran's Affairs.	\$95,495,000 for K-12 education \$812,047,000 distributed to the state. \$2,305,716,288 in total revenue ⁸
New Mexico	1996	Lottery Success. Scholarships.	\$32,230,517 to the lottery tuition fund. \$134,469,162 in total revenue. ⁹
Pennsylvania	1971	Property tax/rent relief. Prescription drug program. Transportation. Dept. of the Aging.	\$870,541,807 to the lottery fund. \$2,662,704,766 in total lottery revenue. ¹⁰
South Dakota	1987	Capital Construction. General Fund. Property Tax Reduction. Department of Human Services.	\$119,321,058 distributed to the state. \$143,954,875 in total revenue. ¹¹
Wisconsin	1988	Property tax relief.	\$143,397,558 for property tax relief. \$451,993,961 in total lottery revenue. ¹²
Indiana	1989	Teachers' Retirement Fund. Police and Fire Pension Fund. Build Indiana Fund.	\$143,880,204 distributed to the state. \$739,633,055 in total lottery revenue. ¹³

Note. State lottery revenue data is taken from 2005 state-level annual lottery reports.

Table 2

State Lotteries that Transfer Proceeds to the State General Fund

State	Year of Lottery	Primary Allocation	Revenue Generated in 2005
Connecticut	1972	General Fund.	\$268,515,000 to the general fund. \$959,706,000 in total revenue. ¹⁴
District of Columbia	1982	General Fund.	\$71,450,000 to the general fund. \$234,931,000 in total revenue. ¹⁵
Delaware	1975	General Fund.	\$297,921,666 to the general fund. \$689,291,202 in total revenue. ¹⁶
Iowa	1985	General Fund. Vision Iowa.	\$50,036,035 to the general fund. \$211,006,243 in total revenue. ¹⁷
Maine	1974	General Fund.	\$52,300,000 to the general fund. \$185,880,000 in total revenue.
Maryland	1973	General Fund.	\$477,098,364 to the general fund out of \$1,485,732,850 in total revenue. ¹⁸
Montana	1986	General Fund.	\$6,222,555 to the general fund out of \$33,842,650 in total revenue. ¹⁹
North Dakota	2004	General Fund.	\$5,838,005 to the general fund. \$19,223,089 in total revenue. ²⁰
Rhode Island	1974	General Fund.	\$307,549,648 to the general fund. \$1,634,938,802 in total revenue. ²¹

Note. State lottery revenue data is taken from 2005 state-level annual lottery reports.

make claims that lottery revenue provides additional revenue for public education as opposed to supplanting previous funding.

Public Education Lotteries

The third and final category of lottery allocation comprises the 23 state lotteries that currently earmark revenue support specifically for public K-12 education programs. Table 3 depicts these 23 states, as well as two states, New Jersey and Colorado, from Table 1 that provide some support for K-12 public education, representing a total of 25 states that directly support K-12 public education with lottery revenue. A striking distinction between public education-based lotteries and the previous two state lottery categories is the number of newer lotteries that allocate funds directly to K-12 public education programs. While only two states in the other two subgroup categories combined were established as recently as 1996, ten of the state lotteries in Table 3 were either created or became education lotteries since 1996. It is interesting to note that even though directing lottery revenue to public education is a recent trend, it is not a novel idea. The three oldest lotteries in the country (New Hampshire, New York and New Jersey) are also public education lotteries. The two state lotteries formed in the 1960's (New Hampshire and New York) earmark revenue exclusively for public education, and in 2005 both states transferred over 30% of the lotteries' total revenue to K-12 public education programs.

States such as New Hampshire and New York provide the greatest percentage of their total revenue for public K-12 education, largely because they have dedicated all or most of the lottery proceeds for public education; often through a state legislative mandate. Other factors affecting the percentage of revenue flowing to K-12 public education include the amount of money spent on managing the lottery and the percentage of total revenue dedicated to prizes. In 2005, seven states (Illinois, Louisiana, Michigan, New Hampshire, New York, Ohio, and Virginia) contributed 30% or more of their total lottery revenue to fund public K-12 programs (Coughlin et al., 2006). In each case, less than 2% of total lottery revenue was transferred to other programs. However, not every state that limits allocations to other programs fares this well towards shifting revenue to public education.

Two states, Texas and Vermont, earmarked all of their lottery proceeds to K-12 public education, but failed to reach the 30% mark. The state of Washington committed only 3% of its total lottery proceeds to other programs, but transferred only 22% of total revenue in 2005 for K-12 public education. Moreover, money spent on overhead and commission to private vendors played a notable role in the fiscal disparity between these two groups of lotteries, but prize payouts have a far greater fiscal impact. The three states of Washington, Texas and Vermont commit between 61% and 63% of their total lottery revenue to prizes, which is greater than any of the other seven states that made the greatest percentage allocation towards public K-12 education. For example, the state of Louisiana earmarks half of its total lottery revenue for prizes and 35% to public education.

Interestingly, the allocation pattern that has had the greatest negative impact on public K-12 education revenues has been the trend to direct lottery dollars to public higher education and scholarship programs. Twelve of the current 25 lotteries that have earmarked some funds for public K-12 education also earmarked a significant portion of their total revenue for public higher education and/or scholarships. The best known of these state lotteries is Georgia's Lottery for Education and the HOPE Scholarship program, which funds merit-based scholarships, including student tuition, fees, as well as a book stipend, to attend one of Georgia's public colleges or universities (Campbell, 2003). Nine state lotteries presently support scholarship programs, including the five most recently created or redesigned state education lotteries. There is also a regional effect as a trend has evolved in southern states (Florida, Georgia, South Carolina, North Carolina, Tennessee, Kentucky and Oklahoma) offering lottery funded scholarship programs.

The percentage of total revenue directed to K-12 public education tells only part of the efficiency story. The strength of a state's lottery policy to encourage the supplementing of existing budgets plays a critical role in determining the impact of lottery proceeds on public K-12 spending. Several states have made explicit efforts to ensure that lottery dollars are not as fungible, or interchangeable, as they have been historically. South Carolina's lottery legislation, for example, states that, "proceeds of lottery games must be used to support improvements and enhancements for educational purposes and programs as provided by the General Assembly and that the net proceeds must be used to supplement, not supplant, existing resources for educational

purposes and programs” (South Carolina Lottery Education Act, SECTION 59-150-350 C(2)).

Driving revenue to higher education programs and scholarship initiatives is indicative of a larger trend to allocate education dollars to specific programs and guard against the fungible nature of lottery revenue when transferred to a general education fund. In North Carolina, for example, K-12 public education construction and class size reduction allocations are established by Section 18C-162 of the North Carolina State Lottery Act. In contrast, South Carolina legislation leaves it up to the discretion of the state legislature to determine the annual distribution of lottery funds. However, both states allocate lottery revenue to specific K-12 public education programs and track lottery spending apart from other revenue sources. While earmarking on this level falls short of ensuring lottery dollars are not fungible, its transparency and independence from the general education fund make it easier to measure the extent to which lottery dollars supplement previous public education spending. In states like New York, where lottery dollars are deposited directly into the state’s general education fund, it is much more difficult to determine the extent to which those funds supplant existing spending. It is also difficult to track the education lottery dollar in New York to specific school programs.

On March 30, 2006, North Carolina became the 42nd and most recent state to adopt a state-sanctioned lottery. North Carolina’s lottery policy has followed recent and regional trends in several key ways. North Carolina’s lottery is an education lottery that earmarks funds for specific programs and tracks the lottery dollar independent of the general education fund spending. After 5% of total revenue is placed in a reserve fund, the remaining net revenue is distributed among three broad categories: class size reduction, school construction, and college scholarships.

Discussion and Conclusions

Currently, 23 states mandated the allocation of at least a portion of the lottery proceeds towards K-12 public education (a 24th state, New Jersey, allocated a portion of lottery revenue to K-12 public education in 2005 but was not mandated to do so, and a 25th state, Colorado, directs overflow to the state education fund after the primary earmark goals have been reached). Nine states directed lottery revenue to the state’s general fund and the remaining

Table 3

State Lotteries that Earmark Funds Specifically for K-12 Public Education

State	Year of Lottery Adoption	Total Revenue	K-12 Allocation	% to K-12	% to Other
California	1985	\$3,333,620,669	\$948,134,123	28	7
Colorado	1983	\$444,500,000	\$1,700,000	< 1	25
Florida	1986	\$3,470,734,000	\$650,039,045	19	15
Georgia	1993	\$2,739,049,000	\$270,909,450	10	19
Idaho	1989	\$113,543,763	\$13,000,000	11	11
Illinois	1974 (1985)	\$1,856,130,835	\$619,496,973	33	0
Kentucky	1989	\$707,300,000	\$3,000,000	< 1	22
Louisiana	1991	\$306,962,028	\$107,992,785	35	1
Michigan	1972 (1981)	\$2,090,132,247	\$667,579,438	32	1
Missouri	1986	\$785,597,632	\$143,865,994	18	10
Nebraska	1993 (2004)	\$100,658,171	\$5,100,683	5	22
New Hampshire	1964	\$228,956,280	\$69,348,561	30	0
New Jersey	1970	\$2,305,716,288	\$95,495,000	4	31
New York	1967	\$6,270,487,000	\$2,062,702,000	33	0
North Carolina	2005	\$216,905,691	\$54,332,472	25	3
Ohio	1974 (1988)	\$2,164,857,239	\$645,137,000	30	0
Oklahoma	2005	\$58,180,145	\$8,726,190	15	15
Oregon	1984 (1995)	\$939,529,001	\$60,237,188	6	36
South Carolina	2001	\$960,149,462	\$102,823,895	11	25
Tennessee	2004	\$787,309,000	\$31,873,000	4	25
Texas	1991 (1997)	\$3,663,413,888	\$1,009,538,728	28	0
Vermont	1978 (1998)	\$92,599,609	\$20,354,442	22	0
Virginia	1988 (2000)	\$1,333,946,125	\$423,500,000	32	0
Washington	1982 (2000)	\$458,131,553	\$102,000,000	22	3
West Virginia	1982 (2000)	\$1,399,074,000	\$83,226,000	6	34

Note. The data in this table for the two most recent lottery states, North Carolina and Oklahoma, is taken from fiscal year 2006 while the rest of the table represents fiscal year 2005 data. Year in parenthesis is when the current allocation pattern was established.

eleven states earmarked funds for programs other than K-12 public education.

Collectively, state lotteries generate only a small fraction of total state revenues allocated to K-12 public education. Nevertheless, earmarking lottery revenues for a specific purpose, such as public education, is a more economically efficient method of channeling lottery profits to actually reach public schools. For example, recent research by Evans and Zhang (2005) that analyzed the impact of lottery revenue on state educational expenditures revealed that up to 50-70% of earmarked lottery profits are allocated to local school districts by the state, and at least 80% of the allocated lottery profits are actually spent on public school related expenses.

A current analysis of lottery models in 42 states and the District of Columbia reveals that there exists a clear recent trend towards earmarking lottery revenue for public education. Over a 10-year period ranging from 1996 to 2006, five lotteries were formed and four of them directed all or part of the proceeds to K-12 public education. During that same period, five states passed legislation that shifted the allocation of lottery revenue towards public education.

While it should be emphasized that state lottery profits should never be seen as a major source for financing today's public schools, our research indicates that those 25 lotteries that currently earmark revenue for K-12 public education are more economically efficient at generating revenue for K-12 public schools than states where lottery profits are placed into a general fund. It is assumed that lottery revenues will automatically enhance a state's financial support for public education by adding an additional, non-traditional revenue source earmarked for public education (DeMitchell, 2000). Research by Jones and Amalfitano (1994), however, tends to support the notion of the state-sanctioned lottery as an "economic placebo" that does not appear to enhance public support for public education. The three main results from Jones and Amalfitano's 1987 study comparing lottery states with non-lottery states were the following: (1) There was no statistically significant difference between states that used lottery funds to support public K-12 education compared to those states that did not support with respect to indicators of support and effort for education; (2) The state's average percentage of general expenditures to education was actually higher in non-lottery states at 23.5% compared to 15.3% in states with lotteries; (3) Non-lottery states contributed a larger fiscal

share of their income to support public K-12 education compared to states that had adopted a lottery (Jones & Amalfitano, 1994).

Lotteries commit different shares of total revenue to overhead, prizes, other programs and K-12 education. These fiscal allotments reflect regional priorities, political pressures, and economic realities that vary from state to state. It is rare that a state lottery transfers more than 30% of its total revenue to the state in support of K-12 public education. In our review of lottery fiscal reports for the fiscal year 2005, only seven states cleared the 30% benchmark. Overhead costs, commissions to vendors and prize allocations had an effect on limiting the revenue available for education, but the most significant siphon on education dollars was the diversification of programs receiving lottery money. Interestingly, in most recently developed lotteries it was educational programs outside of K-12 that was the biggest draw on K-12 public education's share of lottery proceeds.

As the trend towards earmarking for education has grown, states have increasingly drawn dollars away from K-12 to support higher education and scholarship programs. This represents a significant shift in how lottery dollars for education are spent, and while programs such as Georgia's HOPE scholarships are less fungible compared to general education fund contributions, they are also diverting revenue away from the K-12 public educational system.

The most efficient K-12 public education lotteries are those that have the following five characteristics:

- (1) Contribute the largest percentage of revenue to K-12 education.
- (2) Optimize the amount of prize money needed to sustain total revenue growth.
- (3) Earmark revenue for specific K-12 programs in a way that does not supplant existing funds.
- (4) Trace the flow of resources to the program level to measure the impact of lottery revenue.
- (5) Create a transparent accounting system to guard against fungibility.

Given the myriad factors that limit a lottery's effectiveness to support K-12 public education, what are the implications of the Jones and Amalfitano's study on current lottery models? Are state-sanctioned lotteries "economic placebos" for funding public K-12 schools or viable and reliable sources of

public education funding? More studies of fungibility applied to the newest models of lottery revenue allocation will add critical data to that debate. A closer examination and comparison of traditional lottery policies, newer earmarking models, and unique efforts like Massachusetts' allocation to local instead of state budgets would also be a significant area of future research.

Perhaps part of the answer lies in considering the amount of revenue that is generated for education as a percentage of the entire education budget. In New York, for example, arguably the most successful lottery in the country, the 2005 state lottery generated \$6,270,487,000 in total revenue and transferred 33% of that revenue (\$2,062,702,000) to K-12 public education. Analyzing the New York Lottery in terms of percentage transferred to K-12 public education, it ranks second in the country (behind Louisiana) and ranks first in both total revenue and revenue for education. This amounts to 9.59% of total state education aid or approximately \$530 per pupil. While this kind of success is rare, it is unclear exactly how much New York's lottery is injecting towards New York's public education system as opposed to supplanting existing funds. Regardless, although further study into the fungibility of New York's lottery revenue would be needed to determine the extent to which New York public schools are financial winners in the state lottery, it seems clear that the state has tapped into a viable and significant source of voluntary tax revenue.

By comparison, the most recent state to adopt a lottery, North Carolina, has fallen woefully behind initial lottery revenue projections. With the revised projections of proceeds for public education at \$350 million, the state will be forced to all but deplete its reserve fund to make up for the shortfall. When the revenue stream is tracked through the lottery's education earmarks the impact on K-12 public educational programs is diminished further. After 5% goes to the Education Lottery Reserve Fund, and 10% of the remainder for scholarships, \$281 million is left for K-12 public education. This results in \$203 per pupil to be spent on pre-k programs, class size reduction in early grades and school construction related expenses.

Examples such as New York, North Carolina and Massachusetts show us that a national picture of education lotteries is best described as a state by state story that illustrates the vast differences in how they are developed, allocate funds, and the level of success they enjoy. However, it is clearly not a story to be read in a policy vacuum. There are discernable trends in how lotteries are designed. The North Carolina model represents the most recent

iteration of state lottery policy with an emphasis on specific educational earmarking, scholarships and an attempt to moderate overhead and prize costs to get state transfers near or over 30%. Ultimately, one might conclude that a fiscal panacea for select programs in one state can sometimes be another state's economic placebo.

References

- Berner, R. (2001, May 7). State lotteries are coming up snake eyes. *Business Week*, 40.
- Borg, M. O., & Manson, P. M. (1990). Earmarked lottery revenues: Positive windfalls or concealed redistribution mechanisms? *Journal of Education Finance*, 15(3), 289-301.
- Borg, M. O., Mason, P. M., & Shapiro, S. (1991). *The economic consequences of state lotteries*. New York: Praeger.
- Bracey, G. (1995, December). States are gambling and losing on schools. *Phi Delta Kappan*, 322-323.
- Brent, B. O. (2000, May). Yes, the lottery is a tax-and not a very good one. *School Business Affairs*, 22-28.
- Clotfelter, C., & Cook, P. (1989). *Selling hope: State lotteries in America*. Cambridge, Mass: Harvard University Press.
- Clotfelter, C., Cook, P., Edell, J., & Moore, M. (1999). *State lotteries at the turn of the century*. Report to the National Gambling Impact Study Commission, April 23, 1999.
- Coughlin, C. Garrett, T. A., & Hernandez-Murillo, R. (2006). The geography, economics, and politics of lottery adoption. *Federal Reserve Bank of St. Louis Review*, 88(3), 165-180.
- DeMitchell, T. A. (2000, May), Financing public education through state lotteries: Leaving funding to chance. *School Business Affairs*, 32-36.
- Evans, W. N., & Zhang, P. (March 2005). *The impact of earmarked lottery revenues on state educational expenditures*: Working Paper. National Bureau of Economic Research, Cambridge: Mass.
- Fisher, R. (1996). *State and local public finance*. Chicago, IL: Irvin.
- Garrett, T. A. (2001). Earmarked lottery revenues for education: A new test of fungibility. *Journal of Education Finance* 26(3), 219-238.

- Hansen, A. (2004, October). *Lotteries and state fiscal policy*. Background Paper No. 46, Tax Foundation.
- Herring, M., & Bledsoe, T. (1994). A model of lottery participation: Demographics, context, and attitudes. *Policy Studies Journal*, 22(2), 245-257.
- Jones, T. H., & Amalfitano, J. L. (1994). *America's gamble: Public school finance and state lotteries*. Lancaster, PA: Technomic Publishing Co., Inc.
- Kearney, M. S. (2005). The economic winners and losers of legalized gambling. *National Tax Journal*, 58(2), 281-302.
- Mikesell, J. L., & Zorn, C. K. (1986). State lotteries as fiscal savior or fiscal fraud: A look at the evidence. *Public Administration Review*, 46(3), 311-320.
- Miller, D. E., & Pierce, P. A. (1997). Lotteries for education: Windfall or hoax? *State and Local Government Review*, 29(1), 34-42.
- Odden, A. R., & Picus, L. O. (2000). *School finance: A policy perspective* (2nd ed.). Boston, MA: McGraw-Hill.
- Pijanowski, J. C., & Monk, D. H. (1996). Alternative school revenue sources: There are many fish in the sea. *School Business Affairs*, 62(7), 4-10.
- Rodgers, W., & Stuart, C. (1995). The efficiency of a lottery as a source of public revenue. *Public Finance Quarterly*, 23(2), 242-254.
- Spindler, C. J. (1995). The lottery and education: Robbing Peter to pay Paul? *Public Budgeting and Finance*, 15(3), 54-62.
- South Carolina Lottery Education Act, S.C. Code Ann. §59-150-60 (2001).
- U.S. Census Bureau. (2004, March). *2001 Survey of Government Finances*. Washington, DC: U.S. Department of Commerce.

Endnotes

¹ With the exception of the newest lotteries in North Carolina and Oklahoma where we used 2006 data.

² Colorado Lottery Annual Report (2005)

http://www.coloradolottery.com/documents/annual_report/2005GamesProceeds.pdf

³ Arizona Lottery Annual Report (2005)

http://www.arizonalottery.com/pdfs/annualreport_05.pdf

⁴ Colorado Lottery Annual Report (2005)

http://www.coloradolottery.com/documents/annual_report/2005MoneyTable.pdf

⁵ Kansas Lottery Annual Report 2005

<http://www.kslottery.com/LotteryInfo/AnnualReport05.pdf>

⁶ Massachusetts State Lottery Annual Report 2005

<http://www.masslottery.com/pdfs/AnnualReport2005.pdf>

⁷ Minnesota State Lottery Annual Report 2005

<http://www.mnlottery.com/ar05/AnnualReport05.pdf>

⁸ New Jersey Lottery: Give Your Dreams a Chance 2005 Annual Report

http://www.state.nj.us/lottery/money/annual_report_2005.pdf

⁹ New Mexico Lottery Authority Annual Report 2005

http://www.nmlottery.com/News/Annual_Reports/NMLA_Annual_Report_2005.pdf

¹⁰ Pennsylvania Lottery Annual Report 2005-2006

<http://www.palottery.state.pa.us/lottery/cwp/view.asp?A=3&Q=479753>

¹¹ South Dakota Lottery 2005 Annual Report

<http://www.sdlottery.org/pdf%20docs/annual%20report%202005.pdf>

¹² Wisconsin Lottery: Department of Revenue Audit 2006

<http://www.legis.state.wi.us/LaB/reports/06-8Full.pdf>

¹³ The Business of Fun 2005 Annual Report

http://www.in.gov/hoosierlottery/where_money_goes/05Hoosierlottery.pdf

¹⁴ Connecticut Lottery Comprehensive Annual Financial Report, 2005.

<http://www.ctlottery.org/images/CAFR-FY05.pdf>

¹⁵ DC's Best Bet: Creating a Better Community Annual Report 2005

<http://dclottery.com/pdfs/AnnRpt05.pdf>

¹⁶ The Delaware Lottery 2005 Annual Report

<http://www.lottery.state.de.us/pdf/2005annualreport.pdf>

¹⁷ Celebrating our Past, Embracing our Future, 2005

<http://www.ialottery.com/AboutUs/2005annualreportfinal.pdf>

¹⁸ Maryland lottery fact sheet: fiscal year 2005 <http://www.mdlottery.com/>

¹⁹ Montana Lottery Annual Report 2005

http://www.montanalottery.com/reports_forms/annual_report_2005.pdf

²⁰ North Dakota Lottery Bismarck, North Dakota Audit Report for the Year Ended June 30, 2005 Client Code 125.1 <http://www.lottery.nd.gov/about/FinStatements/Audit05.pdf>

²¹ Rhode Island Lottery A Component Unit of the State of Rhode Island and Providence Plantations Comprehensive Annual Financial Report For the Fiscal Year Ended June 30, 2005 http://www.rilot.com/docs/financial/CAFR_FYE_June05.pdf