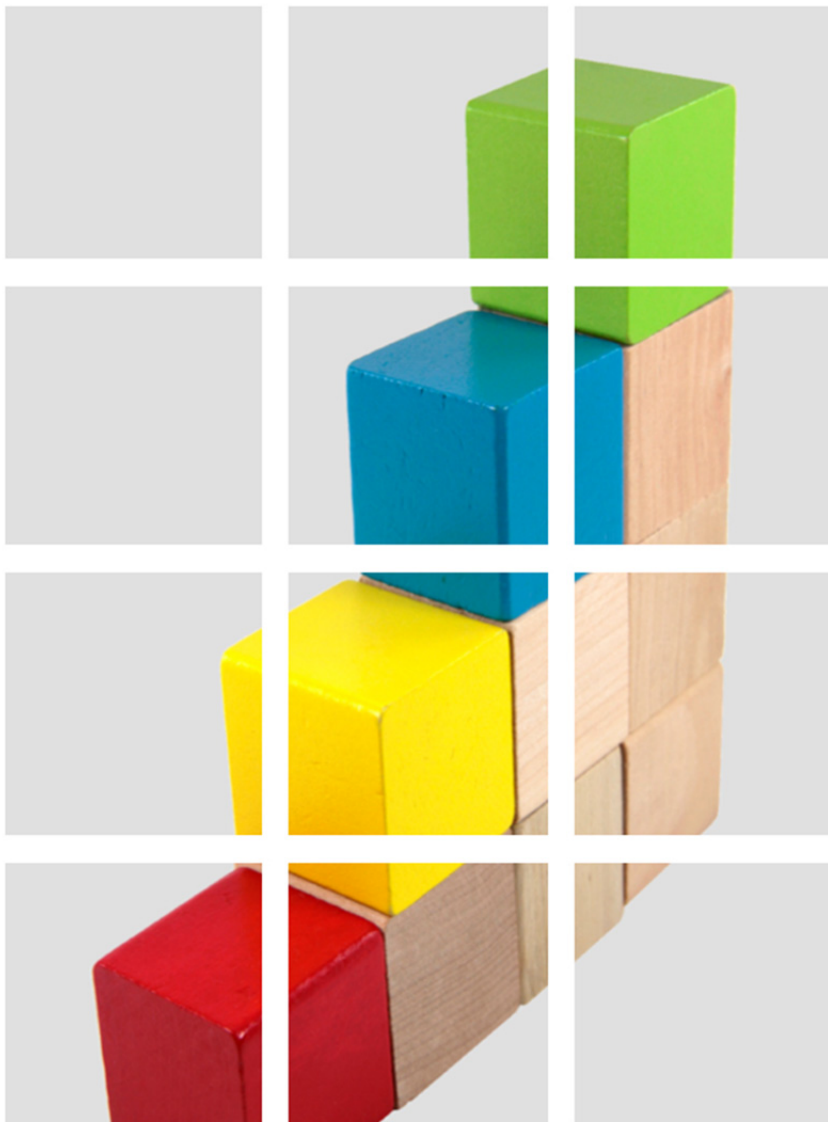


The Challenge of Making Universal Prekindergarten a Reality in New York State

October 2013



FOREWORD

Founded in 1932, the Citizens Budget Commission (CBC) is a nonprofit, nonpartisan civic organization devoted to influencing constructive change in the finances and services of New York State and New York City governments. A major activity of the Commission is conducting research on the financial and management practices of the State and City.

This report was prepared by Elizabeth Lynam, Vice President and Director of State Studies, and Tammy Gamerman, Senior Research Associate. Research assistance was provided by Research Consultants Julia Radunsky, Mateusz Zacharski and Gal Fix, and Research Associate Ben Eisen.

The CBC would like to thank the following reviewers for their invaluable comments and suggestions: 1) De'Shawn Wright, New York State Deputy Secretary for Education; 2) Joseph Conroy, Education Finance Director, New York State Education Department; 3) Billy Easton, Executive Director, Alliance for Quality Education; 4) Michael Rebell, Executive Director of the Campaign for Educational Equity at Teachers College Columbia University, and Jessica Wolff, Policy Director of the Campaign for Educational Equity at Teachers College Columbia University; and 5) Nancy Kolben, Executive Director, Center for Children's Initiatives, and Betty Holcomb, Director of Policy, Center for Children's Initiatives.

The views expressed in the report are solely those of the CBC.

CONTENTS

Foreword	2
Introduction	4
New York’s Current Pre-k Program is Still Far From Universal	5
New York Spends Less per Pupil than National Norms and Neighboring States but Reaches More Students	10
The Fiscal Implications of Fully Funding High-Quality UPK	13
conclusion.....	15
Appendix A: Studies of the Benefits of Pre-K Programs	16
Appendix B: Cost Estimate Methodology.....	19
Appendix C: Cost Estimates for New York City	22
Endnotes.....	23

INTRODUCTION

The expansion of preschool opportunities has been receiving attention of late from national, state and local leaders. President Obama's 2013 State of the Union Address called for access to high-quality preschool for every child, and he proposed to make federal funds available to improve preschool access and quality for children from low- and moderate-income families.¹ In New York Governor Andrew Cuomo created in early 2013 the New NY Education Reform Commission, a 25-member panel tasked with making recommendations for improving the quality, accountability, and financing of public education. It has recommended that access to early educational opportunities be increased by providing full-day prekindergarten (pre-k) to all children in the state's highest needs school districts.² Most recently, New York City mayoral candidate Bill de Blasio has made all day pre-k for all four-year-olds a centerpiece of his campaign.³

Education advocates, led by the Center for Children's Initiatives and The Campaign for Educational Equity, have recently advanced a proposal that calls on State leaders "to recognize explicitly the right of every three- and four-year-old child to a high-quality, full-day prekindergarten program."⁴ This "rights-based" pre-k program would be phased in over eight years starting with four-year-olds in districts with high concentrations of low-income households in year one and all four-year-olds in the state in years two and three. Three-year-olds in high-poverty districts would be added in years six and seven, and in year eight all three-year-olds would be covered. After a phase-in period state aid for the program would be added to and distributed through the K-12 funding formulas that require a local contribution, and the per pupil spending target would be set to include transportation, health, and family support services.⁵

If New York is to embrace the ambitious goal of universal pre-k, it must first acknowledge that it will be costly to achieve. To date New York has not fulfilled the funding targets set for a pre-k program established in 1997. Moreover, because the emphasis to date in New York has been on expanding access rather than enriching services, current per pupil spending on pre-k in New York lags national norms and falls well below spending per pupil in neighboring states that offer more targeted programs. If pre-k is to accomplish the lasting benefits for disadvantaged students shown in research studies, more intensive and expensive programming will be required. (For a discussion of the research studies see Appendix A.) Finally, because a large majority of children from upper-income families already attend privately financed pre-k programs, it is questionable whether the significant expenditure necessary to fund pre-k seats in public schools for these children should be a priority use of scarce tax dollars.

NEW YORK'S CURRENT PRE-K PROGRAM IS STILL FAR FROM UNIVERSAL

New York has a history dating to the 1960s of providing some form of public pre-k services. Over the years the funding formulas and goals of state pre-k programs have changed, and funding has been repeatedly constrained by budget pressures.

New York's early pre-k programs were targeted to poor students. In 1966 the half-day Experimental Prekindergarten (EPK) program, was launched to serve educationally disadvantaged three- and four-year-olds. The main components of the program were: (1) in-school experience, (2) health services,⁶ (3) social services,⁷ and (4) parental involvement. Initial annual funding was \$5 million, which enabled the program to serve approximately 7,000 students. The program remained targeted to disadvantaged students for 30 years. Limited expansion raised the appropriation to \$50 million in 1996-97, serving about 20,840 students.⁸ In 1994 the EPK program was retitled the Targeted Pre-K program, or TPK, reflecting that it was no longer an experiment but an established program.

In 1997, as more research emerged on the benefits of pre-k, New York expanded its program. The State budget adopted in August 1997 included a package of reforms, dubbed LADDER for Learning Achieving Developing by Directing Education Resources. It contained a plan to establish Pre-k for all four-year-olds to be phased in over four years, beginning in the 1998-99 school year. The State Education Department (SED) was charged with administering the program and allocating grants to districts according to a formula based on district need and number of eligible four-year-olds. School districts were not required to participate or to provide local financing, although they could opt to supplement state funds. Those participating were required to subcontract 10 percent of their grant funding to community based organizations.⁹ The programs must operate a minimum of two and half hours a day, five days a week, 180 days a year with no more than 20 students per classroom.¹⁰ The enriched funding in the EPK/TPK program to provide for health, counseling, and case management services was not continued.

Annual funding for the LADDER program was scheduled to grow from \$50 million to \$100 million in the 1999-00 school year, \$225 million in the 2000-01 school year, and \$500 million each year thereafter with the expectation all four-year olds would be able to access services by 2002.¹¹ Based on this goal the LADDER program also became known as the Universal Pre-k or UPK program.

Initial UPK grants to school districts ranged from \$2,000 to \$4,000 per pupil,¹² determined by a formula that included district wealth (measured by local property values and income) and district need (measured by the portion of students in poverty).¹³ Initial school district eligibility was determined based on the number of four-year-olds who were not already placed in other prekindergarten programs and by district need.¹⁴ In the first year of implementation 130 districts were deemed eligible, but only 68 opted to provide pre-k classes in the 1998-99 school year.¹⁵ First year enrollment was 18,176; nearly 14,000 of these students were in New York City.¹⁶ (See Table 1.) Acknowledging the originally appropriated funding was not sufficient to spark widespread enrollment, the Legislature increased the program's budget during the year to \$67 million. About \$57 million was disbursed in grants in that year.

Table 1: New York State Universal Prekindergarten Grants and Enrollees, School Years 1998-99 to 2013-14
(dollars in millions)

School Year	Authorized Grants	Grants Paid	Children Served
1998-99	\$67.4	\$57.1	18,176
1999-00	100.1	83.5	27,719
2000-01	225.0	183.9	49,067
2001-02*	204.7	176.8	54,946
2002-03*	204.7	195.3	59,196
2003-04*	204.7	199.6	58,012
2004-05*	204.7	200.7	56,898
2005-06*	204.7	201.0	56,529
2006-07	254.7	241.7	62,929
2007-08**	437.9	348.6	92,173
2008-09	451.2	372.9	100,093
2009-10	414.1	376.8	101,865
2010-11	414.1	380.9	103,287
2011-12	384.3	380.7	103,573
2012-13	385.0	374.4	100,969
2013-14	385.0	NA	NA

NA = Not Available

Notes: *From school year 2002 through 2006, the UPK expansion was suspended.

**In school year 2008, a new formula replaced UPK, supplemental UPK, and Targeted Prekindergarten (TPK) aids.

Source: New York State Education Department.

Funding for the second and third years of the program followed the schedule in the original legislation - \$100 million and \$225 million for school years 1999-00 and 2000-01, respectively.¹⁷ But school districts were slow to initiate or expand programs, and in the 2000-01 year districts used only \$183.9 million. Districts that did not use their full allocation were permitted to place the unused portion in a reserve fund for use the next year.¹⁸

The plan to increase funding for the program in subsequent years was thwarted by the recession that began with the burst of the dot-com bubble in 2000 and worsened after the terrorist attack on the World Trade Center. The appropriation for the 2001-02 school year was \$204.7 million, less than half of what had been scheduled in the original legislation. School districts spent \$176.8 million that year.

The State's fiscal troubles continued into the 2002-03 school year. UPK funding was kept at prior year levels of \$204.7 million, and state funds were supplemented with federal funds from the Temporary Assistance for Needy Families, or TANF, program.¹⁹ Funding remained flat at \$204.7 million until school year 2006-07 when an additional \$50 million was appropriated.²⁰ In 2006-07 district programs served 62,929 children. (Refer to Table 1.)

In 2007-08 the State renewed its expansion commitment and adopted a new allocation formula for UPK aid.²¹ Each district received base aid equal to its aid in the 2006-07 school year, but the district could not serve fewer children than it had the prior year in order to receive the same grant amount.²² Additional aid was granted to districts for additional pupils enrolled in the program.²³ Although UPK funding was increased to \$437.9 million, only \$348.6 million was spent serving 92,173 children.

Further expansion was put on hold in fiscal year 2008-09 as State leaders began to grapple with the Great Recession. No new districts were allowed to enter the UPK program, and by 2009-10 the allocation was reduced to \$414.1 million.²⁴ Funding for 2010-11 was kept at the prior year level, and in 2011-12 it dropped to \$384.3 million. School districts that had supplemented programming with their own funds cut services because of their own budget pressures. Yonkers and Poughkeepsie, for example, went from full-day to half-day programs.²⁵

In 2011-12, New York’s school districts spent \$380.7 million of the \$384.3 million allocation. Enrollment was 103,573, resulting in per pupil allocations of \$3,676 on average. In 2012-13, \$385 million was allocated, and districts spent \$374.4 million. New York’s large city districts, the “Big 5,” served 63 percent of pupils in the program in school year 2012-13 with per pupil grants ranging from \$2,951 in Yonkers to \$5,636 in Rochester. (See Table 2.) New York City received \$220 million to serve 57,759 pupils, an average per pupil of \$3,810. The second largest grant went to Buffalo, which received \$13 million or \$4,731 per pupil to serve 2,697 pupils. Other districts among the top ten grant recipients include East Ramapo, Brentwood, Newburgh, Albany, and Utica. Per pupil grants for these districts ranged from \$2,866 for East Ramapo to \$4,493 for Newburgh.

Table 2: Ten Largest New York State Universal Prekindergarten Funding Allocations by School District, School Year 2012-2013

School District	Authorized Grant (in millions)	Grant Paid (in millions)	Children Served	Actual Grant Per Pupil
New York City	\$225	\$220	57,759	\$3,810
Buffalo	13	13	2,697	4,731
Rochester	11	11	1,915	5,636
Syracuse	7	7	1,470	5,055
East Ramapo	5	5	1,654	2,866
Yonkers	4	4	1,447	2,951
Brentwood	3	3	737	4,526
Newburgh	3	3	614	4,493
Albany	2	2	591	3,831
Utica	2	2	557	3,743
All Other Districts	110	108	33,529	3,216

Source: New York State Education Department, *Enacted State School Aid for School Year 2013-14*.

Since the aid formula takes district student characteristics and ability to pay into account, the distribution of funds is targeted to the needy, largely urban, areas. State aid for the districts in the neediest 10 percent of districts (Decile 1) – as defined by student need relative to district wealth – received on average \$4,678 per pupil in school year 2012-13, double the amount received by the wealthiest 10 percent of districts (Decile 10). (See Table 3.) The districts in the poorest decile served 61 percent of all-four-years olds in their districts. The second, third, and fourth decile districts served 51 percent, 58 percent, and 46 percent of their four-year-olds, respectively. In contrast, the districts in the least needy decile served just 8 percent of their four-year-olds with an average per pupil grant of \$2,284.

Table 3: New York State Universal Prekindergarten Grants by School District Need Decile, School Year 2012-2013

Need Decile	Actual Grants Paid (\$ in millions)	4-Year-Old Children Served	Average Actual Grant per Child**	Percent of 4-Year-Olds Served
1 (Neediest)	\$60	12,775	\$4,678	61%
2	20	5,347	3,788	51%
3*	233	61,397	3,788	58%
4	15	4,905	3,114	46%
5	16	5,798	2,790	41%
6	10	3,474	2,816	31%
7	11	4,060	2,710	28%
8	7	2,756	2,627	15%
9	4	1,506	2,704	11%
10 (Least Needy)	2	952	2,284	8%

Note: *Includes New York City.

**Some districts make a local contribution that increases per pupil spending.

Percent of 4-year-olds served based on population data from the *2010 Decennial Census*.

Need deciles are based on district student poverty and wealth measures, as reported in the enacted state aid formulas for school year 2013-14. The poverty measure uses free- and reduced-lunch program participation and the child poverty rate, and the wealth measure includes property values and income per pupil.

Sources: New York State Education Department, *Enacted State Aid for School Year 2013-14*. U.S. Department of Commerce, U.S. Census Bureau, *2010 Decennial Census*.

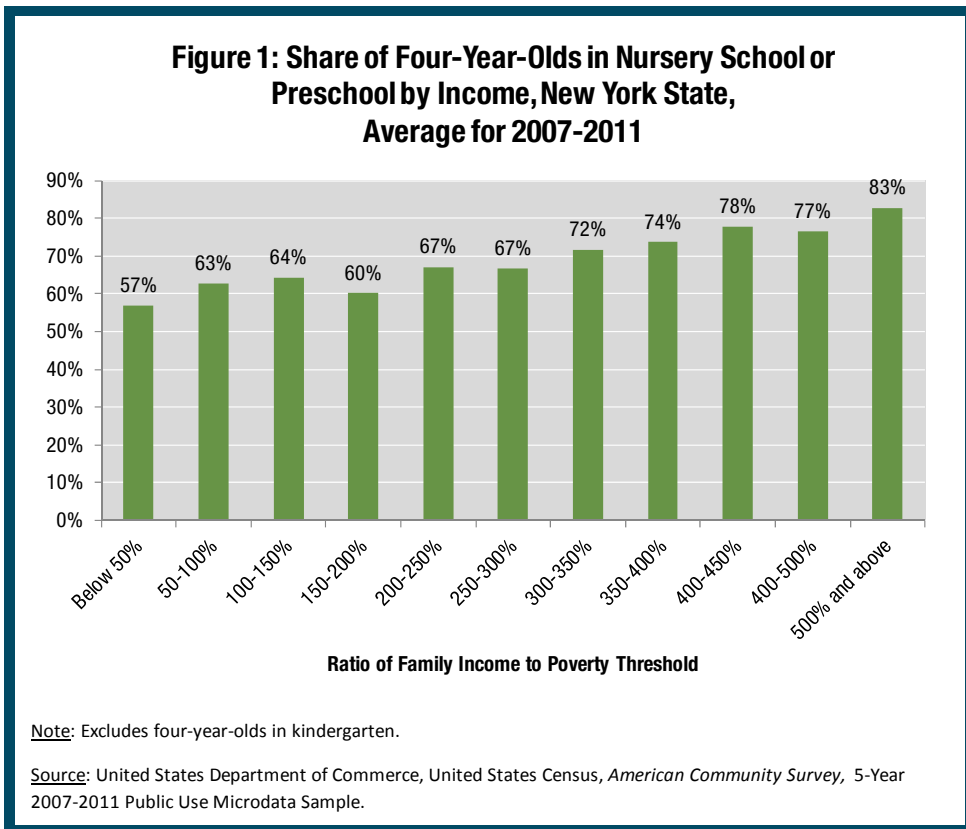
To fund the expansion of pre-k recommended by Governor Cuomo’s commission, the state’s fiscal year 2013-14 budget included a competitive grant program of \$25 million.²⁶ School districts can apply for funds to establish new full-day placements and/or convert existing half-day slots into full-day placements; selection will be based on criteria that include school district wealth, degree of student

need, number of children to be served, and proposed program quality. These new funds will be added to the \$385 million currently allocated for UPK programs.

In 2013-14 the goal of universality continues to be elusive. Fully 232 districts have not yet begun a UPK program, and some dropped their programs in the past several years because of budget pressures. SED estimates that there are approximately 230,000 four-year-olds in the state,²⁷ but the \$385 million appropriated will likely provide funding for less than half that population.²⁸ The additional \$25 million for pre-k expansion in districts that apply for and win competitive grants are not yet distributed.

Although public school pre-k is generally less available in more affluent districts, a high proportion of children from affluent families attend some pre-k program. Among the poorest children in New York State (i.e., those in households with income at 50 percent or less of the federal poverty threshold), an average of 57 percent of four-year-olds attended nursery school or other preschool over the 2007 to 2011 period increasing to 64 percent for children from households with income at 100 to 150 percent of the poverty level. Interestingly, participation dips to 60 percent for children in the 150 to 200 percent-of-poverty income bracket – perhaps reflecting the more limited availability of public programs. Above that income level participation rates climb to 83 percent at the highest income levels. (See Figure 1.)

It is likely participation rates at the lowest income levels are enhanced by the targeted public programs but these programs do not provide pre-k to every four-year-old. With high participation rates at the upper-income levels and a very limited number of publicly funded pre-k seats, it is clear that private funds are supplying preschool programs for most children in those households.



NEW YORK SPENDS LESS PER PUPIL THAN NATIONAL NORMS AND NEIGHBORING STATES BUT REACHES MORE STUDENTS

Because New York’s UPK program spreads funds over a relatively large number of students, its per pupil spending is low compared to national norms and neighboring states. In 2012, about 1.3 million three- and four-year-olds enrolled in public, state-funded pre-k programs in the United States – 1.1 million four-year-olds and 200,000 three-year-olds.²⁹ Across the nation this comprised 28 percent of four-year-olds and just 4 percent of three-year olds. State spending for pre-k among the 40 states that offer programs totaled \$5.1 billion and average spending per pupil was \$3,841.³⁰ In New York comparable spending per pupil was \$3,707, just below the U.S. average, and enrollment was 102,367.

New York’s per pupil spending ranks 21 among the 40 states that offer public pre-k. The top spender was New Jersey, which averaged \$11,659 per pupil, more than three times the national average. (See Table 4.) Other neighboring or large states that outspend New York on a per pupil basis include Connecticut (\$8,388), Pennsylvania (\$5,474), North Carolina (\$5,160), Michigan (\$4,422), California (\$4,136), Massachusetts (\$4,058), and Ohio (\$3,980).

Table 4: State Prekindergarten Spending and Enrollment, Select States, 2012

	Per Pupil Spending			4-Year-Old Enrollment		
	Amount	% of U.S. Average	50-State Rank	Number	% of 4 yr-old Population	50-State Rank
New Jersey	\$11,659	303.5%	1	31,234	28.2%	16
Connecticut	8,388	218.4%	3	5,396	12.9%	29
Pennsylvania	5,474	142.5%	9	20,712	14.0%	28
North Carolina	5,160	134.3%	11	24,836	19.3%	23
Michigan	4,422	115.1%	15	23,579	19.4%	22
California	4,136	107.7%	16	93,866	18.1%	24
Massachusetts	4,058	105.6%	17	10,714	14.3%	27
Ohio	3,980	103.6%	18	3,564	2.4%	37
New York	3,707	96.5%	21	102,367	44.2%	9
Georgia	3,490	90.9%	25	82,868	58.7%	6
Texas	3,232	84.1%	28	203,143	51.4%	8
Illinois	3,210	83.6%	29	46,897	27.7%	17
Florida	2,281	59.4%	35	175,122	79.4%	1
U.S. Avg/Total	\$3,841	100%	NAP	1,151,653	28.0%	NAP

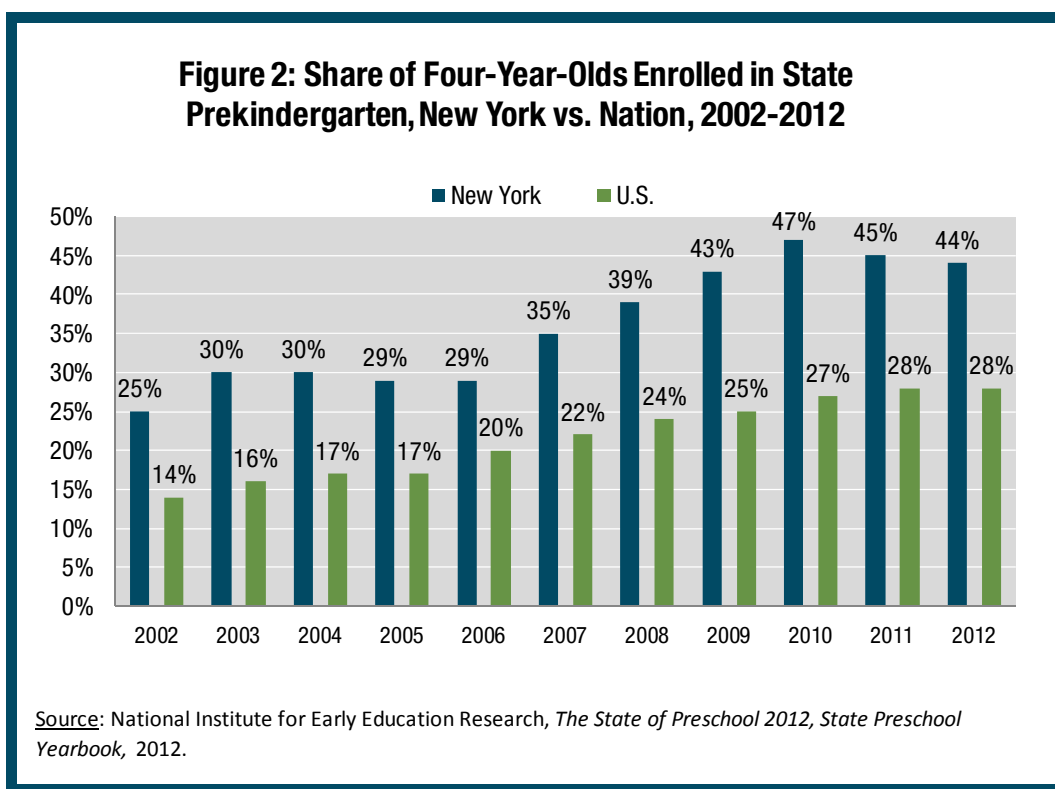
Source: National Institute for Early Education Research, *The State of Preschool 2012, State Preschool Yearbook*, 2012.

In terms of access, as measured by the percentage of the four-year-olds enrolled in state-funded pre-k, New York ranks higher – 9th of the 40 states that offer programs. In New York 44.2 percent of four-year-olds attended pre-k in 2012 compared to a U.S. average of 28.0 percent. Notably, the states that rank

higher than New York on the per pupil spending measure – New Jersey, Connecticut, Pennsylvania, and Massachusetts, for example – enroll a smaller share of their four-year-olds. Large states that spend less than New York per pupil rank higher in their participation measure – Florida, for example, spends \$2,281 per pupil ranking 35 for spending, but enrolls 79.4 percent of its four-year-olds, a greater share than any other state.

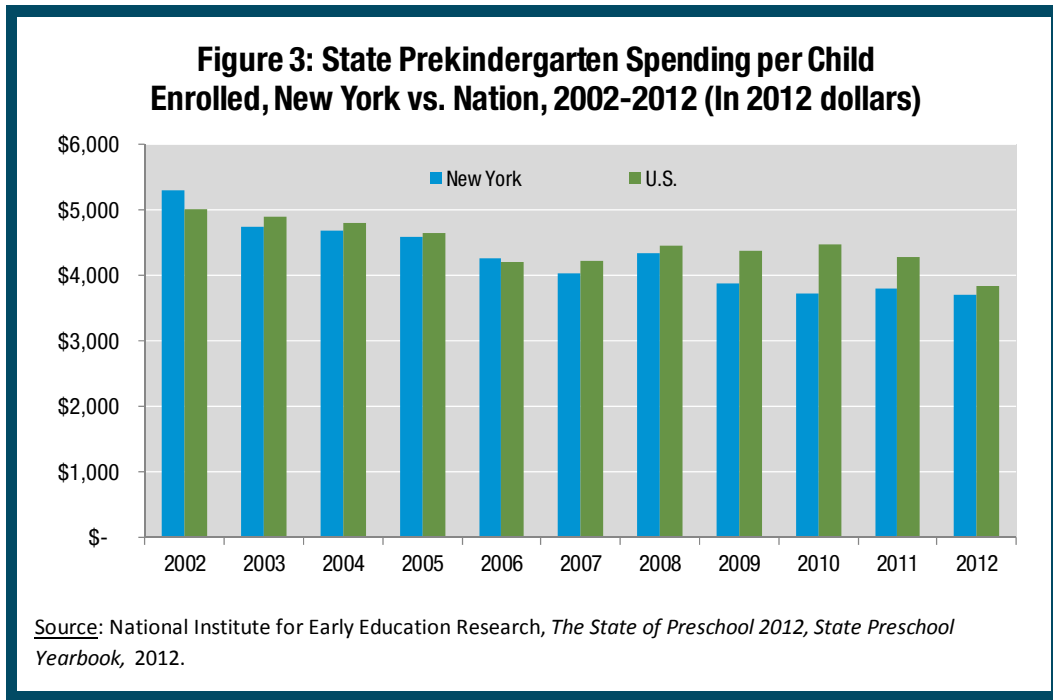
Three-year-olds are much less likely to receive services. Only 26 states provide state-funded pre-k programs for them, serving 171,323 students or about 4 percent of the eligible population in school year 2012.³¹ Three-year-olds in New York are not eligible for UPK, but they may receive services in other public early childhood programs such as Head Start and/or preschool special education.

New York’s participation rate has exceeded the U.S. average for more than a decade. In 2002, 25 percent of four-year-olds in New York State were enrolled compared to 14 percent nationwide. (See Figure 2.) Enrollment in New York peaked at 47 percent in 2010 but declined during 2011 and 2012 to 44 percent in the latest year. Enrollment in the U.S. increased over the decade to 28 percent in 2012.



Although enrollment has grown significantly in New York and elsewhere, total spending in real (inflation adjusted) terms has not kept pace. As a result, U.S. average per pupil spending by states (in 2012 dollars) declined from \$5,020 in 2002 to \$3,841 per pupil in 2012, a decrease of 23 percent. (See Figure 3.) In New York state aid per pupil decreased more precipitously, falling from \$5,306 per pupil in 2002 to \$3,707 in 2012, a reduction of 30 percent. In 2002 New York State spent 104.8 percent of the U.S. average per pupil and ranked 11 among the 36 states that offered state-funded pre-k in that year.³²

By 2012 state spending per pupil in New York was 96.5 percent of the U.S. average, and New York's



rank among states dropped to 21. (Refer to Table 4.)

Due to some extent to per pupil state support that has not kept pace with inflation, teacher certification requirements for New York's nonprofit preschool providers have been postponed. Initially, public school-based UPK programs, and New York City Head Start and child care centers, were required to have a New York State certified teacher; pre-k teachers in private nonprofit organizations outside New York City were required to have at least 9 credits towards certification and be supervised by a certified teacher.³³ By 2004 all pre-k teachers in nonprofits were to meet the same degree and certification requirements as teachers in public school programs.³⁴ Legislation passed with the 2012-13 budget extended the time teachers at nonprofit agencies have to obtain New York teacher certification.³⁵ These teachers may now provide instruction as long as they meet the qualifications prescribed by the applicable licensing or registering agency and have a written plan for obtaining a certificate valid in the early childhood grades within five years of commencing employment, or by June 30, 2017, whichever is later.³⁶

In addition, standard curricula that would help ensure children receive adequate and appropriate preparation for kindergarten and first grade are lacking. By law, the pre-k curriculum is left to the discretion of each school district.³⁷ Nonetheless, SED has tried to promote articulation with the kindergarten and first grade curriculum by providing guidelines. In 2011 the Board of Regents adopted the Prekindergarten Learning Standards, which provides a framework to align pre-k and existing K-12 learning standards. In 2013 the framework was updated to address the new Common Core.³⁸

THE FISCAL IMPLICATIONS OF FULLY FUNDING HIGH-QUALITY UPK

Offering high-quality public pre-k for every three- and four-year-old in New York State would be costly. Table 5 presents estimates of the incremental costs for the State and for local school districts of several “universal” options. Each option assumes that 75 percent of eligible four-year-olds and 65 percent of eligible three-year-olds enroll.³⁹ (See Appendix B for a full description of the assumptions and the methodology.)

The options differ in the level of per pupil support they provide. One standard is New Jersey’s so-called Abbott districts, recipients of relatively high per pupil spending as a result of a court order. Most observers agree these schools provide high quality pre-k programs that are beneficial to students. The first scenario assumes New York’s pre-k programs would be funded at the average per pupil amount of \$12,846 spent by New Jersey’s Abbott districts in 2012. The second scenario assumes that per pupil spending for pre-k in each district is equivalent to K-12 general education spending per pupil in that district.⁴⁰ It is not unreasonable to assume – given the quality expectations and regulation that New York would impose if the mandate to provide a public education were extended to all younger children – that per pupil spending for the pre-k population would equal K-12 general education spending.

For the four-year-old population, the estimated added cost of Abbott quality programs would be \$1.4 billion annually. (See Table 5.) Adding three-year-olds increases that figure to \$3.0 billion. Because K-12 per pupil spending in New York is higher than what is spent on pre-k in Abbott districts in New Jersey, that scenario increases the estimates of incremental cost to \$2.0 billion and \$4.2 billion for four-year-olds and three- and four-year-olds, respectively.⁴¹

If pre-k becomes an extension of public education in New York, then local districts would likely be required to fund part of the cost of the service just as they are for grades K-12. If school districts were required to pay the same proportion as the state’s K-12 foundation aid formulas require, then state taxpayers would bear \$648 million in incremental costs and local taxpayers would bear \$737 million for the expansion to an “Abbott-style” program for all four-year-olds. The estimates increase to \$1.4 billion and \$1.6 billion state and local share, respectively, if three-year-olds are included. Again, the figures are higher using New York school district spending norms. Providing for all four-year-olds at the K-12 general education per pupil spending level would cost the State an estimated \$883 million additional and the school districts \$1.1 billion. Adding three-year-olds at the higher spending level would increase incremental state costs to \$1.9 billion and school district costs to \$2.3 billion.

The estimated school property tax levy increases needed to fund an expanded local funding mandate are also shown in Table 5. For an Abbott-style program for all four-year-olds the average school tax levy increase would be 2.3 percent. Adding three-year-olds increases the estimate to 5.0 percent. If per pupil spending were equivalent to K-12 general education spending the estimated school levy increase needed would be 3.4 percent for all four-year-olds and 7.1 percent for three- and four-year-olds.

Two more targeted approaches shown in Table 5: (1) extending pre-k services to every child in districts with a child poverty rate above 25 percent, and (2) extending services to every child who qualifies for free or reduced-price lunch. These targeted scenarios are less costly.

The estimated added cost of providing an Abbott-style program for all four-year-olds in districts with 25 percent child poverty rates is \$406 million. Offering a program at the K-12 per pupil amounts for those districts would add an estimated \$719 million. The estimated school tax levy increase necessary to fund these options ranges from 0.7 percent to 1.2 percent.

The second option, a “money follows the child” approach based on free or reduced-price lunch (FRPL) eligibility, is estimated to add costs of \$457 million for four-year-olds and \$1.3 billion for three- and four-year-olds for an Abbott-style program. To fund a program for all FRPL students at average K-12 spending per pupil would add an estimated \$796 million for four-year-olds and \$1.9 billion for three- and four-year-olds. School tax levies are estimated to rise from 0.7 percent to 3.1 percent for this alternative.

Identifying state and local resources of a magnitude needed to support high-quality universal pre-k for all three- and four-year-olds is a challenge. New York State is slowly recovering from the Great Recession, the worst economic downturn since the 1930s. During the difficult budget years of the crisis New York’s leaders cut nearly every area of state spending. Education aid for K-12, the single largest item in the state budget, was no exception; school districts endured cumulative reductions of \$2.2 billion from peak to trough over the period.⁴² Although K-12 school aid has increased in the latest two years, it has still not returned to pre-recession levels. Structural budgetary problems remain a feature of New York’s fiscal outlook with budget gaps expected to grow from \$1.7 to \$3.0 billion by fiscal year 2017-18.⁴³

Local school districts lack the ability unilaterally to raise large sums to finance program expansions. The state’s statutory property tax cap holds levy increases to 2 percent unless 60 percent of voters approve a larger increase. Federally-mandated special education costs, costs for transporting students, and the contractually obligated longevity increases for teachers typically cause costs to rise more than revenues. Local voters have shown themselves to be unsympathetic in districts that have tried to override the tax cap. Twenty-eight school districts sent budgets that exceeded their tax capped levies to the ballot box, and all but seven were rejected by voters.⁴⁴ Rather than present voters budget increases that exceed levy caps, the vast majority of school districts have opted to stay under them. Although state leaders could waive the tax cap for the addition of a new initiative such as expanded pre-k, they are still likely to run up against the same barrier that made the tax cap popular – New York’s exceptionally high local tax burden. The local tax burden is \$80.60 per \$1,000 of personal income – 72 percent higher than the national average and 38 percent higher than New Jersey, which ranks second.⁴⁵

CONCLUSION

Calling for the expansion of pre-k programs to all three- and four-year-olds in New York may be popular and, if done properly, may also be worthwhile and cost effective over the long run. But before raising public expectations New York's leaders should review the history of such efforts and take stock of some key realities. Calling the current pre-k program "universal" does not make it so, and underfunding services for those students who could benefit most for the sake of achieving universality is not good public policy. At the same time, adding as much as \$4 billion to the \$51 billion cost of public education in New York State to make the program both richly-resourced and fully universal would impose a significant new fiscal burden on already highly taxed New Yorkers.

Table 5: Incremental Cost Estimates for Preschool Expansion in New York State

(dollars in millions)

Options	Full Cost	State Portion	Local Portion	Average Increase in School Tax Levy
Funded at \$12,846 per Child				
All 4-Year-Olds	\$1,385	\$648	\$737	2.3%
All 3- and 4-Year-Olds	\$3,025	\$1,426	\$1,598	5.0%
All 4-Year-Olds in Districts with Child Poverty Above 25%	\$406	\$189	\$217	0.7%
All 3- and 4-Year-Olds in Districts with Child Poverty Above 25%	\$1,202	\$568	\$634	2.0%
All 4-Year-Olds Who Would Qualify for Free- and Reduced-Lunch	\$457	\$234	\$223	0.7%
All 3- and 4-Year-Olds Who Would Qualify for Free- and Reduced-Lunch	\$1,295	\$653	\$643	2.0%
Funded at District per Pupil Spending for K-12 General Education				
All 4-Year-Olds	\$1,988	\$883	\$1,105	3.4%
All 3- and 4-Year-Olds	\$4,158	\$1,870	\$2,288	7.1%
All 4-Year-Olds in Districts with Child Poverty Above 25%	\$719	\$320	\$399	1.2%
All 3- and 4-Year-Olds in Districts with Child Poverty Above 25%	\$1,796	\$817	\$979	3.0%
All 4-Year-Olds Who Would Qualify for Free- and Reduced-Lunch	\$796	\$378	\$418	1.3%
All 3- and 4-Year-Olds Who Would Qualify for Free- and Reduced-Lunch	\$1,937	\$925	\$1,013	3.1%

Notes: See Appendix B for full description of assumptions and methodology. See appendix C for New York City estimates.

APPENDIX A: STUDIES OF THE BENEFITS OF PRE-K PROGRAMS

Numerous studies document the diverse benefits of participation in high quality preschool programs, particularly for economically disadvantaged children. Many find significant returns for every dollar invested. Less clear is whether these benefits accrue to the same degree for children from middle- and upper-income families. This Appendix provides a brief summary of the most widely cited research on the benefits of preschool participation.

Three longitudinal studies with sophisticated research designs are often cited as strong evidence of significant benefits: (1) the High/Scope Perry Preschool Study; (2) the Abecedarian Project preschool study; and (3) the Chicago Child-Parent Centers (CPC) study. The Perry Preschool project provided a carefully designed prekindergarten program to poor families in Michigan from 1962 to 1967. The intensive half-day program offered small classes, teacher home visits, and detailed advice on how parents could assist with the promotion of cognitive and social development in the home. The program study, with a sample size of 123, randomly assigned three- and four-year-olds to a “control group” that received no intervention or to the preschool program. The outcomes for the two groups have been tracked longitudinally for more than 40 years. The results are impressive; children who participated in the Perry program were much more likely to graduate from high school and be gainfully employed, and much less likely to experience teen pregnancies and to commit crimes as adults than children in the control group.⁴⁶ The long-term benefits to society exceeded the cost of providing the preschool program by a ratio of 16.1:1; the benefits for males exceeded those for females due to more substantially reduced incarceration rates among the males.⁴⁷ The study identified costs of \$17,599 and benefits of \$284,086 per participant (in constant 2006 dollars discounted at 3 percent).⁴⁸ Fully \$198,981 of the benefits resulted from reduced crime costs; 35 percent of the participants were arrested five times or more in a 20-year period compared to 70 percent in the control group.⁴⁹ The costs to the K-12 educational system were reduced by \$9,787 per participant and lifetime participant earnings were increased by \$74,878.

The Carolina Abecedarian Project examined full-day, year-round preschool for low-income families that began in 1972 for poor children aged six weeks to age five in North Carolina. This research project used a randomized trial design with a sample size of 111.⁵⁰ The findings are social and cognitive benefits that persist well into adulthood for participants. However, the cost-benefit ratios were a less dramatic 2.5:1. The costs were \$70,697 per participant compared to \$176,284 in cumulative benefits (in constant 2006 dollars discounted at 3 percent). The higher cost than for the Perry study reflect the longer duration of the intervention.⁵¹ Reduced crime costs were not a factor in the benefits. However, the study included maternal earnings for participants and these increased by \$76,547 due to enhanced participation in the labor force. Costs to the K-12 education system decreased by \$9,841 per participant (comparable to what was seen in Perry), but lifetime earnings increased by a lower \$41,801.

The CPC began in 1983, was hosted across many sites, and provided prekindergarten education in public schools as well as family support services to low-income families in high-poverty neighborhoods. Services were provided for three- and four-year-olds during the school year. The impact was measured in a study of 1,539 children, using a quasi-experimental design that compared the social and cognitive

development outcomes for CPC children with other children from similar neighborhoods who were assigned to random, external preschools. A follow-up study was conducted when the children reached age 21. CPC preschool participants showed significantly higher rates of school completion, lower rates of juvenile criminality, and lower rates of grade retention than their peers in alternative programs. Reductions in spending on special education and social costs from crime were also significant. The developmental impacts were somewhat smaller than in the Perry program but were still significant and produced a large net benefit for society.⁵² The cost-benefit ratio for CPC was 10.1:1; costs per participant were \$8,224 and benefits were \$83,511 (in constant 2006 dollars discounted at 3 percent). Crime costs savings were \$41,100 per participant and participant earnings increases were \$34,123. Maternal earnings were not a factor.⁵³

Many state studies of varying design also show positive results, including one conducted in New York. An evaluation of New York's Experimental Prekindergarten (EPK) program from 1975 to 1982 found a \$7 return for every \$1 invested. The program was most effective for low-income pupils, particularly for children whose mothers had low educational attainment and children who scored lower on pre-tests.⁵⁴ Another study examined the effect of targeted prekindergarten in Texas for disadvantaged children including those who are homeless, spoke limited English, and were eligible for subsidized school lunches.⁵⁵ The study showed statistically significant improvements in 3rd grade state test scores with the greatest positive gains by children both economically disadvantaged and limited English proficient.⁵⁶ A meta-analysis of over 120 studies (mostly focused on low-income children) published in 2010 concluded that preschool interventions – especially ones with high quality services – can provide “a real and enduring benefit to children.”⁵⁷ However, the authors also note that more narrowly focused research was needed to ascertain the benefits attributable to specific kinds of intervention, noting the plethora of options covered in the studies reviewed.

Less encouraging results emerged from a longitudinal study of the federally-funded Head Start program, published in 2012. Although multiple studies have shown children participating in Head Start perform better at the time of school entry than similar children who received no preschool intervention, the 2012 study showed that these positive effects faded almost entirely by the time the children reached third grade. After just three years, Head Start children were virtually indistinguishable from the comparison group.⁵⁸ Some critics of the study argue that the results are flawed because preschoolers in the control group were not barred from participating in Head Start, and eventually about 13.8 percent of four-year-olds and 17.8 percent of three-year-olds spent some portion of the year in Head Start.⁵⁹ Others note that the quality of Head Start programs varies widely, calling conclusions drawn across the whole program into question.

More recently, a series of studies have emerged from the intensive, full-day preschool program offered in the “Abbott” districts of New Jersey for three- and four-year-olds. The Abbott Districts participated in a class action lawsuit aimed at improving the equity and adequacy of funding for the poorest school districts. Beginning in 2000-01 residents in the Abbott districts were guaranteed access to high quality preschool programs as part of the court-ordered package of education services. State-of-the-art facilities are required, a 1:10 staffing ratio is mandated, and teachers must have a bachelor's degree with a prekindergarten specialization.⁶⁰ The program also offers support services for children and their

families. The programs served 43,543 pre-k children in 2011-12 at an average cost to the State of \$12,846 per pupil.⁶¹

Three studies of the program – called the Abbott Preschool Program Longitudinal Effects Study (APPLES) studies – have been completed with the most recent, released in June 2013, focused on the results for participants that have now completed 5th grade.⁶² In 5th grade, the Abbott pre-k program had a persistent positive impact on math and language scores. The gains were equivalent to six months of grade-level math and eight months of grade-level language arts. The study also shows children who received two years of preschool education at ages three and four experienced markedly larger gains than children with just one year of preschool, suggesting that the intensity and length of preschool interventions have an impact on their effectiveness. Although these early results across such a large scale program are encouraging, it remains to be seen whether the longer term outcomes for these children are similar to those for Perry, Abecedarian, and CPC participants.

Based on the well-designed studies, a case can be made that students from disadvantaged backgrounds benefit substantially from high quality and robustly resourced preschool programs. Are these benefits generalizable to students from middle- and upper-income families? Much less is known about this question. Some believe that because the Abbott program is offered to all students in the district and the results are positive, it can be assumed that there are benefits to students from more affluent backgrounds. This may be true, but it is also true that 70 percent of the students in the Abbott districts live in households with incomes below the threshold for free- or reduced-priced lunch.⁶³ By virtue of where it is offered, the Abbott preschool program remains relatively targeted.

Other studies that more directly addressed the question have demonstrated less-than-robust results. A 2005 study used the National Institute of Child Health and Human Development (NICHD) dataset to evaluate the impact of early childhood interventions across the entire population. For non-poor children, the study showed some gains in school-readiness, but these benefits dissipated by the third grade, when no statistically significant effects were found for any cognitive measure.⁶⁴ A 2004 study that relied on the Early Childhood Longitudinal Survey Data set also found small school readiness gains for non-poor children but found that these gains faded sooner, disappearing almost entirely by the end of the first grade.⁶⁵ An additional issue calling generalizable benefits into question is that the seminal longitudinal studies found significant benefits from reduced incarceration. Since children from middle- and upper-income backgrounds are less likely to go to prison, the magnitude of savings potentially attributable to preschool interventions is notably less for this group.⁶⁶

A largely non-economic impact of the universal approach is the value of peer effects on classroom learning. Some studies show that disadvantaged children achieve better outcomes in classrooms that include students from higher-income households.⁶⁷ In addition, there may be larger societal benefits such as increased tolerance for diversity to be gained from programs that include children of varied ability and socioeconomic status.

Future research may add to the evidence that universal pre-k provides substantial, lasting benefits to society. For now, the evidence shows that investments in high quality pre-k deliver the best long-term returns when they are made in intensive, high-quality programs for disadvantaged children.

APPENDIX B: COST ESTIMATE METHODOLOGY

Step 1. Specify the per child spending level

Two options are specified:

1. **New Jersey Abbott schools level.** Spending per child is based on New Jersey's Abbott school districts. In 2012, New Jersey spent an average of \$12,846 per child in these districts.⁶⁸
2. **Current K-12 general education level.** This is an estimate of school year 2011-12 spending per pupil for general education, i.e. non-special education services, in each district. General education spending is derived by subtracting special education spending from total spending. Special education spending is estimated as 20 percent of total spending for all districts except New York City, Buffalo, Rochester, Syracuse, and Yonkers, based on statewide special education spending reported in the *New York State School Report Cards, Fiscal Accountability Supplement* from the New York State Education Department (SED) and statewide total school expenditures reported in SED's *School District Master Files*.⁶⁹ Special education spending as a percent of total spending was calculated for New York City, Buffalo, Rochester, Syracuse, and Yonkers based on actual special education spending and total spending for each district.⁷⁰ General education spending includes fixed costs and district-wide costs. Some fixed costs, such as capital expenditure, may be less than estimated if school districts have excess classroom and administrative capacity.

Step 2. Estimate the number of children to be served

1. **Universal option.**
 - a. **Begin with total number of three- and four-year-olds.** The total number of three- and four-year-olds in each district comes from the *2010 Decennial Census*.⁷¹
 - b. **Subtract children receiving center-based special education preschool services.** The 33,988 three- and four-year-olds receiving State- and county-funded special education preschool center-based services in 2011-12 are excluded from the enrollment count.⁷² These children cannot simultaneously enroll in two full-time pre-k programs. For New York City, the actual number of three- and four-year-olds enrolled in center-based special education services (16,409) was excluded. For the rest of the state, the number of children was allocated based on the district's share of statewide, non-New York City K-12 enrollment. It is assumed that the 62,944 children receiving non-center-based special education preschool services would receive a full-day prekindergarten slot.
 - c. **Apply participation rate.** The analysis assumes that 65 percent of eligible three-year-olds and 75 percent of eligible four-year-olds enroll in the program. The participation estimates are based on SED data for school year 2009-10 and U.S. Census data for 2009, which indicate about 80 percent of New York five-year-olds were enrolled in

kindergarten, which is not mandatory.⁷³ Participation for three- and four-year-olds is likely to be lower.

2. Needy district option.

- a. **Begin with total number of three- and four-year-olds.** As described above.
- b. **Include only high-poverty districts.** The number of districts with a poverty rate greater than 25 percent is based on the Census poverty rate of children age five to 17, as used in SED's enacted state aid formulas for school year 2013-14.⁷⁴
- c. **Subtract children receiving center-based special education preschool services.** As described above.
- d. **Apply participation rate.** As described above.

3. Needy children option.

- a. **Estimate the total number of three- and four-year-olds who would qualify for the free- and reduced-lunch program.** The estimated number of three- and four-year-olds in each district who would be eligible for the free- and reduced-lunch program is based on average 2009 to 2011 participation rates in grades K-6, as used in SED's enacted state aid formulas for school year 2013-14.⁷⁵ This rate is applied to the Census data for the number of three- and four-year olds in each district.
- b. **Subtract children receiving center-based special education preschool services and who would be eligible for the free- and reduced-price lunch program.** This estimate is based on the estimated number of children receiving center-based special education preschool services by district and the share of K-6 students eligible for free- and reduced-lunch in the district.
- c. **Apply participation rate.** As described above.

Step 3. Calculate the total cost

Multiply the cost per child by the number of eligible children under each option.

Step 4. Calculate the incremental costs

1. **Subtract current state Universal Prekindergarten (UPK) spending.** The analysis nets out state UPK funding of \$403 million (\$378 million in actual spending for school year 2012-13 and \$25 million in new grants for 2013-14). These funds are netted out by district based on actual spending in 2012-13. The \$25 million in new state grants is subtracted from the total and the state share for each option. The actual allocation for these new grants had not been announced at the time of this publication. Under the targeted option to provide programs to only children in districts with poverty rates above 25 percent, the analysis assumes that districts with less than 25 percent poverty lose existing UPK funding. If the State decided to hold these districts harmless for existing grants, total cost would rise.

2. **Subtract federal Head Start funding.** The analysis nets out federal funding of \$412 million for three- and four-year-olds in Head Start. Total estimated Head Start spending is calculated by multiplying 44,099, the number of children enrolled statewide, by average spending per Head Start pupil of \$9,342, as reported in the National Institute for Early Education Research's *State of Preschool Yearbook* for 2012.⁷⁶ Estimated Head Start funding by district is based on each district's share of children in poverty, as reported in SED's enacted state aid formulas for school year 2013-14. In the options including only four-year-olds, 44 percent of total Head Start funding is excluded, based on Head Start enrollment by age in New York reported in the Annie E. Casey Foundation, *2012 National Kids Count*.⁷⁷ In the targeted option to districts with high poverty, only Head Start funding going to those eligible districts is subtracted.
3. **Adjustment for local spending.** Some districts also spend local funds on pre-k programs, but due to data limitations, this funding is not excluded with the exception of New York City. The inability to account for these funds likely has a minimal impact. The Center for Children's Initiatives reported that New York City spent \$56 million of local funds on pre-k in 2011.⁷⁸ These funds are subtracted from the required New York City local share.

Step 5. Allocate the incremental costs between the State and school districts

The analysis assumes that total costs are split between the State and school districts according to the "State Sharing Ratio" used in the state foundation aid formula for school year 2013-14.⁷⁹ Existing state UPK funds are subtracted before determining the split between the State and the school districts. Under this assumption, districts currently participating in the UPK program would keep existing grants, and districts that began programs under the new funding formula would be starting without baseline funding from the State.

Step 6. Calculate the average school tax levy percent increase

The average increase required in the school tax levy is based on the 2012-13 tax levy for school districts, as reported in SED's enacted state aid formulas for school year 2013-14.⁸⁰ The Big 5 cities in New York – Buffalo, New York City, Rochester, Syracuse, and Yonkers – have fiscally dependent school districts. In these places, school costs represent only a portion of total local taxes.

APPENDIX C: COST ESTIMATES FOR NEW YORK CITY

Table C-1: Incremental Cost Estimates for Preschool Expansion in New York City
(dollars in millions)

Options	Full Cost	State Portion	Local Portion
Funded at \$12,846 per Child			
All 4-Year-Olds	\$439	\$204	\$235
All 3- and 4-Year-Olds	\$1,104	\$485	\$619
All 4-Year-Olds in Districts with Child Poverty Above 25%	\$439	\$204	\$235
All 3- and 4-Year-Olds in Districts with Child Poverty Above 25%	\$1,104	\$485	\$619
All 4-Year-Olds Who Would Qualify for Free- and Reduced-Lunch	\$244	\$121	\$123
All 3- and 4-Year-Olds Who Would Qualify for Free- and Reduced-Lunch	\$734	\$328	\$406
Funded at District per Pupil General Education Spending for K-12			
All 4-Year-Olds	\$692	\$311	\$381
All 3- and 4-Year-Olds	\$1,584	\$688	\$896
All 4-Year-Olds in Districts with Child Poverty Above 25%	\$692	\$311	\$381
All 3- and 4-Year-Olds in Districts with Child Poverty Above 25%	\$1,584	\$688	\$896
All 4-Year-Olds Who Would Qualify for Free- and Reduced-Lunch	\$441	\$204	\$236
All 3- and 4-Year-Olds Who Would Qualify for Free- and Reduced-Lunch	\$1,106	\$486	\$620

Notes: Assumes that New York City is awarded 40 percent of the new \$25 million in state grants, or \$10 million. Estimated per pupil general education spending in New York City is \$16,587. See Appendix B for full description of assumptions, methodology, and sources.

ENDNOTES

¹ The White House, Office of the Press Secretary, *Fact Sheet: President Obama's Plan for Early Education for all Americans*, February 13, 2013, accessed October 14, 2013, <http://www.whitehouse.gov/the-press-office/2013/02/13/fact-sheet-president-obama-s-plan-early-education-all-americans>.

² New New York Education Reform Commission, *Putting Students First: Education Action Plan*, January 2013, accessed October 14, 2013, <http://www.governor.ny.gov/assets/documents/education-reform-commission-report.pdf>.

³ Bill de Blasio, Mayoral Campaign, *Starting Early, Learning Longer: Education Investments to Keep NYC Competitive*, accessed October 14, 2013, <http://advocate.nyc.gov/files/DeBlasioEducationInvestmentFactSheet.pdf>.

⁴ Center for Children's Initiatives and The Campaign for Educational Equity, *Making Prekindergarten Truly Universal in New York State: A Rights-Based Proposal*, August 11, 2013, p. 6, accessed October 14, 2013, http://onondagacitizensleague.org/ocl_studies/2013/pdfs/Making%20PreK%20Truly%20Universal%20FINAL.pdf.

⁵ *Ibid*, p. 7.

⁶ Physical, dental, and nutritional services.

⁷ Assistance was provided for families to access community resources that would help them become more self-sufficient.

⁸ National Institute for Early Education Research, *The State with Two Prekindergarten Programs: A Look at Prekindergarten Education in New York State (1928-2003)*, p. 44, June 2004, accessed October 15, 2013, <http://nieer.org/resources/files/NYCaseStudy.pdf>.

⁹ New York State Education Department, *Questions and Answers, Including Mid-Year Programs*, April 19, 2011, accessed October 14, 2013, <http://www.p12.nysed.gov/upk/faq.html>.

¹⁰ New York State Education Department, Regulations of the Commissioner of Education, Subpart 151-1 Universal Prekindergarten, accessed October 15, 2013, <http://www.p12.nysed.gov/upk/documents/151-1.pdf>.

¹¹ New York State Comptroller, *The 1997-98 Budget: Fiscal Review and Analysis*, September 1997, accessed October 16, 2013, <http://www.osc.state.ny.us/reports/budget/1997/9-97.htm#education>.

¹² *Ibid*.

¹³ New York State Comptroller, *State Education Department Oversight of the Expansion of the Universal Prekindergarten Program*, Report 2000-S-13, May 2001, accessed October 16, 2013, <http://osc.state.ny.us/audits/allaudits/093001/00s13.pdf>.

¹⁴ *Ibid*.

¹⁵ Schuyler Center for Analysis and Advocacy, Universal PreKindergarten Resource Partnership, *Universal PreKindergarten Takes Off in New York State: Preliminary Findings from School Districts Implementing Universal PreKindergarten in Year One of Eligibility, 1998-99, 1999*, p. 4, accessed October 14, 2013, http://www.scaany.org/resources/documents/upk_takesoff_report.pdf.

¹⁶ *Ibid*.

¹⁷ New York State Education Department, *State Support to Public School Districts 1999-00*, March 23, 2000, accessed October 14, 2013, <http://www.oms.nysed.gov/faru/Primer/primercomp.htm>; New York State Division of the Budget, *Description of 2000-01 New York State School Aid Programs*, October 9, 2000, accessed October 14, 2013, <http://www.budget.ny.gov/pubs/archive/fy001archive/001schoolaid/001schoolaid.pdf>.

- ¹⁸ New York State Division of the Budget, *Description of 2000-01 New York State School Aid Programs*, October 9, 2000, accessed October 14, 2013, <http://www.budget.ny.gov/pubs/archive/fy001archive/001schoolaid/001schoolaid.pdf>.
- ¹⁹ New York State Division of the Budget, *Description of 2002-03 New York State School Aid Programs*, October 15, 2002, accessed October 14, 2013, http://www.budget.ny.gov/pubs/archive/fy0203archive/fy0203schoolaid/0203schlaidd_enact.pdf.
- ²⁰ New York State Education Department, *State Formula Aids and Entitlements for Schools in New York State*, October 2006, accessed October 14, 2013, https://stateaid.nysed.gov/publications/handbooks/handbook_2006.pdf.
- ²¹ National Institute for Early Education Research, *The State of Preschool 2008, State Preschool Yearbook*, 2008, p. 102, accessed October 14, 2013, <http://nieer.org/sites/nieer/files/2008yearbook.pdf>.
- ²² New York State Education Department, Memorandum to the State Aid Subcommittee from Ken Slentz, "Governor's Proposal on State Aid and State Support for Universal Pre-Kindergarten," February 6, 2012, accessed October 14, 2013, <http://www.regents.nysed.gov/meetings/2012Meetings/February2012/212sad1.pdf>.
- ²³ Foundation aid ratios are determined according to student need and district ability to pay.
- ²⁴ New York State Senate, *Budget Bill Supplement 2009-10: School Aid Runs*, March 31, 2009, accessed October 14, 2013, <http://www.nysenate.gov/report/budget-bill-supplement-2009-10-school-aid-runs>.
- ²⁵ Alliance for Quality Education, Citizen Action of New York, and Winning Beginning New York, *Early Childhood Education: Frozen Funding Leads to Cracks in the Foundation*, February 7, 2012, accessed October 14, 2013, <http://www.aqeny.org/ny/wp-content/uploads/2012/02/Frozen-Funding-Leads-to-Cracks-in-the-Foundation-2.8.12.pdf>.
- ²⁶ New York State Division of the Budget, *2013-14 Executive Budget: Aid to Localities*, January 22, 2013, p.158-9, accessed October 14, 2013, <http://publications.budget.ny.gov/eBudget1314/fy1314appropbills/Local.pdf>.
- ²⁷ New York State Education Department, Memorandum to the State Aid Subcommittee from Ken Slentz, "Governor's Proposal on State Aid and State Support for Universal Pre-Kindergarten," February 6, 2012, accessed October 14, 2013, <http://www.regents.nysed.gov/meetings/2012Meetings/February2012/212sad1.pdf>.
- ²⁸ *Ibid.*
- ²⁹ National Institute for Early Education Research, *The State of Preschool 2012, State Preschool Yearbook*, 2012, p. 6, accessed October 14, 2013, <http://nieer.org/sites/nieer/files/yearbook2012.pdf>.
- ³⁰ *Ibid.*, p. 6.
- ³¹ *Ibid.*, p. 15.
- ³² National Institute for Early Education Research, *The State of Preschool: 2003, State Preschool Yearbook*, 2003, Table 3, accessed October 14, 2013, <http://nieer.org/sites/nieer/files/2003yearbook.pdf>.
- ³³ *Ibid.*, p. 104.
- ³⁴ Public school UPK programs require that teachers have a BA degree if hired before 1978 and a MA degree if hired after 1978 in addition to a NYS teaching certificate. Nonpublic UPK teachers are required to have a BA in early childhood or related field with a 5-year plan to become certified. See National Institute for Early Education Research, *The State of Preschool 2011, State Preschool Yearbook*, 2011, p. 104, accessed October 14, 2013, <http://nieer.org/sites/nieer/files/2011yearbook.pdf>.
- ³⁵ New York State Education Department, *2012-13 NYS Universal Prekindergarten Program*, May 17, 2012, accessed October 14, 2013, <http://www.p12.nysed.gov/funding/2012-13upk/home.html>.
- ³⁶ *Ibid.*

³⁷ New York State Education Department, *Questions and Answers, Including Mid-Year Programs, Universal Prekindergarten*, April 19, 2011, accessed October 14, 2013, <http://www.p12.nysed.gov/upk/faq.html>.

³⁸ New York State Education Department, *New York State Prekindergarten Foundation for the Common Core*, accessed October 14, 2013, http://www.p12.nysed.gov/ciai/common_core_standards/pdfdocs/nyslsprek.pdf.

³⁹ Pre-k attendance would not be mandatory and it is unlikely that all eligible students would enroll.

⁴⁰ K-12 per pupil spending on general education is less than per pupil spending for students receiving special education.

⁴¹ The analysis subtracts \$412 million in Head Start spending and \$403 million in current UPK spending including the new \$25 million for competitive grants. Total estimated Head Start spending of \$412 million is calculated by multiplying 44,099, the number of children enrolled, by \$9,342, average spending per Head Start pupil. See National Institute for Early Education Research, *The State of Preschool 2012, State Preschool Yearbook*, 2012, p. 103, accessed October 14, 2013, <http://nieer.org/sites/nieer/files/yearbook2012.pdf>. The 33,988 three- and four-year-olds receiving State- and county-funded special education preschool center-based services in 2011-12 are excluded from the enrollment count.

⁴² Citizens Budget Commission, *Improving the Poorly Targeted Proposed School Aid Increase*, March 21, 2012, accessed October 15, 2013, <http://www.cbcny.org/cbc-blogs/blogs/improving-poorly-targeted-proposed-school-aid-increase>.

⁴³ Office of the New York State Comptroller, *Report on the State Fiscal Year 2013-14 Enacted Budget and Financial Plan*, July 2013, accessed October 16, 2013, http://www.osc.state.ny.us/reports/budget/2013/financial_plan0713.pdf.

⁴⁴ New York State School Boards Association, *Overall, 95% of School Budgets Pass*, May 22, 2013, accessed October 15, 2013, <http://www.nyssba.org/news/2013/05/22/press-releases/overall-95-of-school-budgets-pass/>.

⁴⁵ New York State Department of Taxation and Finance, *New York State Tax Sourcebook*, Table 8, accessed October 15, 2013, http://www.tax.ny.gov/research/stats/statistics/policy-special/tax_sourcebook/new_york_state_tax_sourcebook_electronic_toc_tables_excel.htm.

⁴⁶ Schweinhart, Lawrence J., Clive R., Montie, Xiang, Zongping, Barnett, W. Steven, Belfield, Jeanne, and Nores, Milagros, "The High/Scope Perry Preschool Study Through Age 40: Summary, Conclusions, and Frequently Asked Questions," High/Scope Press (2005): p. 5.

⁴⁷ *Ibid*, p. 4. Participants in the program committed less violent crimes (32% vs. 48%), property crimes (36% vs. 58%), and drug crimes (14% vs. 34%). For males in the program, the cost to society was \$732,894 less over their lifetimes as a result of the decrease in crime.

⁴⁸ National Institute for Early Education Research, *Who Goes to Preschool and Why Does it Matter?*, November 2007, p. 11, accessed October 14, 2013, <http://nieer.org/resources/policybriefs/15.pdf>.

⁴⁹ *Ibid*, p. 11.

⁵⁰ Campbell, Frances A., Pungello, Elizabeth P., Burchinal, Margaret, Kainz, Kirsten, Pan, Yi, Wasik, Barbara H., Barbarin, Oscar A., Sparling, Joseph J., and Ramey, Craig T., "Adult Outcomes as a Function of an Early Childhood Educational Program: An Abecedarian Project Follow-Up," *Development Psychology* 48 (2012): p. 1033.

⁵¹ National Institute for Early Education Research. *Who Goes to Preschool and Why Does it Matter?*, November 2007, p. 11, accessed October 14, 2013, <http://nieer.org/resources/policybriefs/15.pdf>.

⁵² Reynolds, Arthur J., Temple, Judy A., Robertson, Dylan L., and Mann, Emily A., "Age 21 Cost-Benefit Analysis of the Title 1 Chicago Child-Parent Centers," *Institute for Research on Poverty* (2002).

⁵³ National Institute for Early Education Research. *Who Goes to Preschool and Why Does it Matter?*, November 2007, p. 11, accessed October 14, 2013, <http://nieer.org/resources/policybriefs/15.pdf>.

- ⁵⁴ Irvine, David, *Evaluation of the New York State Experimental Prekindergarten Program*, State Education Department, 1982.
- ⁵⁵ Alyssa Haywood, "Scaling Up Preschool in Texas," Eye on Early Education, April 1, 2013, accessed October 14, 2013, <http://eyeonearlyeducation.com/2013/04/01/scaling-up-preschool-in-texas/>.
- ⁵⁶ Grover J. Whitehurst, "Can We Be Hard-Headed About Preschool? A Look at Universal and Targeted Pre-K," Brookings Institute, January 23, 2013, accessed October 14, 2013, http://www.brookings.edu/blogs/brown-center-chalkboard/posts/2013/01/23-prek-whitehurst#_ftn3.
- ⁵⁷ Camilli, Gregory, Vargas, Sadako, Ryan, Sharon, and Barnett, W. Steven, "Meta-Analysis of the Effects of Early Education Interventions on Cognitive and Social Development," *Teachers College, Columbia University* (2010): 602, http://spot.colorado.edu/~camillig/Papers/38_15440.pdf.
- ⁵⁸ Puma, Mike, Bell, Stephen, Cook, Ronna, Heid, Camilla, Broene, Pam, Jenkins, Frank, Mashburn, Andrew, and Downer, Jason, "Third Grade Follow-up to the Head Start Impact Study: Final Report," *U.S. Department of Health and Human Services Office of Planning, Research and Evaluation* (2012): xvi. http://www.acf.hhs.gov/sites/default/files/opre/head_start_report.pdf.
- ⁵⁹ *Ibid*, p. xv.
- ⁶⁰ *Ibid*, p.97.
- ⁶¹ National Institute for Early Education Research, *The State of Preschool 2012*, 2012, p.97, accessed October 14, 2013, <http://nieer.org/sites/nieer/files/yearbook2012.pdf>.
- ⁶² Barnett, W. Steven, Jung, Kwanghee, Youn, Min-Jong, and Frede, Ellen C., "Abbott Preschool Program Longitudinal Effects Study: Fifth Grade Follow-Up," *National Institute for Early Education Research* (2013): p. 17.
- ⁶³ *Ibid*, p. 21.
- ⁶⁴ Fuller, Bruce, "Standardized Childhood: The Political and Cultural Struggle over Early Education," *Stanford University Press* (2007):p. 207.
- ⁶⁵ Magnuson, Katherine A., Ruhm, Christopher J., and Waldfogel, Jane, "Does Prekindergarten Improve Preparation and Performance?" *National Bureau of Economic Research* (2004): p. 2, http://www.nber.org/papers/w10452.pdf?new_window=1.
- ⁶⁶ Political Research Associates, *Poverty and the Criminal Justice System*, May 2005, accessed October 14, 2013, <http://www.publiceye.org/defendingjustice/pdfs/factsheets/11-Fact%20Sheet%20-%20Poverty.pdf>.
- ⁶⁷ Schechter, Carlota and Bye, Beth, "Preliminary evidence for the impact of mixed-income preschools on low-income children's language growth," *Early Childhood Research Quarterly* (2007): p. 137, http://www.lumainstitute.org/wp-content/uploads/2011/03/Preliminary_Evidence_for_the_Impact_of_Mixed_Income_Preschools.pdf.
- ⁶⁸ National Institute for Early Education Research, *The State of Preschool 2012, State Preschool Yearbook, New Jersey Profile*, 2012, accessed October 18, 2013, http://nieer.org/sites/nieer/files/New%20Jersey_o.pdf.
- ⁶⁹ New York State Education Department, *School District Master Files for School Years 2010-11 and 2011-12*, accessed October 18, 2013, http://www.oms.nysed.gov/faru/Profiles/profiles_cover.html. New York State Education Department, *New York State School Report Cards, Fiscal Accountability Supplement*, School Year 2011-12, accessed October 18, 2013, <https://reportcards.nysed.gov/>.
- ⁷⁰ *Ibid*.
- ⁷¹ U.S. Department of Commerce, U.S. Census Bureau, *2010 Decennial Census*.
- ⁷² New York State Education Department.

⁷³ New York State Education Department, *Public School Enrollment and Staff, School Year 2009-10*, Table 10, accessed October 18, 2013, <http://www.p12.nysed.gov/irs/statistics/enroll-n-staff/TABLE10elementary.pdf>. U.S. Department of Commerce, U.S. Census Bureau, *American Community Survey, Population Under 18 Years of Age, 2009*, accessed October 18, 2013, http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_09_1YR_B09001&prodType=table.

⁷⁴ New York State Education Department, *Enacted State Aid for School Year 2013-14*.

⁷⁵ *Ibid.*

⁷⁶ National Institute for Early Education Research, *The State of Preschool 2012, State Preschool Yearbook, 2012*, p. 103, accessed October 14, 2013, <http://nieer.org/sites/nieer/files/yearbook2012.pdf>.

⁷⁷ Annie E. Casey Foundation, *National Kids Count, Head Start Enrollment by Age Group, 2012*, accessed October 18, 2013, <http://datacenter.kidscount.org/>.

⁷⁸ The Center for Children's Initiatives, *CCI Primer 2011: Key Facts About Early Care and Education in New York City*, p. 23, accessed October 18, 2013, http://www.centerforchildrensinitiatives.org/ccinyc/Website_PDF_s/CCI-Primer-2011_14.pdf.

⁷⁹ New York State Education Department, *Enacted State Aid for School Year 2013-14*.

⁸⁰ New York State Education Department, *School District Master File for School Year 2011-12*, accessed October 18, 2013, http://www.oms.nysed.gov/faru/Profiles/profiles_cover.html.