

**AN EVIDENCE BASED APPROACH TO ESTIMATING  
THE NATIONAL AND STATE-BY-STATE COSTS OF AN  
INTEGRATED PREK-3<sup>RD</sup> EDUCATION PROGRAM**

**Prepared for  
The Foundation for Child Development**

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The Foundation for Child Development (FCD) is a national private philanthropy in New York City dedicated to promoting a new beginning for American education from Prekindergarten through Third Grade (PreK-3<sup>rd</sup>). The Foundation promotes the well-being of children, and believes that families, schools, nonprofit organizations, businesses, and government at all levels share complementary responsibilities in the critical task of raising new generations.

# An Evidence Based Approach to Estimating the National and State-by-State Costs of an Integrated PreK-3<sup>rd</sup> Education Program

## EXECUTIVE SUMMARY

The American public and policy makers are realizing that if all children are to meet their states' education performance standards, an important part of helping them do so is the provision of high quality integrated PreK-3<sup>rd</sup> education programs. The PreK-3rd approach starts with three-year-olds and focuses on providing educational experiences to three- and four-year-old children on a universal, voluntary basis, followed by required full-school-day Kindergarten. Effective PreK-3rd provides the following components: High-quality and unified learning in well-staffed classrooms; well prepared teachers and aides (for 3 and 4 year olds) to educate children in the 3-8 age range; supportive school district policies; strong principal leadership that includes supporting professional development time for teachers to plan for effective coordination across and between grades; and includes families and communities that share accountability with PreK-3rd schools for children's educational success.

What will a quality PreK-3<sup>rd</sup> program cost? To answer that question, with support from the Foundation for Child Development, Lawrence O. Picus and Associates developed a comprehensive and flexible costing model that uses our Evidence-Based approach to school finance adequacy (Odden and Picus, 2008). We also conducted site visits in six locations to ascertain whether or not the resources identified in our model were adequate to provide integrated, high quality PreK-3<sup>rd</sup> programs that would enhance the likelihood that all children would be able to meet their states' educational performance standards.

Assuming the components of the Evidence-Based adequacy model were implemented for all PreK-3<sup>rd</sup> programs, we estimate that the likely *additional* national costs of providing adequate PreK-3<sup>rd</sup> programs range from \$27.4 billion to \$78.7 billion depending on the number of 3-and 4-year-old children eligible for, and electing to participate in PreK programs.<sup>1</sup> On a per-child served (PreK-3<sup>rd</sup>) basis, additional costs range from \$2,095 to \$3,975.

If we assume universal eligibility for 3-and 4-year-old children, with a participation rate of 65% -- a number that approximates PreK program participation in Oklahoma, a state

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<sup>1</sup> These figures assume that any state that funds PreK-3<sup>rd</sup> programs above the adequate level estimated using the Evidence-Based approach continue to expend those resources for education. That is, these figures "hold harmless" those states where education expenditures exceed our estimates and therefore represent the national cost to bring every state to at least an adequate level. In addition, these numbers assume a maximum of 65% participation in PreK programs.

with universal access for 4-year-olds – and PreK class size of 20 students with a teacher and an instructional aide, the estimated *total* PreK-3<sup>rd</sup> costs are \$215 billion or \$10,867 per PreK-3<sup>rd</sup> student. This represents an increase of \$71.5 billion or \$3,626 per PreK-3<sup>rd</sup> pupil.

In this study we determine the costs of an, integrated PreK-3<sup>rd</sup> education system by estimating:

- The number of 3-and 4-year-old children in each state
- The costs of providing PreK programs for those children (as well as for subsets of 3-and 4-year-olds stratified by poverty level and participation rates)
- The costs of public school programs for grades K-3 for all children
- Any additional costs associated with integration of Pre-K programs with existing public K-3 schools
- The net public costs of that system

### **The Evidence-Based Method of School Finance Adequacy**

This study relied on the Evidence-Based method for estimating the resources necessary for a high quality education program. Although not the only method available for estimating what is known as school finance adequacy, the Evidence Based method has been used in a number of states, and forms the basis for the school funding systems in Arkansas and Wyoming. Moreover, it has been used previously to estimate resources needed for both high quality PreK and K-12 programs, facilitating development of an integrated model.

The Evidence-Based approach relies on the best available educational research to identify strategies that when implemented at the school level will lead to dramatic gains in student achievement over a four-to six-year time frame.<sup>2</sup> Figure S1 identifies the components of the Evidence-Based model. These include:

- Class sizes of 15 in grades K-3 (our model allows estimation of the costs of both 15 and 20 student classes at the PreK level, each with a teacher and instructional aide)

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<sup>2</sup> The research supporting the Evidence Based model is described in detail in chapter 4 of Odden, A.R., and Picus, L.O. (2008). *School Finance: A Policy Perspective, 4<sup>th</sup> edition*. New York, NY: McGraw Hill. We recognize that there are multiple approaches available for estimating an adequate level of resources for public schools, and that there is considerable debate over the efficacy of all of those methods. The goal of all is to provide sufficient resources for schools and school districts to offer high quality education programs for all children. We have chosen to use the evidence based approach because of its grounding in the best available research on educational effectiveness, and because our experience in developing cost estimates suggests this approach results in cost estimates that provide a set of resources adequate for schools to double student performance as measured by state tests and are generally affordable by most states facing school finance adequacy demands.

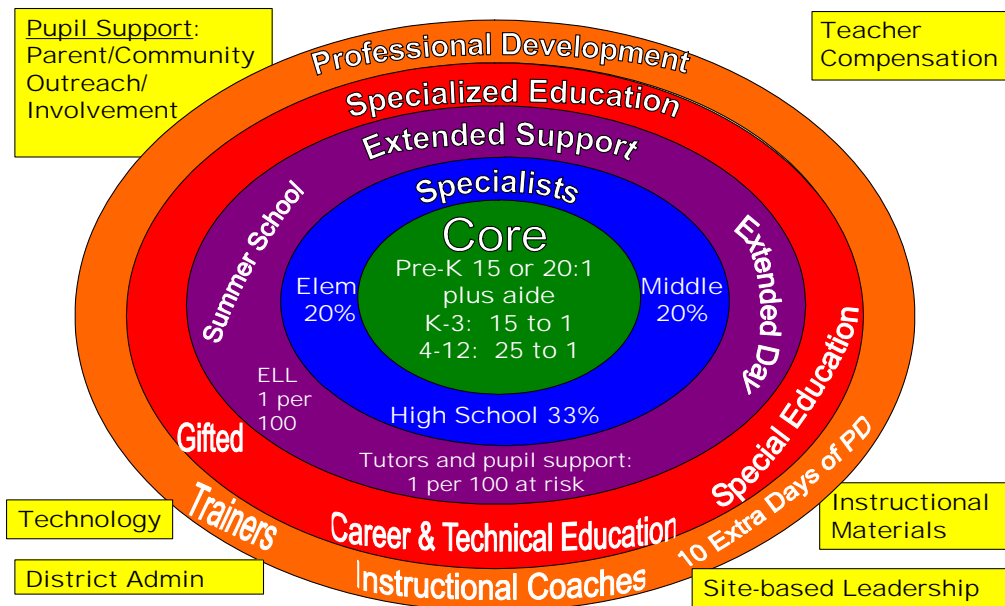
- Specialist teachers to provide a rich liberal arts program including music, art and PE, and to provide for planning and collaboration time for core teachers. These are resourced at a rate of 20% of core teachers
- Classroom aides in all PreK classrooms (PreK only)
- Strategies for struggling students (K-3 only) including:
  - Certificated tutors for short term intensive help so that students return to the regular program at grade level as quickly as possible, also providing additional resources for children who are at risk of falling behind
  - Extended day programs
  - Summer school
- Resources for children with special needs and/or disabilities
- Funding for professional development including
  - Additional teacher time for comprehensive summer workshops focused on teaching and learning
  - Instructional coaches in each school at a ratio of one coach for every 200 students
  - Funds for trainers and consultants
- Staff for pupil support (guidance counselors, nurses, social workers, family liaison, etc.)
- Staff resources for school site leadership
- Staff resources for district administration
- Dollar resources for:
  - Instructional materials
  - Technology
  - Operations, maintenance and utilities
  - Central office operations

The costs of these resources are estimated for a set of prototypical schools and then summed to the district and state level to provide an estimate of adequate school funding costs. For this study, we estimated the resource needs of existing K-3 students in each state as well as the additional resources that would be needed for PreK programs under a variety of assumptions regarding both PreK eligibility and participation rates. We also developed estimates of program costs for PreK class sizes of 15 and 20 students.

To estimate the costs of an integrated PreK-3<sup>rd</sup> program, we developed a comprehensive and flexible model that estimates the state-by-state costs of this program. Using data from 2005-06 (the most recent year for which data for all model components was available) the model includes K-3 enrollment by state as well as Census Bureau estimates of the number of 3- and 4-year-old children in each state. We further disaggregate 3- and 4-year-old children based on family income, estimating the total number of 3- and 4-year-olds, the number in families with incomes at the poverty level and the number in families with incomes at 200% of the poverty level. Finally, the model enables us to continuously vary the estimated percentage of eligible 3- and 4-year-olds who actually participate in PreK programs.

# The Evidence-Based Model:

## A Research Driven Approach to Linking Resources to Student Performance



**Figure S1: The Evidence-Based Model  
The Cost Model**

In addition to allowing for the variation in the number of 3- and 4-year-olds, the model allows us to vary all of the components of the Evidence-Based model. The largest component of the model is for personnel. In the cost estimates provided today, we have used NEA estimates of teacher salaries by state. For other personnel, we have relied on national average salaries adjusted by region for geographical cost differences.

The power of this model is that it allows individuals in each state to estimate the costs of PreK-3<sup>rd</sup> programs using a variety of assumptions about program components, eligibility and participation rates for PreK children, as well as salaries for school personnel.

### Estimated Costs of an Integrated PreK-3<sup>rd</sup> Program

The estimated costs of an integrated PreK-3<sup>rd</sup> program vary depending on the assumptions made regarding eligibility of 3- and 4-year-old children for PreK programs and on the assumptions made regarding their participation rate. It also varies with the size of PreK classes. Tables S1 and S2 display the variation in the estimated *total* costs and *total* costs per-pupil of an integrated PreK-3<sup>rd</sup> program. These are displayed using a variety of assumptions regarding eligibility for 3- and 4-year-old children and alternative assumptions regarding the size of PreK classes. For example, if we assumed universal eligibility for 3- and 4-year-old children, with a participation rate of 65% and PreK class

size of 20 students with a teacher and aide, the estimated total PreK-3<sup>rd</sup> costs are \$215 billion or \$10,867 per PreK-3<sup>rd</sup> student. *It is important to note that these are total costs for PreK – 3<sup>rd</sup> programs and reflect not only quality PreK program costs, but the costs of a quality K-3 program as estimated using the Evidence-Based model – which in many states exceeds current K-3 spending.*

Tables S3 and S4 show how much *additional* revenue would be needed to fund these programs. Assuming the components of the Evidence-Based adequacy model were implemented for PreK-3<sup>rd</sup> programs in every state, and that parents of 65% of the eligible children elect to place their children in PreK programs, we estimate that the likely *additional* national costs of providing adequate PreK-3<sup>rd</sup> programs range from \$29.8 billion to \$78.7 billion depending on the number of 3- and 4-year-old children who are eligible for the program and the average size of PreK classes.<sup>3</sup> On a per child served basis this ranges from \$2,237 to \$3,975.

**Table S1: Estimated Total Costs of Providing PreK-3<sup>rd</sup> Programs Using the Evidence-Based Model in 2005-06 in States with Spending Currently Below Evidence-Based Adequacy Estimates (Billions of Dollars): Using PreK class sizes of 15 and 20**

	Number of 3- and 4-Year-Olds					
	100% of federal poverty level		200% of federal poverty level		All Children	
	Average PreK class size (teacher and instructional aide)					
Participation Rates	15	20	15	20	15	20
50% participation	\$169.3	\$168.2	\$180.6	\$178.2	\$207.6	\$202.1
65% participation	\$172.4	\$171.0	\$187.1	\$184.0	\$222.2	\$215.0
100% participation	\$179.8	\$177.5	\$202.2	\$197.5	\$256.2	\$245.2

<sup>3</sup> These figures assume that any state that funds PreK-3<sup>rd</sup> programs above the adequate level estimated using the Evidence-Based approach continue to expend those resources for education. That is, these figures “hold harmless” these states where education expenditures exceed our estimates and therefore represent the national cost to bring every state to at least an adequate level. In addition, these numbers assume a maximum of 65% participation in PreK programs.

**Table S2: Estimated *Per-Child Total* Costs of Providing PreK-3<sup>rd</sup> Programs Using the Evidence-Based Model in States with Spending Currently Below Evidence-Based Adequacy Estimates (Dollars): Using PreK class sizes of 15 and 20**

	Number of 3- and 4-Year-Olds					
	100% of federal poverty level		200% of federal poverty level		All Children	
	Average PreK class size (teacher and instructional aide)					
Participation Rates	15	20	15	20	15	20
50% participation	\$11,029	\$10,954	\$11,097	\$10,951	\$11,181	\$10,884
65% participation	\$10,794	\$10,953	\$11,132	\$10,948	\$11,230	\$10,867
100% participation	\$11,091	\$10,950	\$11,207	\$10,944	\$11,323	\$10,836

**Table S3: Estimated *Additional* Costs of Providing PreK-3<sup>rd</sup> Programs Using the Evidence Based Model in 2005-06 in States with Spending Currently Below Evidence-Based Adequacy Estimates (Billions of Dollars): Using PreK class sizes of 15 and 20**

	Number of 3 and 4 year Olds					
	100% of federal poverty level		200% of federal poverty level		All Children	
	Average PreK Class Size (teacher and instructional aide)					
Participation Rates	15	20	15	20	15	20
50% participation	\$28.4	\$27.4	\$38.2	\$36.1	\$64.1	\$58.6
65% participation	\$31.0	\$29.8	\$44.0	\$41.2	\$78.7	\$71.5
100% participation	\$37.3	\$35.3	\$58.8	\$54.1	\$112.7	\$101.7

**Table S4: Estimated *Per-Child Additional* Costs of Providing PreK-3<sup>rd</sup> Programs Using the Evidence Based Model in States with Spending Currently Below Evidence-Based Adequacy Estimates (Dollars): Using PreK class sizes of 15 and 20**

	Number of 3 and 4 year Olds					
	100% of federal poverty level		200% of federal poverty level		All Children	
	Average PreK Class Size (teacher and instructional aide)					
Participation Rates	15	20	15	20	15	20
50% participation	\$2,169	\$2,095	\$2,692	\$2,545	\$3,471	\$3,179
65% participation	\$2,332	\$2,237	\$2,763	\$2,790	\$3,975	\$3,626
100% participation	\$2,623	\$2,500	\$3,281	\$3,099	\$4,981	\$4,494

Table S5 displays our estimate of the costs of a high quality integrated PreK-3<sup>rd</sup> program in all 50 states assuming an average PreK class size of 20 (with both a teacher and an instructional aide) and an average class size of 15 for K-3 programs, along with universal access for all 3-and 4-year-olds, and a participation rate of 65%.

An important component of PreK-3<sup>rd</sup> is integration between the PreK and K-3 programs. It is important that teachers at both levels have time to understand the curriculum across all levels, and have adequate time for planning and coordination to ensure a well articulated curriculum. To understand the staffing and fiscal resource requirements of this integration, we visited six PreK-3<sup>rd</sup> programs identified by the Foundation for Child Development. Based on our observations and on interviews with school teachers and administrators, we concluded that the range of personnel funded through the Evidence-Based model is adequate to provide sufficient resources for strong integration across grades PreK-3<sup>rd</sup>.

## **Conclusions**

This study estimates the costs of providing a high quality PreK-3<sup>rd</sup> education program in all fifty states plus the District of Columbia. Relying on an Evidence Based approach to school finance adequacy, it identifies the staffing resources needed to offer high quality integrated PreK-3<sup>rd</sup> programs and then estimates the costs of those resources.

By developing a highly flexible model, it is possible to simulate alternative staffing resource configurations for PreK-3<sup>rd</sup> programs providing a state-by-state estimate of the cost to implement the program. If we assume that 65% of 3-and 4-year-old children will participate in PreK programs, we estimate the additional cost of providing the resources for Prek-3<sup>rd</sup> ranges from \$31 billion if eligibility is limited to 3-and 4-year-olds at 100% of the federal poverty level to \$78.7 billion if PreK is universally available to 3-and 4-year-olds. These costs range from \$2,169 to \$4,494 per student served, and vary considerably by state.

**Table S5**  
**Estimated Costs of an Integrated PreK-3<sup>rd</sup> Program By State: 2005-06**  
**(PreK class size of 20, K-3 class size of 15,**  
**all 3- and 4-year-olds eligible, 65% participation in PreK)**

State	PreK-3rd Cost	PreK-3rd Cost	Estimate of PreK-3rd	PreK-3rd Expenditures	Difference	Difference
	Cost Estimate	Estimate Per Pupil	Current Expenditures	Per Pupil		Per-Pupil
Alabama	\$2,979,894,704	\$9,611	\$1,923,963,356	\$6,205	\$1,055,931,349	\$3,406
Alaska	\$594,381,240	\$11,729	\$415,453,133	\$8,198	\$178,928,107	\$3,531
Arizona	\$4,468,226,074	\$10,042	\$1,984,386,840	\$4,460	\$2,483,839,234	\$5,582
Arkansas	\$1,891,004,149	\$9,763	\$1,388,076,923	\$7,166	\$502,927,226	\$2,596
California	\$31,850,591,952	\$12,355	\$17,336,706,375	\$6,725	\$14,513,885,576	\$5,630
Colorado	\$3,179,243,403	\$9,806	\$2,236,083,814	\$6,897	\$943,159,590	\$2,909
Connecticut	\$2,800,222,697	\$12,356	\$2,283,009,822	\$10,074	\$517,212,875	\$2,282
Delaware	\$617,484,651	\$11,997	\$474,002,928	\$9,209	\$143,481,723	\$2,788
District of Columbia	\$440,899,831	\$14,423	\$390,419,340	\$12,771	\$50,480,491	\$1,651
Florida	\$11,080,664,407	\$10,006	\$7,045,975,633	\$6,362	\$4,034,688,774	\$3,643
Georgia	\$7,180,071,952	\$10,678	\$4,699,172,493	\$6,988	\$2,480,899,459	\$3,690
Hawaii	\$860,362,225	\$10,451	\$584,416,554	\$7,099	\$275,945,671	\$3,352
Idaho	\$1,010,349,393	\$9,134	\$600,439,457	\$5,428	\$409,909,936	\$3,706
Illinois	\$10,145,651,410	\$12,110	\$6,280,879,594	\$7,497	\$3,864,771,816	\$4,613
Indiana	\$4,545,325,529	\$10,638	\$2,924,860,476	\$6,846	\$1,620,465,053	\$3,793
Iowa	\$1,740,368,211	\$9,218	\$1,188,524,774	\$6,295	\$551,843,437	\$2,923
Kansas	\$1,790,617,088	\$9,614	\$1,252,259,938	\$6,723	\$538,357,150	\$2,890
Kentucky	\$2,698,769,520	\$9,891	\$1,845,776,125	\$6,765	\$852,993,395	\$3,126
Louisiana	\$2,846,067,176	\$9,848	\$2,012,595,113	\$6,964	\$833,472,064	\$2,884
Maine	\$674,354,153	\$9,681	\$682,037,695	\$9,792	(\$7,683,542)	(\$110)
Maryland	\$3,840,617,659	\$11,496	\$2,591,716,107	\$7,757	\$1,248,901,552	\$3,738
Massachusetts	\$4,633,155,337	\$11,957	\$3,816,456,990	\$9,849	\$816,698,347	\$2,108
Michigan	\$7,759,965,769	\$11,572	\$5,369,134,655	\$8,007	\$2,390,831,113	\$3,565
Minnesota	\$3,382,479,850	\$10,513	\$2,476,249,701	\$7,697	\$906,230,149	\$2,817
Mississippi	\$2,103,146,325	\$9,716	\$1,295,295,380	\$5,984	\$807,850,944	\$3,732
Missouri	\$3,542,005,805	\$9,574	\$2,281,809,614	\$6,168	\$1,260,196,191	\$3,406
Montana	\$506,508,571	\$9,157	\$371,477,465	\$6,716	\$135,031,106	\$2,441
Nebraska	\$1,054,612,654	\$9,266	\$720,038,193	\$6,326	\$334,574,461	\$2,940
Nevada	\$1,689,504,931	\$9,925	\$913,591,211	\$5,367	\$775,913,720	\$4,558
New Hampshire	\$711,586,239	\$9,771	\$577,258,766	\$7,926	\$134,327,473	\$1,844
New Jersey	\$7,067,947,347	\$12,966	\$6,095,448,780	\$11,182	\$972,498,568	\$1,784
New Mexico	\$1,331,102,897	\$10,065	\$941,646,903	\$7,120	\$389,455,994	\$2,945
New York	\$14,131,711,947	\$12,807	\$11,917,953,306	\$10,801	\$2,213,758,641	\$2,006
North Carolina	\$5,979,309,408	\$9,821	\$3,649,499,666	\$5,994	\$2,329,809,742	\$3,827
North Dakota	\$313,968,777	\$8,797	\$236,147,544	\$6,616	\$77,821,233	\$2,180
Ohio	\$7,976,148,070	\$10,825	\$5,649,112,737	\$7,667	\$2,327,035,333	\$3,158
Oklahoma	\$2,401,624,651	\$9,407	\$1,641,937,569	\$6,431	\$759,687,082	\$2,975
Oregon	\$2,366,855,891	\$10,644	\$1,570,678,854	\$7,063	\$796,177,037	\$3,580
Pennsylvania	\$8,019,397,369	\$11,504	\$6,000,052,342	\$8,607	\$2,019,345,027	\$2,897
Rhode Island	\$672,086,432	\$11,585	\$503,647,876	\$8,681	\$168,438,556	\$2,903
South Carolina	\$2,796,562,749	\$9,889	\$1,902,521,954	\$6,728	\$894,040,795	\$3,161
South Dakota	\$415,532,117	\$8,405	\$312,228,390	\$6,315	\$103,303,727	\$2,089
Tennessee	\$3,867,030,948	\$9,712	\$2,207,878,476	\$5,545	\$1,659,152,472	\$4,167
Texas	\$18,800,277,588	\$10,025	\$11,611,114,194	\$6,191	\$7,189,163,394	\$3,834
Utah	\$2,016,344,085	\$8,886	\$940,924,225	\$4,146	\$1,075,419,860	\$4,739
Vermont	\$353,027,452	\$10,060	\$352,334,956	\$10,040	\$692,496	\$20
Virginia	\$5,048,902,620	\$10,282	\$3,553,507,372	\$7,236	\$1,495,395,249	\$3,045
Washington	\$4,105,746,272	\$10,251	\$2,566,186,640	\$6,407	\$1,539,559,632	\$3,844
West Virginia	\$1,049,189,454	\$9,976	\$932,663,076	\$8,868	\$116,526,378	\$1,108
Wisconsin	\$3,363,076,187	\$10,319	\$2,671,830,955	\$8,198	\$691,245,232	\$2,121
Wyoming	\$328,445,224	\$9,870	\$314,823,162	\$9,460	\$13,622,062	\$409
Totals*	\$215,022,420,385	\$10,867	\$143,534,207,436	\$7,254	\$71,495,896,491	\$3,613

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# **An Evidence Based Approach to Estimating the National and State-by-State Costs of an Integrated PreK-3<sup>rd</sup> Education Program**

## **INTRODUCTION**

There is growing evidence that a quality PreK program is an effective way to help all children succeed in school (Kauerz, 2006). Research shows that at-risk children who attend PreK programs do not catch up to their peers when they enter low-resourced elementary schools (Takanishi & Kauerz, 2008). However, fewer than half of children ages 3 and 4 participate in some type of early childhood education. While both the Federal Government and individual states are working to expand PreK programs, support for those programs varies across the states as do the program offerings and quality of those programs (Russo, 2007). Moreover, there is a growing recognition that integrating PreK programs with the traditional public school system, particularly the K-3 grades, could strengthen the effect of both PreK programs and Grades 1-3. This PreK-3<sup>rd</sup> effort focuses on estimating the costs of establishing universally available, voluntary, high quality programs for all three- and four-year-olds, well integrated with K-3.

Russo (2007) identifies the components of a PreK-3<sup>rd</sup> program to include:

- Voluntary, full-day *Pre-Kindergarten* available to all 3-and 4-year-old children
- Full-day *Kindergarten* that builds on PreK experiences and is available to all children
- Standards, curriculum, instruction, and assessments aligned within and across grades from PreK through grade three
- Curriculum focused on emotional development, social skills, and self-discipline, as well as reading and mathematics
- All early education lead teachers qualified to teach any grade level from PreK through Grade 3 and compensated based on public elementary school teacher salaries
- Families and teachers who work together to ensure the success of all children.

An important step in making quality PreK-3<sup>rd</sup> programs available to all children is knowing what it would cost to provide those programs. Describing the components of that cost requires specifying both PreK and K-3 education programs that will provide strong preparation for children to perform at high levels as they continue in school, as well as the costs of coordinating PreK programs (many of which are offered outside of the public school system) with K-3 programs in the public schools.

The purpose of this report, prepared for the Foundation for Child Development, is to begin the process of estimating the costs of integrated, universal PreK-3<sup>rd</sup> programs in the nation and in each of the 50 states. The goal of this study is to provide initial estimates of:

- The number of 3-and 4-year-old children in each state
- The costs of providing PreK programs for those children (as well as for subsets of 3-and 4-year-olds stratified by poverty level)
- The costs of public school programs for grades K-3 for all children
- Any additional costs associated with integration of Pre-K programs with existing public K-3 schools, specifically time for planning.
- The costs of a universal, integrated PreK-3<sup>rd</sup> education system
- The net public costs of that system.

In addition, at the request of the staff of the Foundation for Child Development, we visited six schools/districts that the Foundation identified as having successful PreK-3<sup>rd</sup> programs to develop an understanding of how the staffs at those schools integrate PreK and K-3 offerings, and to get a better sense of whether or not the resources identified through the Evidence-Based approach to adequate funding would be sufficient to meet the staffing needs of these programs including integration of PreK with K-3 programs. We also studied strategies for parent and community outreach and involvement, additional resources provided for in the Evidence-Based model.

Understanding the costs of an integrated PreK-3<sup>rd</sup> program and development of state-by-state cost estimates is a complex, multi-dimensional undertaking. Our approach is to specify the ingredients or resources needed for PreK-3<sup>rd</sup> programs using the Evidence-Based costing out method that we have developed to estimate the costs of public school programs in a number of states.<sup>4</sup> While this process has focused mostly on K-12 programs in the past, here we identify the research-based resources specifically needed for K-3 programs that will lead to dramatic improvements in academic performance for students. We also identify a set of Evidence-Based resources for PreK programs.

Using a process described in Odden, Goetz and Picus (2008) and Odden, Picus and Goetz (under review), we developed state-by-state estimates of the costs of providing an integrated Evidence-Based PreK-3<sup>rd</sup> education program. The model we developed for this project provides the user with flexibility to vary a number of the parameters that drive the final cost estimate. For example, the cost model allows users to vary assumptions regarding the participation rate of 3-and 4-year-old children in PreK programs. The model also allows users to select which 3-and-4 year-old children are eligible to participate in publicly funded PreK programs ranging from the universe of all 3-and 4-years-olds to sub-sets of those children based on poverty levels by state. The model provides flexibility to control for student/teacher ratios at both PreK and K-3 levels as well as flexibility to vary other educational resources. Once these parameters are selected, the model computes the estimated costs of PreK programs and compares that

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<sup>4</sup> See Odden and Picus, 2008 for a general description of the Evidence-Based model – in particular chapter 4. See also, Picus, Odden, Aportela, Mangan and Goetz, 2008; Odden, Picus, Archibald, Goetz, Mangan and Aportela, 2007; Odden, Goetz, and Picus, 2008; Odden, Picus, Goetz, Mangan and Fermanich, 2006; Fermanich, Mangan, Odden, Picus, Gross and Rudo, 2006; Odden, Picus and Goetz, 2006; Odden, Picus, and others, 2005; Odden, Picus, Fermanich and Goetz, 2004; Odden, Picus and Fermanich, 2003; Picus, Odden and Fermanich, 2003; and Odden, Fermanich and Picus, (2003). All of the state reports are available at [www.lpicus.com](http://www.lpicus.com).

with estimates of current state expenditures for PreK education. Similarly, the model estimates the Evidence-Based cost of K-3 education programs in each state, which may be more or less than the estimate of the current K-3 education expenditures in each state. The difference is added to or subtracted from our estimated costs of PreK programs to generate a state-by-state estimate of the costs of a universal PreK-3<sup>rd</sup> education program. These costs include adequate resources for integration between PreK and K-3 programs. Cost estimates are based on national and state-by-state educational expenditures in the 2005-06 school year.

Assuming the components of the Evidence-Based adequacy model were implemented for all PreK-3<sup>rd</sup> programs, with a participation rate of 65%, which is approximately the participation rate of the Oklahoma program that makes state supported PreK programs universally available to all children whose parents want to enroll them, we estimate that the likely additional national costs of providing adequate PreK-3<sup>rd</sup> programs range from \$27.4 billion to \$78.7 billion depending on the number of 3 and 4 year old children eligible for and electing to participate in PreK programs.<sup>5</sup> On a per child served basis the estimated additional costs range from \$2,095 to \$3,975.<sup>6</sup>

The balance of this report is divided into five sections. Section one provides a brief discussion of the evidence supporting wider availability for PreK education programs and the importance of integrating those programs with the early years of elementary school. Because PreK-3<sup>rd</sup> integration is a major focus of the Foundation for Child Development's work, this section provides a summary of the key issues surrounding PreK-3<sup>rd</sup> rather than a comprehensive review of the topic.

The second section describes the resources included in the Evidence-Based approach to school finance adequacy generally. It outlines the Evidence-Based approach and provides links to more detailed descriptions of the research base used to develop the model. In this section we also apply the resource recommendations contained in the Evidence-Based model to PreK programs and compare the resources identified through the model to resource allocations found in widely recognized effective PreK programs (i.e. the High-Scope Perry Preschool Program, Carolina Abecedarian Project and the Child-Parent Center Program), as well as to universal PreK programs in Oklahoma and Georgia and the New Jersey Abbott School district PreK program.

Section three considers the question of whether additional resources are needed to coordinate PreK with grades K-3 to establish an integrated PreK-3<sup>rd</sup> program. To address

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<sup>5</sup> These figures assume that any state that funds PreK-3<sup>rd</sup> programs above the adequate level estimated using the Evidence-Based approach continue to expend those resources for education. That is, these figures "hold harmless" these states where education expenditures exceed our estimates and therefore represent the national cost to bring every state to at least an adequate level. In addition, these numbers assume a maximum of 65% participation in PreK programs. Section 4 presents additional cost estimates under the unlikely assumption of 100% participation by eligible 3 and 4 year old children in PreK programs.

<sup>6</sup> This figure is computed based on the additional costs of the Evidence-Based model for both PreK and K-3 programs in each of the 50 states and the estimated number of children served includes the assumed eligibility and participation rate figures in each model simulation as well as the number of students enrolled in grades K-3 in each state.

this issue, we conducted site visits in five schools/districts across the United States to develop a better understanding of the work entailed in integrating PreK programs with existing school structures.

In section four, we describe our costing model in detail, identify how our cost estimates were derived and provide a sensitivity analysis for those estimates. While we have confidence in the cost estimates that our model generates, as described in that section, because of the difficulty in estimating K-3 education costs by state, we have less confidence in our estimates of the total resources currently available for PreK-3<sup>rd</sup> education programs.

Section five offers our conclusions.

## 1. UNIVERSAL PREK-3<sup>RD</sup> PROGRAMS

Our discussion of universal PreK-3<sup>rd</sup> programs has three parts. The first briefly summarizes the research base supporting PreK education programs, the second describes existing PreK programs in the United States and the third identifies the research base for integrating PreK programs with K-3 programs into a more unified PreK-3<sup>rd</sup> program.

### The Case for PreK

Today there is growing policy pressure to establish universal PreK programs for 4 year old children and in some instances for 3 year olds as well. This pressure stems from the increased demands on schools through standards-based education reforms and a growing recognition that early childhood development programs can have an impact on student outcomes well beyond the pre-school years. Much of the research on the effectiveness of PreK-3<sup>rd</sup> programs has focused on the PreK component, with relatively little considering the advantages of integrated programs that continue from PreK through the 3<sup>rd</sup> grade.

Reynolds and Temple (2008) identify a number of major studies that find long-term positive effects of pre-school programs on student learning. They construct five pathways that contribute to the effectiveness of early childhood development programs. These include:

- A cognitive advantage pathway that leads to enhanced literacy, language and numeracy skills, and better school readiness (see also Conger, 2008 for evidence on the impact of early learning on acquisition of English language skills for English Language Learners)
- A family support pathway describing benefits from greater parental involvement in education and enhanced parenting skills (see also Kalil & Crosnoe, 2008)
- A school support pathway that argues for high quality education programs beyond pre-school to strengthen the learning advantages of early childhood development programs.
- A social adjustment pathway suggesting benefits from increased classroom and peer social skills and positive teacher-child relationships.
- A motivational pathway arguing that early education programs provide benefits in terms of achievement motivation and commitment to school.

Gault, et. al. (2008) suggest that policy makers have begun to see the benefits of PreK education and are committing substantial resources to expanding PreK programs. Lynch (2007) identifies the benefits of PreK programs by showing that children who participate in high quality PreK programs:

- Require less special education
- Are less likely to repeat a grade
- Are less likely to need child welfare services
- Enroll in K-12 education better prepared resulting in lower spending requirements at that level
- Are less likely to engage in criminal activity as juveniles and adults
- Are less likely to need social welfare support services as adults
- Generally have higher incomes when they enter the labor force
- Pay higher taxes as a result of their higher incomes.
- Are likely to have employer-provided health insurance

Generally, estimates of the benefits of PreK programs are reported as returns to investment. Reynolds and Temple (2008) report that in addition to benefits on child well being and student achievement, high quality PreK programs for low income children at risk for underachievement produced economic returns ranging from \$4 to \$10 per dollar invested.

Lynch (2007) found that voluntary, high quality, publicly funded PreK programs targeted to the poorest 25% of three-and four-year old children generate substantial benefits that would eclipse the costs of the programs in six years. By 2050, Lynch estimates that the annual benefits of these PreK programs would exceed the program costs in that year by a ratio of 12.1 to 1. He estimates the costs of a high quality half-day program for these children at \$6,300 for each of the 2 million children enrolled. He further estimates that if these programs were funded mainly by individual states (rather than the Federal Government), by 2050, all 50 states would realize net benefits in tax revenues from the programs in between four and 29 years.

Lynch (2007) also estimates that if a voluntary, high quality publicly funded universal half-day PreK program for three-and four-year-olds were established, budgetary savings would surpass costs in about nine years and that by 2050 benefits would exceed costs by an 8.2:1 ratio. He assumes these PreK programs would also cost about \$6,300 per student and would enroll approximately 7 million children when fully phased in.

Others have found similar benefits to PreK education. The consistently recurring theme in all of the analyses of PreK programs is that the savings accrue to “high quality” programs. Although to a large extent, a high quality program is defined by the individuals employed to run the program and their commitment to their job, as well as a comprehensive array of services beyond just the “school” component,” it is possible to identify the resource levels needed to support such high quality programs. In essence the resources are a necessary, but not sufficient condition for having a high quality program because a school with the revenue to higher an adequate number of qualified teachers still needs to find and train them appropriately.

Longitudinal studies of three well known PreK programs (High-Scope Perry Preschool Program, Carolina Abecedarian Project and the Chicago Child-Parent Center Program) have demonstrated substantial benefits to children and to society. All three meet a

generally accepted standard of high quality. Consequently, as we develop estimates of resources needed for a high quality PreK program below, we will compare our Evidence-Based estimates with the resources identified in the provision of each of these three programs.

Researchers have also looked at the success of larger, more universal Preschool initiatives. There is evidence that state-wide universal programs in Georgia (Henry, et. al. 2006), and Oklahoma (Gormley, Jr. et. al. 2005) have improved the performance of students who participated in those programs. In addition, Frede, et. al. (2007) provide evidence that in a select group of urban districts – the Abbott districts – PreK programs have improved student performance as well. While detailed resource information is more difficult to assimilate because of the much larger size of these program, we will compare the costs of these programs with the estimated costs of the PreK-3<sup>rd</sup> program developed through the Evidence Based model.

In the pages that follow, we provide estimates of the costs of the resources needed to offer a high quality program recognizing this is the first step in ensuring children in PreK through grade three have access to quality programs. First we describe current spending for PreK programs across the United States and then summarize recent research on the importance of looking beyond PreK programs to integrated PreK-3<sup>rd</sup> services for children.

### **Current PreK Programs in the United States**

The National Institute for Early Education Research (Barnett, et. al., 2007) provides the most comprehensive assessment of current expenditures for PreK education in its annual yearbook *The State of Preschool 2007*. The Yearbook reports that in 2006-07, 22% of four-year-old and 3% of three-year-old children were enrolled in state-funded PreK programs. Average spending per PreK child enrolled amounted to \$3,642 and ranged from a high of over \$10,000 per child enrolled in New Jersey to twelve states that do not have state PreK programs.

In addition, Barnett, et. al. (2007) report a total of 908,412 students enrolled in Federal Head Start and Early Head start programs, another 15,994 children in state-funded Head Start programs and 407,967 children 3-and 4-year-old enrolled in special education programs across the United States.

Although this gives a picture of how many children attend PreK programs, it does little to investigate the question of program quality. The National Institute for Early Education Research (NIEER) has established ten quality benchmarks to help measure program quality. The ten PreK quality standards are:<sup>7</sup>

1. Comprehensive learning standards
2. Teachers with a bachelor degree

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<sup>7</sup> See <http://nieer.org/yearbook/compare/> for a detailed description of the NIEER quality standards.

3. Teachers with specialized training in early childhood
4. Assistant teachers with an Child Development Associate credential or the equivalent
5. Teacher in-service training of at least 15 hours per year
6. Maximum class sizes of 20 or less
7. Staff to child ratios of 1 to 10 or better
8. Vision, hearing and health screening and referral and support services
9. At least one meal per day provided
10. Site visits to ensure program quality

The *Yearbook* states that two states – North Carolina and Alabama – met all ten quality benchmarks while eight more met nine of the ten benchmarks. Moreover, only eight of the state-funded PreK programs met less than half of the ten quality benchmarks. Interestingly, the *Yearbook* estimates that of the 38 states with state-funded programs, half (19) provided adequate funding to meet the benchmarks.

There are, of course, alternative ways to estimate adequate levels of spending. In this report, we estimate the costs of resources needed to put in place a PreK version of our Evidence-Based school finance adequacy program.

### **The Case for Integrated PreK-3<sup>rd</sup> Programs**

The discussion above considers PreK programs, but says little about PreK-3<sup>rd</sup> programs or their benefits. While there is growing evidence that integration of PreK programs with the primary grades can lead to increased educational benefits, this field has been less explored.

Takanishi and Kauerz (2008) argue that the PreK-3<sup>rd</sup> grade years are the “cornerstone” of any educational system, and point out the importance of quality integrated PreK-3<sup>rd</sup> programs in providing strong foundations for lifelong learning, educational excellence and competitiveness in the marketplace. Bogard (2003) suggests that variability in PreK experiences is a strong predictor of children’s outcomes, and that the link is even stronger for low-income children. She suggests that a PreK-3<sup>rd</sup> approach to early childhood education will help to “level the playing field” by supporting better teacher preparation and qualifications, as well as establishing sequential learning experiences from PreK through the 3<sup>rd</sup> grade.

One of the challenges in thinking about PreK-3<sup>rd</sup> programs is the need to coordinate traditional education programs in K-3 with PreK programs. This takes on a number of dimensions. First, even if the PreK programs are in the same school, the need to coordinate education programs (curriculum, professional development, school facilities) becomes more complex with the addition of more staff, more students and more grade levels to integrate into the program. Second, most PreK programs are offered by providers other than the public school system – frequently at sites other than the local school. This makes all of the coordination efforts more complex yet.

Finally, this is further complicated by the fact that in the foreseeable future, PreK programs will remain voluntary. This means some children will continue to come to kindergarten without the benefit of PreK programs, and other children who have had access to PreK programs will likely have had very different experiences. In addition, the success of a PreK-3<sup>rd</sup> program also depends on the quality of the educational program in grades K-3, which varies across schools, school districts and even states. This study addresses that issue by using an Evidence Based model to estimate the resources needed for a high quality program in all PreK-3<sup>rd</sup> classrooms.

Many of the components of success for high quality PreK programs are also part of the components advocated by PreK-3<sup>rd</sup> supporters. These include full-day programs with low pupil/teacher ratios staffed by highly qualified teachers and aides, along with support for articulating curriculum, training teachers and helping children with special educational needs. As described in sections 2 and 3 of this report, many of the components of a high quality PreK program are part of the Evidence-Based funding model we have developed for K-3 programs in a number of states.

## 2. THE EVIDENCE-BASED MODEL IN PREK-3<sup>RD</sup> PROGRAMS

One of the questions education policy makers face on a regular basis is how much it will cost to provide an education program that offers reasonable assurance that all (or most) children will be able to meet their state's education performance standards.

Unfortunately, answering this question is not simple or straightforward. Known in the field of school finance as adequacy – as in what level of resources is adequate to meet state established student performance goals – policy makers and education researchers have been wrestling with this issue since at least 1994, when William Clune published his important work defining the concept of school funding adequacy (Clune, 1994). This section describes the Evidence-Based approach to estimating adequacy at both the K-3 and PreK levels. Subsequent sections of the report provide a description of how the two are integrated into a PreK-3<sup>rd</sup> model and the additional costs of PreK-3<sup>rd</sup> programs can be estimated.

### Using the Evidence-Based model to Estimate K-3 Program Costs

Clearly, part of estimating the costs of a PreK-3<sup>rd</sup> education system requires understanding the resources needed (and the subsequent cost of those resources) for both the PreK and the K-3 component of the program. For the latter, there are four approaches available in the literature to estimate adequate levels of funding for schools.

The first of these, the successful district method identifies school districts that meet an agreed upon set of standards and uses those standards to estimate the costs of an adequate program. The drawback to this method is that it generally underestimates the additional costs associated with children who are at risk. Moreover, the existence of agreed upon standards that can be measured for PreK education is less clear than it is in K-12 education, where there is still much room for disagreement.

A second costing approach is the cost function. A cost function is an econometric technique that uses desired test score data along with student, school and district characteristics to estimate the cost of an adequate education. The drawback to using this approach for PreK education is the fact that few standardized tests exist to use for setting student performance standards or goals. When combined with the voluntary nature of PreK education, the potential for non-random samples is also high, limiting the effectiveness of the analysis. Finally, the findings that come from these complex computations often appear as a “black box” to state policy makers.

A drawback to these two approaches to adequacy is while they offer a rationale for a level of spending on schools, they do not provide guidance as to how those resources can be used to produce improved student learning. The general assumption in these models is that local school officials are best qualified to determine how resources can be used to foster gains in student performance. Unfortunately, that may not always be the case. Our research in other states suggests that in many instances, absent some guidance from the state (or some other source) local schools do not choose to establish programs that have

been shown to be successful in other settings, and instead continue to do “more of the same” (see Fermanich, et. al., 2006; and Picus, et. al. 2008).

Two other approaches to adequacy offer suggestions as to how educational resources can be used to produce student learning and offer an advantage over the successful district and cost function approaches. The first of these, Professional Judgment, relies on panels of education professionals and leaders to identify the components of an educational program that will lead to improved student learning, ideally to the state established standards. The costs of these components are then estimated to determine the cost of an adequate education. Moreover, given different professional standards and educational expectations across the 50 states, it seems this approach is better suited to individual state analyses than for making comparisons across the United States using a consistent set of assumptions.

The Evidence-Based approach to adequacy is similar in some respects to the Professional Judgment model. The difference is that rather than rely on panels of educational experts, this model first uses findings from current educational research to identify the resource components needed to deliver a comprehensive, high quality instructional program, and then estimates an adequate expenditure level by placing a price (e.g. an appropriate salary level for personnel) on each component and aggregating the components to a total cost. The use of research or evidence addresses the problem of making cross-state comparisons identified above. The approach is based on evidence from three sources:

1. Research with randomized assignment to the treatment (the “gold standard” of evidence)
2. Research with other types of controls or statistical procedures that can help separate the impact of a treatment
3. Best practices either as codified in a comprehensive school design (e.g., Stringfield, Ross & Smith, 1996) or from studies of schools and districts doubling student performance over a 4-6 year time period (e.g., Odden, Picus, Archibald, Goetz, Mangan & Aportela, 2007).

The Evidence-Based approach to determining school finance adequacy defers to evidence on the level of resources needed to meet performance goals much more strongly than on the professional judgment of educators, though professional educator input is solicited.<sup>8</sup>

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<sup>8</sup> In this, and all our recommendations, we are aware that the research is neither completely definitive nor in agreement on all aspects of the resources needed for a high quality educational program. The recommendations identified here, and the research on which we based them, are conclusions we have reached after considerable analysis and are described in more detail in Chapter 4 of Odden and Picus (2008). We recognize that there are multiple approaches available for estimating an adequate level of resources for public schools, and that there is considerable debate over the efficacy of all of those methods. The goal of all is to provide sufficient resources for schools and school districts to offer high quality education programs for all children. We have chosen to use the evidence based approach because of its grounding in the best available research on educational effectiveness, and because our experience in developing cost estimates provide a set of resources adequate for schools to double student performance as

Based on existing research, the Evidence-Based model generally recommends class size of 15 students in grades K-3, and provides enough resources to enable prototype schools to hire enough core teachers to offer classes of this size. In addition, specialist teachers are funded at each elementary school at a level of 20 percent of the core teachers. These specialist teachers work with children on art, music and health/physical education programs (as examples) and provide for planning and coordination time for core teachers during the school day.

Critical to the success of all students, the Evidence-based model provides a comprehensive strategy for struggling students including certificated teacher tutors, extended day programs, summer school and additional pupil support resources. The Evidence-Based model also invests heavily in professional development, providing ten days for professional development activities (generally in a concentrated summer program), instructional coaches at each school at the rate of 1.0 FTE coach for every 200 students, and funds for consultants and learning materials. The model also includes a comprehensive strategy for children with special needs, site based administration, technology and school district administration – including district leadership, maintenance and operations, and other district level costs. Details of the research used to substantiate the resource recommendations contained in the Evidence-Based model, as well as the resource allocation strategies for middle and high schools, can be found in Chapter 4 of Odden and Picus (2008). Figure 1 summarizes the components of the Evidence-Based model. Details of how this can be operationalized at the PreK-3<sup>rd</sup> level are described below and displayed in Table 1.

Evidence-Based adequacy models have been developed in Arkansas, Wyoming, Wisconsin, Arizona, Kentucky, North Dakota and Washington (see the reference list for complete citations for these studies). In Arkansas, our cost estimate included providing PreK programs for all 3 and 4 year olds from households at 200 percent of the poverty level or below. That model assumed full day programs staffed by certificated teachers and an instructional aide with classes of 15 students. In Arkansas we estimated the costs of a nine month program similar to the length of the K-12 school year.

The usual approach for estimating the costs of adequacy in any individual state is to establish three prototypical schools – an elementary, middle and high school – and to then determine the resources each school would generate based on the model. That model is then used to determine the resources each school in the state would generate. This requires a set of assumptions about how to estimate resource needs based on the actual enrollment and student characteristics observed at each school. The cost of these resource requirements are used to determine the level of funding each school would receive. The school-by-school estimates are then aggregated up to a district level where additional resources for central office administration, operations and maintenance, utilities, food services and transportation are added to the aggregated school level costs to get a district-by-district estimate of the resources needed to fund the model. The sum of

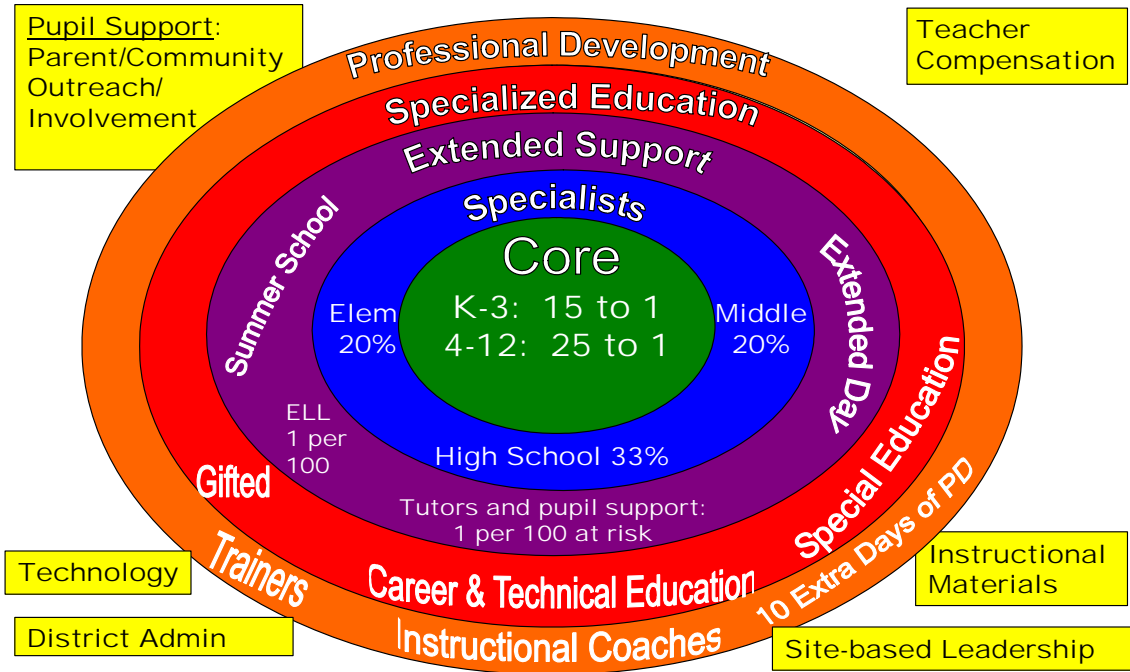
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measured by state tests and are generally affordable by most states facing school finance adequacy demands.

the district level resources is used to estimate adequacy for the individual state in which the study was conducted.

## The Evidence Based Model:

### A Research Driven Approach to Linking Resources to Student Performance



**Figure 1: The Evidence Based Model**

While detailed Evidence-Based cost estimates have only been developed for a handful of states, we have estimated the costs of the model on a national average basis (Odden, Goetz & Picus, 2008). This approach does not offer a school-by-school analysis. Instead, it divides the students in the state into prototype schools and estimates the costs of those prototype schools. To this is added a per pupil estimate of the central administration, operations and maintenance, utilities, etc. This estimate is based on existing costs for those functions, adjusted for inflation.

While this approach does not provide the type of detailed school level cost estimates needed to operationalize a school funding system, it does provide a close approximation of the total costs of this model for each state and the nation as a whole. As described below, we used the approach from our national average analysis to estimate the costs of K-3 education programs for each state and combined that with the similarly computed costs of PreK programs for each of the 50 states.

## Applying the Evidence-Based Model to PreK Education Programs

What would an Evidence-Based resource model for high quality PreK programs look like? It seems likely that to a large extent, the resources required for a high quality K-3 program would also be appropriate for PreK. As described above, Russo (2007) identifies the components of a PreK-3<sup>rd</sup> program to include:

- Voluntary, full-day *pre-kindergarten* available to all 3 and 4 year-old children
- Full-day *kindergarten* that builds on PreK experiences and is available to all children
- Standards, curriculum, instruction, and assessments aligned within and across grades from PreK through grade three
- Curriculum focused on emotional development, social skills, and self-discipline as well as reading and mathematics
- All early education lead teachers qualified to teach any grade level from PreK through Grade 3 and compensated based on public elementary school teacher salaries
- Families and teachers work together to ensure the success of all children

In addition, Zigler, Gilliam and Jones (2006) suggest the following components of a high quality PreK program:

- A two year universal preschool program for three and four year old children
- Located in elementary schools and administered by public school systems and staffed with certified teachers, school psychologists, social workers and other support personnel (the authors realize that quality programs can also be delivered by other institutions as well)
- PreK personnel would be paid at wages at the same level as other school personnel
- Access to public health services for children with health concerns or disabilities
- Offer school based care for working families beyond the school day
- School services currently available to K-3 students such as special education, transportation, school nutrition programs and mental health assistance would be available to PreK children as well
- A class size of 15 students to one certified teacher and one instructional aide
- Teachers should have a BA and be certified in early childhood education
- Instructional aides should have an AA degree or a Child Development Associate (CDA) degree
- A PreK-3<sup>rd</sup> curriculum that is aligned so that children experience sequential programs of study during their first five years of school .

It is helpful to look at the resource allocation strategies of successful PreK and PreK-3<sup>rd</sup> programs to help identify the resources needed to provide quality programs. While there has been a great deal of research on PreK programs and on some PreK-3<sup>rd</sup> programs, we

focus on six specific programs. The first three – the High-Scope Perry Preschool Project (PPP), The Carolina Abecedarian Project (ABC) and the Chicago Child Parent Center Program (CPC), although relatively old, showed net benefits in terms of the investment of tax dollars. Other research on these three programs has also found long term positive impacts on student achievement and child well-being as (for a discussion of this research see Reynolds & Temple, 2008; Lynch 2007; Zigler, Gilliam & Jones, 2006; and Gromley, 2007).

While these three programs have been widely studied and show considerable success, they are all relatively small in scope. Gormley Jr. et. al. identify six states that offer PreK programs that are universal in “reality or aspiration” – Florida, Georgia, Massachusetts, New York, Oklahoma and West Virginia (2005: p.872). Research in Oklahoma (Gormley, Jr. et. al. 2005) and Georgia (Henry, et. al, 2006) has found positive effects of these programs. Consequently we have included the PreK programs in those two states in our analysis of successful PreK programs as well. New Jersey funds an extensive program for PreK children in the so-called Abbott school districts, a group of poor urban school districts who have successfully challenged the state’s school funding system to require they receive additional funds. An important component of funding for Abbott districts is a PreK program for 4 year olds. Frede, et. al. (2007) has found positive impacts of this program as well.

Understanding the resources needed to operate these programs provides a good place to start in terms of understanding whether or not the resources generated through the Evidence-Based model would be adequate at the PreK level. The advantage of using the first three programs is they have been the subject of considerable study over many years and the evidence of their success – despite relatively small numbers of children served— have included both school performance through college and in some instances employment experience as well. Analysis of the programs in Oklahoma, Georgia and New Jersey provide a baseline to which the expenditures computed in our Evidence Based model can be compared. .

### *High-Scope Perry Preschool Project (PPP)*

This widely recognized program continues to have influence in PreK circles today. Many PreK programs use the High-Scope curriculum and continue the methods pioneered by the PPP in the mid 1960s. PPP operated in Ypsilanti Michigan from 1962 to 1967 serving 3 and 4 year old, low SES African American children with IQs between 70 and 85 at an elementary school site. Children spent an average of 1.8 years in the program, generally entering at the age of 3 and moving on to kindergarten. PPP offered a half day program (2.5 hours) supplemented by weekly home visits lasting approximately 1.5 hours each. The average class size was 22 children and the overall program had a child to staff ratio of 5.7 to 1. Teachers and other staff were paid at wage rates paid by the public schools. It also offered an array of health support programs and parent and community outreach and involvement.

Extrapolating from data provided by Reynolds and Temple (2006;2008), a child to staff ratio of 5.7 to 1 leads to an estimated staff of approximately 10. The initial program – and the one that was studied so widely – served 58 children. If one assumes this was staffed by three teachers and three aides, the remaining four individuals would have been available for program administration, health services, student support and counseling and parent outreach, including the weekly home visits.

### *Carolina Abecedarian Project (ABC)*

This program operated in a university setting in Chapel Hill, North Carolina from 1972 to 1977. The program enrolled 111 high risk children almost all of whom were African American. The children were enrolled when they were less than 4 months old and the program operated for a full day five days a week, 50 weeks a year. Curriculum focused on language development and children's social development. For infants the average class size was 12, with a child to staff ratio of 3:1 for infants and 6:1 for preschool age children. In addition to the school programs, parents were given educational material and training every two weeks or so and expected to engage their children at home with the materials they received.

Identifying staffing configurations for the 3-and 4-year-old component of this project is complicated by the fact that the program served children from infancy through 4 and by the fact that it was an active research project at the University of North Carolina. A 1974 brochure describing the project lists a total of ten teachers and one head teacher (as well as a nursery supervisor) among the staff. In addition, there are four health care professionals, two pediatricians, a licensed practical nurse and a family nurse practitioner. It is unlikely that any of them worked full time for the project. It is not clear how many of the research staff listed also participated in providing services to children.

If one takes Reynolds and Temple's (2006) estimate of a child to staff ratio of 6:1 for preschool children, and assumes that at any given time 40% of the 111 children in the program were 3 and 4 year olds, then at a ratio of 6:1 there would be 7.4 adults to staff the program for those children. For a school of 120 children at this ratio, this would amount to approximately 20 staff positions.

### *Chicago Child Parent Center Programs (CPC)*

The CPC program operates under the auspices of the Chicago Public Schools and provides comprehensive educational and family support services for PreK-3<sup>rd</sup> children who come from economically disadvantaged families. The program is supported through Title I funds and thus children must reside in a neighborhood eligible for Title I assistance to participate. This is slightly different than most programs as the eligibility is based on neighborhood, not student poverty levels. Programs are provided either in elementary schools or in facilities adjacent to elementary schools.

Participation in this part day program is encouraged through outreach counselors and parents are expected to participate in classroom activities, field trips or adult education classes at least half a day per week. Teachers have at least a bachelor's degree and are paid at the rate of a regularly licensed teacher; the program also includes a head teacher, who reports to the principal of the associated elementary school, who is the administrative leader of the site program. All classes have a certified teacher as well as an aide. Maximum PreK class size is 17. Children attend half day programs beginning at age 3. There are full or half day kindergarten programs with maximum class size of 25 and since 1977 an elementary school component was added to the program at many schools. In its initial configuration, the CPC program also included a full time parent resource teacher, paid at a regular teacher salary level, and a full time community liaison coordinator, who was paid at the rate of a para-professional. The original program also included portions of a nurse and speech therapist, and a clerk to provide administrative support.

### *The Georgia PreK Program*

In 1993, Georgia established a voluntary pre-kindergarten program for 4 year old children from low income families. In 1995, the program was expanded so that all 4 year olds were eligible making Georgia the first state in the nation to offer a universal, voluntary PreK program (Suitts, 2008). Georgia funds a full day (6.5 hours) program during the regular school year (180 days), with class sizes of up to 20 students staffed by a lead teacher and an aide in each classroom (Henry, et. al., 2006). Teachers are not required to have a BA degree although all must possess a technical school diploma or a 2 year college degree in a field related to early education or child development. Suitts (2008) states that 75% of the teachers have a BA, most with an early education specialization.

The Georgia PreK program has not provided parent support resources to every PreK classroom, and does not appear to provide substantial resources to coordinate and integrate PreK programs with K-3 offerings. In 2007 the program enrolled approximately 75,299 4 year old children – about 54% of the 4 year olds in the state. Spending for the program averaged \$4,410 per student in 2006-07, just over half of what was spent on each K-12 student in the state that year. The NIEER 2007 Yearbook shows Georgia meeting 8 of the 10 quality benchmarks for PreK programs, falling short on teacher qualifications and teacher aid qualifications. Overall, the Georgia program appears to support a lower level of resources to PreK programs than we identify in the Evidence Based model.

Henry, et. al. (2006) found positive effects of the Georgia program concluding children who participated in the program were at least as well prepared for kindergarten as were children who benefited from Head Start programs.

### *Oklahoma's PreK Program*

Oklahoma has offered voluntary universal PreK access to all 4 year olds since 1998. Today, 97 percent of the school districts in the state take advantage of PreK funding and Oklahoma ranks first in the United States in terms of the percentage of 4 year olds enrolled in PreK programs at 68%. The program meets nine of NIEER's ten quality standards, falling short only on the degree requirements for teacher aides.

Districts can offer half day (2.5 hours) or full day (6 hours) programs which are staffed with fully certificated teachers with early education specializations who are paid at the same rate as other K-12 teachers. Classes are no larger than 20 students, staffed by one teacher and one teacher aide. Although local districts are not required to match state spending, total state spending on PreK amounts to \$3,433 per child, while all reported PreK spending totals \$6,731 per student (NIEER, 2007).

Gormley, Jr. et. al. (2005) found that the state's universal PreK program has led to enhanced school readiness for the children who participate, and argue that PreK education is a promising path to improving school readiness.

#### *New Jersey Abbott Preschool Program*

The Abbott Preschool Program is the only recent program we studied that serves both 3- and 4-year-old children. In 2006-07, the program served over 39,678 children or 78 percent of the student population in the 31 Abbott districts which were eligible for the program. Spending on the program was nearly \$500 million or approximately \$12,600 per child.

The program focuses on the highest poverty districts in the state and its goal is to offer a high-quality preschool education to prepare children to enter school with the knowledge and skills they need to meet the State's educational standards. The New Jersey Department of Education funds a 180 day six hour program, while a wrap-around program funded by the New Jersey Department of Human Services that offers daily before-and after-care and summer programs. In total, the program offers a ten hour program 245 days a year (Frede, et. al. 2007).

The Abbott Preschool Program Implementation Guidelines<sup>9</sup> describe funding availability for all of the components of the evidence based model including teachers, aides, community outreach, master teachers, professional development and health services.

Frede, et. al. have found that children who attend PreK programs are improving in language, literacy, and math – at least through the end of kindergarten, and those who attend PreK for two years (ages 3 and 4) significantly out-perform those who attend for one year, or who don't attend PreK at all.

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<sup>9</sup> [http://www.state.nj.us/education/ece/dap/imp\\_guidelines.pdf](http://www.state.nj.us/education/ece/dap/imp_guidelines.pdf)

## Resources for the Evidence-Based PreK-3<sup>rd</sup> Model

It appears that the staffing configurations of all of the above programs could generally be supported by the number of staff identified in the Evidence-Based model. The one exception to this is that the Evidence-Based model for PreK students presented in this report does not provide appropriate resources to staff PreK centers that serve children under the age of 3 as provided in the Abecedarian project.

Table 1 provides estimates of the resources needed to implement an Evidence-Based PreK-3<sup>rd</sup> program. The table outlines all of the components of the Evidence-Based model and describes the resources generated by the students at that school. Resources are described either in terms of personnel counts or dollars per student. Once staff numbers have been established, the costs of personnel would vary based on the average salary and price level in each state. Consequently, costs are not identified in Table 1 but are displayed below in the description of our costing model. Here we provide a line-by-line description of the resources in Table 1 and the rationale for any differences observed between the K-3 and PreK columns. The evidence backing up these recommendations can be found in chapter 4 of Odden and Picus (2008) or any of the individual state reports listed in the references and available at [www.lpicus.com](http://www.lpicus.com).

### Detailed Analysis of Table 1

Table 1 contains four columns. The first describes the resources included in the Evidence-Based model. The second column shows the resources the model generates for a prototypical K-5 elementary school of 432 students. This is a school with 72 students at each grade level and thus an average class size of 18. In this configuration there are four class sections for each grade level. The third column shows the resources generated through the Evidence-Based model for 288 students in grades K-3 assuming an average of 18 students per class and four class sections at each grade level (18 students times four class sections times four (K-3) grade levels). The last column shows the additional resources the school would need to serve 144 PreK children (eight classes of 18 three and four year olds). We have elected to present the data this way so that the school configuration shows a typical school with roughly the same number of children moving from grade to grade each year. In the cost estimates in the following section, we estimate national and state-by-state costs for class sizes of 15 and 20 PreK children in each class. Clearly, the costs for class sizes of 18 would be in between these estimates, a bit less than for class sizes of 15 and a bit more than for class sizes of 20.

It is important to note that in many instances, fractional teachers are identified. This is not to suggest that a school would have to hire individuals for what are in some instances part time positions, but rather we would anticipate these represent allocations of time among the full and part-time staff in the school, and what is important to consider is the number of teacher and other positions that would be funded for the prototype schools through the model if it were implemented.<sup>10</sup>

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<sup>10</sup> A complete description of the Evidence Based model can be found in Odden and Picus, 2008

### *School Characteristics*

The first eight lines of Table 1 provide information on the characteristics of the prototype school. The first line identifies the grades served in each column. The second line shows a prototypical school of 432 K-5 children, of which 288 are enrolled in grades K-3 and an additional 144 students would be added for PreK programs.<sup>11</sup> The next line shows the class size used to generate certificated teachers which averages to 18 in the K-5 prototype, so we use class size of 18 for K-3 and PreK to make comparisons within the prototype clearer.

The fourth line of Table 1 indicates that the elementary school includes a full day kindergarten program. Following that on line 5, we assume that both schools are staffed with certified teachers, and that they have 190 day contracts, which allow for ten days of intensive professional development activities as well as 180 days of instruction.

We assume that 12% of the children in each prototypical school have mild or moderate disabilities and that at the elementary school 50% qualify for free and reduced price lunch programs. In the costing model, we use the actual percentage of students who qualify for free and reduced price lunches in each state. For PreK students, this figure depends on the parameters established regarding who is eligible for PreK programs. If services are available to children who come from families at 100% or 200% of the poverty level, then all would qualify for free and reduced price lunch. If that constraint is relaxed (e.g. if all students are eligible for PreK) we use the actual number of 3 and 4 year old children in each state. In this table we assume that 100% of the children qualify for free and reduced price lunch to indicate how resources are generated.

Finally, for the purpose of this example we have assumed that 10% of the children at each prototypical school are English Language Learners. Again the actual cost model uses the average ELL population in each state to estimate resource needs.

### *Personnel Resources*

The Personnel Resources section of Table 1 shows the personnel that would be deployed at the prototypical schools. As indicated above, personnel counts are shown as Full Time Equivalents (FTE), and it is assumed that where fractional FTEs are displayed, one individual might well serve in multiple capacities at a school. For more details on the evidence backing each of these recommendations and a more detailed description of how the staff positions fit together, see chapter 4 in Odden and Picus (2008).

Line 1 – Core Teachers: Core teachers are what are commonly thought of as the regular classroom instructors in an elementary or PreK setting. The class size used in the prototype exhibited in Table 1 is 18 students so the K-3 component of the school would generate 16 core teachers and the PreK program 8 core teachers. This would provide classes about the size of the three comparison programs (CPC, Perry and Abecedarian).

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<sup>11</sup> In the cost model it is possible to vary assumptions about which children would receive PreK services.

Line 1a – Instructional Aides: The research base for instructional aides suggests that they add little to improved student performance in grades K-3. Consequently, the K-3 component of the model does not provide resources for aides. However, research on PreK programs stresses the importance of an aide in every classroom (see for example Zigler, Gilliam & Jones, 2006). Therefore the prototypical PreK school has 8 FTE aides, one for each class of 18. This results in a classroom child to staff ratio of 9.0:1 in PreK program components. This figure is slightly but not much higher than the child teacher ratios observed by Reynolds and Temple (2006; 2008) in the Perry and Abecedarian programs.

Line 2 – Specialist Teachers: In addition to core program teachers, schools need specialist teachers who can offer programs in music, art, PE and other liberal arts subjects. These specialist teachers, who at the PreK and elementary levels would replace the core teacher in the classroom for a period of time on a regular basis, make it possible for the core teachers to have time for curriculum planning and collaboration with other teachers both at their grade level and more broadly across the grade spectrum at the school. Specialist teachers are provided in numbers equal to 20% of the core teachers, or 3.2 at the K-3 level and 1.6 at the PreK level in the prototypical school in Table 1.

Line 3 – Instructional Facilitators/Coaches: A critical component of a successful school is the availability of professional development programs to help all teachers improve their teaching skills. Evidence suggests that one of the most powerful ways to provide professional development for teachers is to have instructional coaches available at the school level on a regular basis. The model funds one coach or facilitator for every 200 students in a school which amounts to 1.44 at the K-3 level and 0.72 at the PreK level for the prototypical schools in Table 1.

Lines 4,6 & 7 – Tutors for Struggling Students: These lines represent staff for three coordinated strategies for students who are struggling in class. Certified teachers serving as tutors provide instruction to students who teachers identify as struggling with the core curriculum in a one-to-one, one-to-three or possibly one-to-five setting. The concept is to provide students with intensive help to get them up to speed and back to the regular classroom. Extended Day and Summer School programs are the remaining two strategies for struggling students. Tutors are estimated at a rate of one tutor for every 100 students who are at risk. A proxy for at risk students is the number of students who qualify for free and reduced price lunch programs. For extended day and summer school, staff are resourced at levels to provide two hours of instruction five days a week during the school year, and to offer a six hour a day (four hours in core subjects) six week summer school program. The concept of struggling with the PreK curriculum seems somewhat hard to establish – except for students with disabilities who require special education – consequently, resources for these strategies are not included in the PreK prototype and only in the K-3 prototype.

Line 5 – ELL: English Language Learners require additional assistance, which the model resources at the level of one FTE certified teacher for every 100 ELL students. This

represents 0.29 positions at the K-3 level and another 0.14 at the PreK level assuming 10% of the students require ELL services.

Lines 8 & 9 – Students with Disabilities: Resources are provided using a “census” approach at the prototypical schools to provide services for students with mild and moderate disabilities. Staff are provided at a ratio of one professional position for each 150 students enrolled in the school (providing more special education staff as enrollment in the school grows) along with a half time aid for each special education teacher. At the prototypical schools in Table 1 this amounts to 1.92 teachers and 0.96 aides at the K-3 level and 0.96 teachers and 0.48 aides at the PreK level. We assume 2% of special education students have severe disabilities and the costs of providing these children with services averages approximately \$42,000 a year. This is estimated by determining how many of these students exist in each state, summing the total cost of services for children with severe disabilities and then estimating this total as a function of total state enrollment.

Line 10 – Gifted and Talented: In many instances, programs for gifted children can be provided by accelerated learning programs or advancing them to higher grades. The Evidence-Based model provides \$25 per student for gifted programs in each school.

Line 11 – Substitutes: Costs for substitutes are estimated at a rate of ten days per FTE teacher (core and specialist).

Line 12 – Pupil Support Staff: Resources for pupil support are staffed at a rate of one for every 100 students who qualify for free and reduced price lunch. At the K-3 prototype in Table 1 this would amount to 1.44 positions at both the K-3 and the PreK levels. These staff can be used for counseling, family outreach, or other services as determined at the local school site.

Line 13 – Supervisory Aides: These positions are used to provide supervision during non-class times and before and after school. They supervise bus loading and un-loading and at lunch time. The model allocates 2.0 aides to prototypical schools.

Line 14 – Librarians: The model allocates 1.0 librarian to prototypical schools. The 0.67 librarian indicated for the K-3 component would be part of the 1.0 librarian in an K-5 elementary school, and the 0.33 librarian is that portion of a librarian that would be added if 144 PreK children were added to the prototypical school. Thus, a PreK-5 school of 576 children would generate 1.33 librarians, one for the K-5 portion of the school and 0.3 for the PreK program.

Line 15 – Principal: All schools need a principal.. The model allocates 1.0 principal to prototypical schools. The staff allocations for the K-3 and PreK schools were computed similarly to the librarian.

Line 16 – School Site Secretary: The model allocates 1.0 secretaries and 1.0 clerical staff to prototypical schools. Table 1 shows the proportion of secretaries and clerical staff generated by the K-3 and PreK components of the school.

*Dollar Per Pupil Resources:*

For the balance of the resources needed for a school, we have estimated the level of resources needed on a dollar per pupil basis. The figures used in the model for both K-3 and PreK programs are:

<b>School Element</b>	<b>Per Pupil Amount (\$)</b>
Professional Development	100
Technology and equipment	250
Instructional materials including textbooks and formative assessments	165
Student Activities	25
Operations and Maintenance	940
Transportation	390
Food Services	340

These resources appear to be adequate to meet the needs of a PreK-3 integrated curriculum. If one takes the child to staff ratios of 5.7 to 1 for Perry and 6 to 1 for Abecedarian estimated by Reynolds and Temple (2006; 2008), 144 students would generate between 24 and 25.3 staff positions. Summing the staff positions identified in the fourth column of Table 1 shows a total of 24.66, thus providing a similar level of staff to programs that research has shown to have significant, long term positive impacts.

When considering how this compares to the CPC program, column four shows adequate staffing to include the full-time parent resource teacher, full-time community liaison coordinator, and the time for portions of a nurse and speech therapist, as well as a clerk to provide administrative support. CPC relies on a lead teacher who provides both administrative help and instructional coaching assistance and could be funded through the combined resources identified for the principal and instructional coach positions.

One major concern is providing adequate time and resources to coordinate PreK and elementary programs either within the school, or in the case were PreK is provided in another facility, across buildings. To ascertain whether or not resources identified above are adequate, we conducted site visits to five programs as described in the next section. As that section shows, the resources identified in Table 1 appear to be considerably more than any of the programs we visited are able to allocate for Prek-3<sup>rd</sup> programs today.

**Table 1**  
**Recommendations for Adequate Resources for**  
**Prototypical Elementary Schools**

<b>School Element</b>	<b>Prototype K-5 Elementary School</b>	<b>K-3 Component of Prototype Elementary School</b>	<b>Additional Resources for a PreK Program</b>
<b>School Characteristics</b>			
School configuration	K-5	K-3	3 and 4 Year Olds
Prototypical school size	432	288	144
Class size	K-3: 15 4-5: 25 Average = 18	K-3: 18	18
Full-day kindergarten	Yes	Yes	N/A
Number of teacher work days	200 teacher work days, Including 10 Days for intensive Training	200 teacher work days, Including 10 Days for intensive Training	200 teacher work days, Including 10 Days for intensive Training
Percent of students with disabilities	12%	12%	12%
Percent Poverty (free & reduced lunch)	50.0%	50.0 %	100%
Percent ELL	10.0%	10.0%	10.0%
<b>Personnel Resources</b>			
1. Core teachers	24	16	8
1a. Instructional Aides	0	0	8
2. Specialist teachers	20% more or 4.8	20% more or 3.2	20% or 1.6
3. Instructional Facilitators/Coaches (ratio of one for every 200 students)	2.2	1.44	0.72
4. Tutors for struggling students	one for every 100 poverty students: 2.16	one for every 100 poverty students: 1.44	N/A
5. Teachers for ELL students	An additional 1.0 teachers for every 100 ELL students 0.43	An additional 1.0 teachers for every 100 ELL students 0.29	An additional 1.0 teachers for every 100 ELL students 0.14
6. Extended Day	1.8	1.0	N/A
7. Summer School	1.8	1.0	N/A

**Table 1 (Continued)  
Recommendations for Adequate Resources for  
Prototypical Elementary Schools**

<b>School Element</b>	<b>Prototype K-5 Elementary School</b>	<b>Elementary Schools</b>	<b>PreK Programs</b>
8. Students with mild disabilities	Additional 1 professional teacher positions per 150 students and 0.5 aides for each special education teacher or 2.88 teachers and 1.44 aides	Additional 1 professional teacher positions per 150 students and 0.5 aides for each special education teacher or 1.92 teachers and 0.96 aides	Additional 1 professional teacher positions per 150 students and 0.5 aides for each special education teacher or 0.96 teachers and 0.48 aides
9. Students with severe disabilities	100% state reimbursement minus federal funds	100% state reimbursement minus federal funds	100% state reimbursement minus federal funds
10. Resources for gifted/talented students	\$25/student	\$25/student	\$25/student
11. Substitutes	10 days per FTE	10 days per FTE	10 days per FTE
12. Pupil support staff	1 for every 100 poverty students: 2.16	1 for every 100 poverty students: 1.44	1 for every 100 poverty students: 1.44
13. Supervisory Aides	2.0	2.0	2.0
14. Librarians/media specialists	1.0	0.67	0.33
15. Principal	1.0	0.67	0.33
16. School Site Secretary**	2.0	1.34	0.66
<b>Dollar per Pupil Resources</b>			
Professional development	<u>Included above:</u> Instructional facilitators 10 summer days <u>Additional:</u> \$100/pupil for other PD expenses – trainers, conferences, travel, etc.	<u>Included above:</u> Instructional facilitators 10 summer days <u>Additional:</u> \$100/pupil for other PD expenses – trainers, conferences, travel, etc.	<u>Included above:</u> Instructional facilitators 10 summer days <u>Additional:</u> \$100/pupil for other PD expenses – trainers, conferences, travel, etc.
Technology and equipment	\$250/pupil	\$250/pupil	\$250/pupil
Instructional materials, including textbooks, formative assessments	\$140/pupil	\$140/pupil	\$140/pupil
Student Activities	\$25/pupil	\$25/pupil	\$25/pupil

**Table 1 (Continued)**  
**Recommendations for Adequate Resources for**  
**Prototypical Elementary Schools**

School Element	Prototype K-5 Elementary School	Elementary Schools	PreK Programs
<b>Other Expenditures*</b>			
Operations and Maintenance	\$940 per pupil	\$940 per pupil	\$940 per pupil
Transportation	\$390 per pupil	\$390 per pupil	\$390 per pupil
Food Services	\$340 per pupil	\$340 per pupil	\$340 per pupil

\* Note: “Other Expenditures” are carried forward in this model; actual state expenditures for operations and maintenance, transportation, and food are used. National averages for these and all other elements are listed in the Table 1. In typical studies by Lawrence O. Picus and Associates, the cost of food services is assumed to be a self-supporting enterprise activity; where such services operate at a loss, the model recommends out-sourcing the function to a private sector company whose core business is food services, such as ARA Services. In this model, in an attempt to ease comparisons between actual expenditures and the costs associated with the evidence-based model, these expenditures are carried forward.

### 3. PREK-3<sup>RD</sup> PROGRAM SITE VISITS

An important part of our study was to visit six programs identified by the staff at the Foundation for Child Development to develop a better understanding of the resources in those programs and particularly the resources they used to coordinate PreK-3<sup>rd</sup> programs and to ascertain whether or not the resources identified in the Evidence Based model are adequate high quality and coordinated PreK programs with K-3 programs.

The programs represented in the six site visits represent a number of different approaches to providing integrated PreK-3<sup>rd</sup> programs for children. There are two versions of the long standing and successful CPC program in Chicago. There is a single school in a large urban district that benefits from a tremendous influx of private funds each year to design an integrated PreK-3<sup>rd</sup> program. There are two large urban school districts, one with a highly focused school improvement strategy that operates across grade levels to help all students meet performance standards and a second facing substantial funding cutbacks and looking for ways to maintain preschool programs that are in varying states of integration/coordination. Another district uses the limited resources it has available to create incentives for preschool programs to integrate with the district's PreK-3<sup>rd</sup> program goals by purchasing curriculum materials and including staff of community preschool programs in professional development activities, and by encouraging parent involvement programs across all PreK providers who are interested in participating.

Class sizes for PreK programs ranged from 15 to 20, all staffed with certificated teachers paid on the regular district salary schedule and an aide. Beyond these staffing configurations, the schools relied on additional professional support in the schools to meet the needs of PreK children along with children enrolled in K-3 classes. Strategies for struggling students varied, and in many instances, outside of children with disabilities requiring special education services, most schools/districts seemed to feel that PreK was too early to really identify and single out struggling students, preferring to rely on the small classes with the aides to help children work through the various academic, developmental, and social problems they might exhibit.

Consequently, the major focus of integrating PreK-3<sup>rd</sup> services is around ongoing collaborative professional development focused on aligning curriculum and tracking student progress. In one district there is a kindergarten assessment tool used for placement in school programs. If partner PreK programs are interested, the district shares the results of those assessments with the preschools so they can adjust instructional practices if they would like.

In another district there is a PreK-5 aligned curriculum with formative and benchmark assessments; schools focus on integration of services from PreK through elementary school, and professional development activities and strategies for struggling students are integrated across the grades present at each school, including PreK.

The most tightly coordinated programs seem to be the CPC programs. In these programs, PreK teachers have regular planning and preparation periods just like regular K-5

teachers; this provides time for collaboration around curriculum and instructional issues during the regular school day. In addition, ongoing professional development is provided to PreK teachers by the CPC head teacher, who in this professional development role functions like the instructional coaches in the regular K-5 program. Interestingly, in another urban district, PreK-3<sup>rd</sup> program integration is hampered – at least in the school we visited – because of enrollment lotteries at both the PreK level and again when children enroll in kindergarten limiting the effectiveness of any integration efforts.

All of the programs have resources for parent outreach. One district does this with staff from the central early childhood offices who visit schools periodically. The early CPC programs relied on a full time parent resource teacher and a full-time community liaison. Today, those CPC resources have been cut from the program and all functions of those resources appear to have been rolled into the responsibilities of the head teacher position. In the school with high levels of private support, parent outreach is a critical component of the program, although staff are paid for by funds from a private foundation. Another district works hard to coordinate parent outreach with the regular school programs to encourage parents to send their children to PreK programs. The remaining large urban district’s parent outreach appears to be less focused.

The Evidence-Based model provides adequate resources for these components of the program through the pupil support staff element, and the additional site leadership time the model would fund for PreK children at an existing school (as enrollment grows, so does support for site leadership).

Overall, our sense is that the resources available through the Evidence-Based model and identified above in Table 1 exceed those in all of the PreK programs visited and are adequate to meet the service delivery and integration needs of schools providing comprehensive PreK-3<sup>rd</sup> programs. Indeed, the Evidence-Based model provides resources for the PreK program that would match that in the original CPC program in Chicago,<sup>12</sup> which over time has seen the initial staffing dramatically reduced. The Evidence-Based model’s staffing totals appear to match the number of staff in schools with PreK-3<sup>rd</sup> programs even at the urban school with considerable private funding. And the superintendent of one district who has considerable familiarity with the Evidence-Based model seemed to feel that if the PreK and K-3 resources were all funded as described in the model, integration of programs across the Prek-3<sup>rd</sup> spectrum would not be a problem.<sup>13</sup>

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<sup>12</sup> We note that the research on the long term impacts of the CPC program is on its original program configuration, not the reduced program configuration we found in the schools visited.

<sup>13</sup> Many of the resources that support students and teachers are enrollment driven and thus increase as the number of children increases – even if they are 3-and 4-year olds)

#### 4. COST ESTIMATES

To estimate the costs of providing a PreK-3<sup>rd</sup> program on a national basis, we adapted a costing model developed to estimate the state-by-state costs of the Evidence-Based model for K-12 education programs. The model uses the resources identified in Table 1 above and applies them to state-by-state enrollment counts to establish an estimate of the costs of the Evidence-Based model for each state. It is designed to allow us to vary many of the assumptions in the model including such things as the grade-by-grade pupil teacher ratio, salaries of personnel, whether or not programs for struggling students such as tutors, extended day or summer school are included, and the per-pupil funding level of resources that are funded on that basis. For our PreK-3<sup>rd</sup> model we added the ability to determine the estimated number of children who are eligible for and who participate in the program.

Our approach to estimating the cost of a PreK-3<sup>rd</sup> program on a national basis was to add capacity to the model for making estimates of program costs for 3 and 4 year old children, add that to our cost estimates for grades K-3, and subtract current expenditures for PreK-3<sup>rd</sup> programs. The result, computed for each state and summed to a national total provides an estimate of the additional costs of providing a PreK-3<sup>rd</sup> program. It should be noted that in some states current funding for PreK and K-3 funding exceeds our estimate of the additional funding needs of the Evidence Based model. It is likely this occurs in states with high K-12 expenditures and is a result of spending at that level, not because of high expenditures for PreK programs. In those instances, we did not assume reductions in funding, but rather only estimated the additional funding needs in those states where current funding levels are below our estimate.

##### **Enrollment Estimates**

The first step in developing our cost model was to estimate the number of 3 and 4 year olds who would participate. Because PreK programs are voluntary, in addition to estimating the number of children eligible for PreK programs, we also needed to be able to adjust the percent of eligible children we anticipate will enroll in PreK programs.

Working with the Population Dynamics Research Group at the University of Southern California, we used the American Community Survey data available from the United States Census Bureau to determine the number of 3-and 4-year-old children by state as well as the number of children in each state living in families at or below 100% and 200% of the poverty level. Table 2 displays the total number of 3-and 4-year-olds we estimate would participate in PreK programs depending on the assumptions made regarding participation rate and eligibility criteria. Appendix A contains our state-by-state estimates of the number of potential PreK children by state.

**Table 2: Estimated Number of 3 and 4 Year Old Children in PreK Programs by Poverty Level and Participation Rates, 2005**

Participation Rate	Number of 3 and 4 year Olds		
	100% of poverty level	200% of poverty level	All
50%	852,391	1,772,081	4,063,871
65%	1,108,108	2,303,705	5,283,032
100%	1,704,781	3,544,161	8,127,742

Source: Population Dynamics Research Group at the University of Southern California, and the United States Census Bureau

Because PreK programs are voluntary, the model needs to accommodate variations in the estimated number of children who will enroll as well as variations in the resources in the model. For the cost estimates that follow, we identified 18 possible options. These include the number of 3-and 4-year-olds in the United States in 2005, as well as the number living in families at 100% and 200% of the poverty level.

To accommodate the fact that PreK programs are voluntary we also include estimates that assume all children will participate as well as estimates using participation rates of 50% and 65%. These participation rates were chosen because 50% is often stated as a national goal for PreK participation in state funded programs, and because 65% represents a participation rate that approximates the 68% participation rate in Oklahoma, the state currently offering universal PreK programs with the highest participation rate (Barnett, et. al., 2007). Finally, we also provide estimates for each of the parameters identified above with PreK class size of 15 and PreK class size of 20. This results in 18 separate cost estimates that use: three eligibility options (all 3- and 4-year-olds, 3-and 4-year-olds at 100% and at 200% of poverty); three participation rates for eligible children (50%, 65% and 100%); and two alternative PreK class size options (15 and 20).

### **Other Cost Factors**

There are a number of other variables in the model that impact the total costs of the Evidence-Based model. The most important is personnel compensation (salaries and benefits). For teacher salaries, which are the largest component of educational costs, the model allows us to use either national average teacher salary or state-by-state salary estimates developed by the National Education Association (NEA, 2007). If national average salaries are used, adjusted by a Comparable Wage Index (CWI) (Taylor & Fowler, 2006), the model allows the user to include a regional cost adjustment factor if desired. For all other personnel compensation, we have used national averages. Appendix B includes tables identifying the compensation estimates used in the cost estimates below. For the analyses provided here, we have used state average salary data as we believe it more accurately reflects the estimated costs of providing staff in each state.

The compensation data allow us to estimate the costs of the staff resources in the Evidence-Based model which can be added to the per pupil costs identified in Table 1 above. For each state, we estimate the number of PreK children (which varies based on assumptions identified below) and the number of students enrolled in K-3 programs. We then estimate the costs of the Evidence-Based model as if they were all enrolled in prototype size schools. We are confident that this approach offers accurate estimates of the costs of this model.

In individual states where we have made school-by-school cost estimates, our approach is to pro-rate the resources linked to individual schools on the basis of actual enrollments.<sup>14</sup> Thus the per pupil costs would be very close to the estimates derived by assuming all children are in prototypical sized schools. In some states we have developed additional tools to estimate the additional costs incurred by very small schools due to dis-economies of scale.

Once we have estimated the costs of the Evidence-Based model for each state, we subtract current state expenditures for PreK-3<sup>rd</sup> programs. Data for estimates of current expenditures for PreK programs were provided by NIEER for the 2005-06 fiscal year and represent NIEER's estimates of state funding for PreK programs. Estimates of state-by-state expenditures for K-3 programs are difficult to obtain. Typically states (and school districts) do not collect or report fiscal data by grade level. In fact in many states it is not even possible to distinguish between elementary and secondary school expenditures, only by districts which typically serve students in grades K-12. Consequently, our approach to estimating current expenditures for K-3 education was to take 4/13 of the per pupil expenditures for education in each state and multiply that figure by K-3 enrollment. This figure was then subtracted from the estimated K-3 costs of the Evidence-Based model. It is important to note that using this approach, some states currently spend more for K-3 education than the model estimates is needed to fund the resources identified in Table 1 (for more details on this issue see Odden, Goetz & Picus (2008),; and Odden, Picus & Goetz, under review). Finally all per child cost figures presented here are computed by dividing our cost estimates by the number of PreK-3<sup>rd</sup> students we estimate are served, a number which varies based on the PreK enrollment assumptions in the model.

Our view is that the 100% participation rate is unlikely to be reached, and that a rate of 65% represents a more likely participation rate in the long term. We base this on Oklahoma's participation rate of about 68% for 4 year olds in its universal PreK program.

The cost estimates provided below are based on estimates of 3-and 4-year-old children in 2005, and use cost data for the 2005-06 fiscal year, the last year for which we had complete data for all components of the funding model. We have also estimated the

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<sup>14</sup> As an example of how this works, if a prototype school has 240 students, a school with 480 students would receive twice the level of teacher resources (core and specialist) as well as double the number of coaches, support staff, etc. Depending on available data and model parameters, staff for struggling students would either be doubled (if based on state averages as done for this report) or based on the actual count of free and reduced price lunch students or other proxy for at risk children as determined in the individual state.

national and state-by-state costs of the PreK component of the model under varying class size assumptions, using both 15 students in a class and 20 students in a class. For all cost estimates presented here, we have used both class size parameters. The estimates show the national costs and the change in costs per child for PreK-3<sup>rd</sup> programs using the Evidence-Based model under a variety of assumptions regarding the number of 3 and 4 year old children eligible and electing to participate in the PreK component of the PreK-3<sup>rd</sup> model (Barnett, et. al., 2007).

## **Cost Estimates**

### *PreK Program Costs*

Assuming universal access to PreK programs for all 3-and 4-year-olds, and a participation rate of 65%, we estimate the total national costs of PreK programs using our Evidence Based model with PreK class sizes of 20 children to be \$56 Billion, or an average of \$10,617 per enrolled child. State per child costs for PreK programs under these assumptions range from a low of \$8,390 in South Dakota to a high of \$13,783 in the District of Columbia. Table 4 shows the state-by-state estimated costs of an Evidence-Based PreK program for all 50 states plus the District of Columbia if all 3-and 4-year olds are eligible and the participation rate is 65%.

By way of comparison, our model estimates PreK costs of \$9,018 per child in Oklahoma (which has universal access and a 68% participation rate), compared to NIEER's current spending estimate of \$6,731 (\$3,433 from state sources and the balance from local funds).

In New Jersey, which has the highest PreK spending per child, our model estimates costs of \$12, 822 per child compared with NIEER's estimate of \$11,831 per child. In Georgia (like Oklahoma, a state with universal PreK access for 4-year olds) our model estimates per pupil costs of \$10,289 compared with NIEER estimated spending of \$4,111 per child.

Reducing average class size in PreK programs to 15 increases the national cost to \$97.3 billion or \$11,974 per child served. Under this assumption, per child costs range from a low of \$9,394 in South Dakota to a high of \$15,377 in the District of Columbia. Costs per child in Oklahoma are estimated at \$10,121. In New Jersey, with class size of 15 estimated costs per child increase to \$14,394 and in Georgia the are estimated at \$11,622 per child.

Table 4 displays the estimated total and per child costs of the Evidence-Based PK model for all of the states. These figures only represent the costs of PreK programs. Below, we provide more comprehensive estimates of the costs of a PreK-3<sup>rd</sup> integrated program for all 50 states.

**Table 4**  
**Estimated Costs of an Evidence-Based PreK Program by State**  
**(Universal Eligibility with 65% Participation)**

State	PK Enrollment		PK Adequacy Cost	
	Universe		Per-Pupil	State Cost
Alabama	77,433		\$9,295	\$719,747,829
Alaska	11,649		\$11,393	\$132,717,881
Arizona	117,151		\$9,777	\$1,145,412,523
Arkansas	47,077		\$9,336	\$439,529,844
California	705,540		\$11,794	\$8,321,046,465
Colorado	88,422		\$9,743	\$861,535,301
Connecticut	57,980		\$12,169	\$705,584,971
Delaware	15,348		\$11,683	\$179,311,690
District of Columbia	9,715		\$13,783	\$133,899,824
Florida	289,448		\$9,750	\$2,822,210,568
Georgia	175,439		\$10,289	\$1,805,079,147
Hawaii	26,280		\$10,088	\$265,106,692
Idaho	30,555		\$8,899	\$271,909,929
Illinois	227,278		\$11,694	\$2,657,772,455
Indiana	115,037		\$10,394	\$1,195,721,546
Iowa	48,456		\$9,121	\$441,948,792
Kansas	50,018		\$9,405	\$470,419,824
Kentucky	72,893		\$9,490	\$691,784,340
Louisiana	84,642		\$9,393	\$795,010,046
Maine	14,291		\$9,600	\$137,185,848
Maryland	97,171		\$11,309	\$1,098,927,445
Massachusetts	105,160		\$11,801	\$1,240,995,349
Michigan	172,053		\$11,237	\$1,933,401,034
Minnesota	85,335		\$10,401	\$887,601,687
Mississippi	61,236		\$9,058	\$554,683,778
Missouri	100,946		\$9,492	\$958,141,359
Montana	13,923		\$8,960	\$124,743,821
Nebraska	30,295		\$9,181	\$278,147,440
Nevada	42,374		\$9,812	\$415,789,271
New Hampshire	17,599		\$9,857	\$173,463,638
New Jersey	152,864		\$12,822	\$1,960,085,721
New Mexico	32,986		\$9,706	\$320,180,164
New York	321,192		\$12,378	\$3,975,678,703
North Carolina	159,430		\$9,655	\$1,539,224,624
North Dakota	8,372		\$8,758	\$73,322,394
Ohio	200,282		\$10,656	\$2,134,245,821
Oklahoma	63,289		\$9,018	\$570,720,244
Oregon	57,268		\$10,264	\$587,795,064
Pennsylvania	183,600		\$11,249	\$2,065,253,002
Rhode Island	15,896		\$11,295	\$179,543,748
South Carolina	73,234		\$9,510	\$696,457,656
South Dakota	13,424		\$8,390	\$112,625,421
Tennessee	103,893		\$9,451	\$981,908,455
Texas	480,742		\$9,884	\$4,751,827,746
Utah	61,361		\$8,927	\$547,790,492
Vermont	9,669		\$9,904	\$95,760,467
Virginia	133,005		\$10,417	\$1,385,485,553
Washington	102,123		\$10,200	\$1,041,688,898
West Virginia	22,955		\$9,770	\$224,269,007
Wisconsin	88,303		\$10,256	\$905,677,773
Wyoming	8,399		\$9,682	\$81,325,995
<b>Total</b>	<b>5,283,032</b>		<b>\$10,617</b>	<b>\$6,089,697,285</b>

### *Prek-3<sup>rd</sup> Program Costs*

Tables 5 and 6 show the estimated total and total per-pupil costs of integrated PreK-3<sup>rd</sup> programs. Tables 7 and 8 show the estimated increase in total and increase in per-pupil costs of integrated Prek-3<sup>rd</sup> programs. The tables show 18 estimated costs that vary according to the class size of the PreK program, whether the program is for students at or below 100% of the poverty level, 200% of the poverty level or a universe program, and at three different participation rates: 50%, 65% and 100%.<sup>15</sup>

Assuming average class size of 20 (with a teacher and an aide) for PreK programs and an average class size of 15 for K-3 programs, along with universal access for all 3-and 4-year olds, and a participation rate of 65%, our Evidence Based model estimates total PreK-3<sup>rd</sup> costs to be just over \$215 billion, or an increase of approximately \$71.5 billion over the \$143.5 billion we estimate is currently spent for Prek-3<sup>rd</sup> spending. Our estimate amounts to \$10,867 per pupil or an increase of \$3,626 per pupil compared to our estimate of current spending of \$7,280 per pupil.

If we assume a PreK class size of 15 with a teacher and an aide, Table 7 shows estimated additional total PreK-3<sup>rd</sup> costs for the Evidence-Based model range from \$28.4 Billion if enrollment is limited to 3-and 4-year-old children at 100% of the poverty level and a participation rate of 50%, to a total of \$78.7 billion for universally available PreK programs and a 65% participation rate (the highest rate we think is reasonably feasible in the short and medium term). If a class size of 20 is used, these estimates range from \$27.4 billion (eligibility at 100% of poverty and a 50% participation rate) to \$71.5 billion if all students are eligible and 65% participate. Detailed tables in Appendix C provide estimates of the costs of PreK-3<sup>rd</sup> programs by state under all 18 options.

Table 8 shows these data on a per Prek-3<sup>rd</sup> student basis. If we assume a class size of 15 in PreK, national average additional costs per PreK-3<sup>rd</sup> student in states that currently do not provide adequate levels of funding would be between \$2,169 for 100% of poverty eligibility and 50% participation, to \$3,975 per child for universal PreK with 65% participation. If we estimate PreK class sizes of 20, these figures range from \$2,095 (100% poverty, 50% participation) to \$3,626 (universal eligibility, 65% participation).

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<sup>15</sup> There are a total of 18 cost estimates because of the variety of assumptions that can be made regarding the number of 3-and 4-year-olds who receive PreK services. Our model allows the number of 3-and 4-year-olds to be varied on the basis of eligibility (all, 100% or 200% of poverty), participation rate (continuously variable in the model but estimated at 50%, 65% and 100% in the tables that follow), and PreK class size (15 or 20). This leads to 18 possible combinations of 3-and 4-year-old enrollment counts.

**Table 5: Estimated *Total* Costs of Providing PreK-3<sup>rd</sup> Programs Using the Evidence Based Model in 2005-06 in States with Spending Currently Below Evidence-Based Adequacy Estimates (Billions of Dollars): Estimated PreK class size of 15 and 20<sup>16</sup>**

	Number of 3 and 4 year Olds					
	100% of poverty level		200% of poverty level		All	
Average PreK Class Size	15	20	15	20	15	20
50% participation	169.3	168.2	180.6	178.2	207.6	202.1
65% participation	172.4	171.0	187.1	184.0	222.2	215.0
100% participation	179.8	177.5	202.2	197.5	256.2	245.2

**Table 6: Estimated *Per-Child Total* Costs of Providing PreK-3<sup>rd</sup> Programs Using the Evidence Based Model in States with Spending Currently Below Evidence-Based Adequacy Estimates (Dollars): Estimated Class Size of 15 and 20<sup>17</sup>**

	Number of 3 and 4 year Olds					
	100% of poverty level		200% of poverty level		All	
Average PreK Class Size	15	20	15	20	15	20
50% participation	11,029	10,954	11,097	10,951	11,181	10,884
65% participation	10,794	10,953	11,132	10,948	11,230	10,867
100% participation	11,091	10,950	11,207	10,944	11,323	10,836

<sup>16</sup> These data assume no funds are recaptured from states spending above an adequate level given the Evidence-Based approach.

<sup>17</sup> These data are based on the weighted average per pupil resource needs for states requiring additional resources to meet estimated adequacy levels.

**Table 7: Estimated *Additional* Costs of Providing PreK-3<sup>rd</sup> Programs Using the Evidence Based Model in 2005-06 in States with Spending Currently Below Evidence-Based Adequacy Estimates (Billions of Dollars): Estimated PreK class size of 15 and 20<sup>18</sup>**

	Number of 3 and 4 year Olds					
	100% of poverty level		200% of poverty level		All	
	15	20	15	20	15	20
Average PreK Class Size	15	20	15	20	15	20
50% participation	28.4	27.4	38.2	36.1	64.1	58.6
65% participation	31.0	29.8	44.0	41.2	78.7	71.5
100% participation	37.3	35.3	58.8	54.1	112.7	101.7

**Table 8: Estimated Per-Child *Additional* Costs of Providing PreK-3<sup>rd</sup> Programs Using the Evidence Based Model in States with Spending Currently Below Evidence-Based Adequacy Estimates (Dollars): Estimated Class Size of 15 and 20<sup>19</sup>**

	Number of 3 and 4 year Olds					
	100% of poverty level		200% of poverty level		All	
	15	20	15	20	15	20
Average PreK Class Size	15	20	15	20	15	20
50% participation	2,169	2,095	2,692	2,545	3,471	3,179
65% participation	2,332	2,237	2,763	2,790	3,975	3,626
100% participation	2,623	2,500	3,281	3,099	4,981	4,494

<sup>18</sup> These data assume no funds are recaptured from states spending above an adequate level given the Evidence-Based approach.

<sup>19</sup> These data are based on the weighted average per pupil resource needs for states requiring additional resources to meet estimated adequacy levels.

It is important to recall that not all of these costs are for providing the PreK component of the Evidence-Based program. In many states additional funding is required to provide all of the resources in the Evidence-Based model for children in grades K-3 as well.

Regardless of the assumption of PreK class size of 15 or 20, if PreK enrollment is limited to 3- and 4-year-olds at 100% of the poverty level with a 50% participation rate, we estimate that 12 states currently have adequate resources to fully fund our PreK-3<sup>rd</sup> model while the remaining 39 do not have adequate funding levels today (See Tables C1 and C10 in Appendix C). The same 12 states have adequate funding if the participation rate is increased to 65% regardless of PreK class size (Tables C2 and C11), while nine of them have adequate funding if we assume all 3- and 4-year-olds at 100% of the poverty rate participate in PreK programs in class sizes of 15 (Table C3) and ten states have adequate funding under those assumptions and class size of 20 (Table C12). This compares with the NIEER estimate that 19 of the 38 states with state funded PreK programs have adequate funding to meet the NIEER quality standards (NIEER, p.19).

Table C1 shows that on a per child basis, with eligibility established at 100% of the poverty level, a 50% participation rate, Arizona would need \$4,531 more per child to fully fund the PreK-3<sup>rd</sup> program described in Table 1 with class size of 15, and an additional \$4,453 per student with class size of 20. At the other extreme, Vermont would have an estimated \$3,039 more per child than the model requires with class sizes of 15, and \$3,098 with class sizes of 20 in PreK. At a participation rate of 65% with eligibility still at 100% of the poverty level, Arizona would need an additional \$4,654 per child with PreK class size at 15 and an additional \$4,555 with classes at 20. Vermont has \$2,841 more than the model estimates with a class size of 15, and \$2,918 more with class size of 20 under the same eligibility and participation assumptions.

At PreK class sizes of 15, if eligibility is changed so that PreK programs are available to children in families at 200% of the poverty level, ten states have adequate PreK-3<sup>rd</sup> funding levels if half the eligible children participate (Table C4); five states have adequate PreK-3<sup>rd</sup> funding levels if 65% of the eligible children participate; and three states have adequate PreK-3<sup>rd</sup> funding if all eligible children participate. If PreK class size is 20, then with eligibility at 200% of poverty, 10 states have adequate funding at 50% participation, and 9 states have adequate funding at 65% participation.

At PreK class sizes of 15, if PreK programs are made universally available for all 3 and 4 years olds, only two states, Vermont and Maine, would have adequate funding at an estimated 50% participation rate, and none of the states currently have adequate PreK-3 funding at participation rates of 65% or 100%. If PreK class size increases to 20, Wyoming joins Vermont and Maine at 50% participation rate, and even at a 65% participation rate, Maine continues to have adequate funding.

Using universal eligibility and 65% participation rate, we estimate at the extremes, that California would require an additional \$6,071 per child and Maine would need an additional \$126 per child at PreK class sizes of 15. At PreK class sizes of 20, California would need an additional \$5,630 per child while Maine would have adequate funding.

Oklahoma, a state with universal access to PreK programs for 4 year olds would need \$3,249 per child (class size of 15) despite a current PreK participation rate of 68% for those 4 year olds. The reason for this apparent discrepancy appears to be inclusion of 3 year olds in our model, as well as the likelihood that current K-3 expenditures in that state are not adequate to meet the resource requirements embedded in the Evidence Based model.

In summary, states are currently not spending enough money to provide quality PreK-3<sup>rd</sup> programs using the Evidence-Based school funding adequacy model. The additional costs of providing a program like this vary depending on assumptions of eligibility and participation rates of 3 and 4 year old children, and are substantially impacted by the level of current expenditures for children in grades K-3.

## CONCLUSIONS

The public and policy makers in the United States are realizing that if most (if not all) children are to meet their states' performance standards, an important part of helping them do so is the provision of high quality PreK-3<sup>rd</sup> education programs. High quality PreK programs have demonstrated their effectiveness in helping children come to school prepared to learn, and when combined with integrated K-3 programs, PreK-3<sup>rd</sup> programs have tremendous promise for helping all students get an early start toward meeting high expectations for learning.

Although our understanding of the resources needed to dramatically improve student learning is in its early stages, a great deal can be learned from current research about the best ways to deploy educational resources and strategies to improve performance. One method for estimating those resources is the Evidence-Based approach (Odden & Picus, 2008). In this document, we have used the Evidence-Based approach to estimate the resource needs of both PreK programs and K-3 programs for children in each of the 50 states plus the District of Columbia.

The resources identified are based on an approach that includes small classes focused intensely on core subjects (English, Math, Science, Social Studies and World Languages), as well as specialist teachers to provide a rich liberal arts program that includes music, arts and PE. The model includes resources to identify and help students who are struggling so that they return to the regular program at grade level as quickly as possible, and provides additional resources for children who are at risk of falling behind. Substantial resources are also provided for professional development for teachers and other school officials along with funds for special education, school site leadership, district administration and for the maintenance, operations and utility costs of running a school.

We have built a cost model that, on a state-by-state basis, estimates the costs of PreK-3<sup>rd</sup> education using the Evidence-Based model. It relies on development of prototype K-3 and PreK education programs and then resources those programs based on the model's specifications. In addition, the model provides flexibility to allow variation in the eligibility for PreK programs (all 3- and 4-year-olds, or 3- and 4-year-olds at 100% or 200% of the poverty level) as well as variation in the percentage of 3- and 4-year-old children that would participate in PreK programs. Many other variables can be adjusted as well so it is possible to estimate the total – and additional – costs of PreK-3<sup>rd</sup> programs under a variety of assumptions.

As we discovered when variations of our model were run, in some instances, some states actually spend more at the present time for PreK schools than our model suggests. This tends to happen in states that currently have high K-3 expenditures or that serve a large proportion of PreK children in relatively expensive programs. As the eligibility requirements and participation rates increase, fewer and fewer states have adequate funding. In the cases where states have more resources than the model recommends, our

total cost estimates do not assume reductions in spending in those states, but rather sum the additional funding requirements of the other states.

Under that logic, if we assume that 65% of 3-and 4-year-old children will participate in PreK programs and the system provides for PreK class sizes of 20 with a teacher and an aide, the additional cost of providing the resources for Prek-3<sup>rd</sup> ranges from \$29.8 billion if eligibility is limited to 3-and 4-year-olds at 100% of the poverty level to \$71.5 billion if PreK is universally available to 3-and 4-year-olds. It is important to remember that these cost figures in many instances also assume increased spending for K-3 programs as well.

One of the keys to a strong PreK-3<sup>rd</sup> program is integration across all levels, something that has been hard to achieve in the past. Following a total of six site visits to schools and districts with highly regarded PreK programs, we have concluded that the resources identified in the model will provide schools and districts with adequate personnel to coordinate and integrate Prek-3<sup>rd</sup> programs.

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**Appendix A**  
**Estimated Number of 3 and 4 year olds at Poverty Levels (2005)**

	Total	100% Poverty	200% Poverty
Alabama	119,916	34,534	60,799
Alaska	16,955	1,598	6,350
Arizona	186,779	43,429	91,972
Arkansas	79,670	21,648	42,169
California	1,072,939	215,324	489,444
Colorado	134,159	24,025	53,484
Connecticut	83,879	10,180	22,382
Delaware	23,706	3,741	8,745
District of Columbia	12,746	5,231	8,552
Florida	443,302	91,786	205,590
Georgia	276,819	63,636	126,147
Hawaii	36,354	5,253	14,128
Idaho	44,136	8,491	24,469
Illinois	360,778	64,308	133,411
Indiana	175,755	35,563	77,050
Iowa	77,495	12,170	29,411
Kansas	77,279	15,179	35,527
Kentucky	103,969	29,015	59,234
Louisiana	122,479	38,952	64,825
Maine	28,475	4,821	8,527
Maryland	146,997	17,679	42,699
Massachusetts	150,434	20,248	42,627
Michigan	268,010	53,967	102,465
Minnesota	137,810	18,108	38,133
Mississippi	78,262	32,936	55,345
Missouri	155,171	33,726	71,447
Montana	22,208	3,079	10,153
Nebraska	49,833	7,975	19,691
Nevada	73,378	10,866	26,776
New Hampshire	27,029	1,874	5,512
New Jersey	228,462	36,757	73,361
New Mexico	59,244	15,182	32,231
New York	494,699	109,419	201,136
North Carolina	243,439	56,609	114,348
North Dakota	13,121	2,070	4,943
Ohio	296,804	68,802	136,223
Oklahoma	95,103	23,906	52,992
Oregon	90,196	17,748	41,506
Pennsylvania	288,740	54,684	110,200
Rhode Island	24,739	5,511	9,915
South Carolina	112,210	27,866	54,112
South Dakota	24,266	5,593	11,118
Tennessee	154,894	36,999	80,323
Texas	786,158	210,945	396,061
Utah	95,386	9,177	38,156
Vermont	14,772	2,440	5,966
Virginia	206,468	29,871	64,654
Washington	159,652	26,421	62,823
West Virginia	41,531	9,745	18,321
Wisconsin	140,047	23,460	52,694
Wyoming	12,977	2,234	6,014
<b>Total</b>	<b>8,169,630</b>	<b>1,704,781</b>	<b>3,544,161</b>

**Appendix B**  
**Tables with compensation data<sup>20</sup>**  
**Table C1: National Average Compensation for School and District Staff**  
**(Excluding Teachers)**

Position	Salary	Model Benefits	Total Compensation
<b>School Building</b>			
Principal	\$80,411	\$20,986	\$101,397
Asst. principal	\$67,836	\$18,956	\$86,792
Media Tech	\$37,562	\$14,066	\$51,629
Other Prof Staff	\$54,071	\$16,732	\$70,803
School Secretary	\$24,887	\$12,019	\$36,906
School Clerical	\$19,910	\$11,215	\$31,125
Supervisory Aide	\$15,915	\$10,570	\$26,485
Custodian	\$18,176	\$10,935	\$29,112
<b>Central Office</b>			
Superintendent	\$116,244	\$26,773	\$143,017
Asst. Superintendent	\$99,771	\$24,113	\$123,884
Business Manager	\$78,154	\$20,622	\$98,776
Instructional Services Staff-personnel	\$83,279	\$21,450	\$104,729
Services	\$80,568	\$21,012	\$101,580
Technology	\$66,832	\$18,793	\$85,625
Other Areas	\$68,229	\$19,019	\$87,248
Secretary	\$33,077	\$13,342	\$46,419
Accounting/payroll clerks	\$34,829	\$13,625	\$48,454
Typists/data-entry clerks	\$26,156	\$12,224	\$38,380
<b>Substitutes</b>	\$100	\$8	\$108/day

<sup>20</sup> Note, staff not on the teacher salary scheduled are adjusted by the CWI for each state. The teacher salaries by state are utilized in the model for teacher, librarian, nurse, and counselor FTEs.

**Table B2**  
**Average Teacher Salaries by State**

<b>State</b>	<b>Avg. NEA Salary (05-06)</b>	<b>Model Benefits</b>	<b>Additional 5 Days PD</b>	<b>Total Compensation</b>
Alabama	\$40,347	\$14,516	\$1,267	\$56,130
Alaska	\$53,553	\$16,649	\$1,681	\$71,883
Arizona	\$44,672	\$15,215	\$1,402	\$61,289
Arkansas	\$42,768	\$14,907	\$1,343	\$59,018
California	\$59,825	\$17,662	\$1,878	\$79,365
Colorado	\$44,439	\$15,177	\$1,395	\$61,011
Connecticut	\$59,304	\$17,578	\$1,862	\$78,743
Delaware	\$54,264	\$16,764	\$1,703	\$72,731
District of Columbia	\$59,000	\$17,529	\$1,852	\$78,381
Florida	\$43,302	\$14,993	\$1,359	\$59,655
Georgia	\$48,300	\$15,800	\$1,516	\$65,617
Hawaii	\$49,292	\$15,961	\$1,547	\$66,800
Idaho	\$41,150	\$14,646	\$1,292	\$57,088
Illinois	\$58,686	\$17,478	\$1,842	\$78,006
Indiana	\$47,255	\$15,632	\$1,483	\$64,370
Iowa	\$41,083	\$14,635	\$1,290	\$57,008
Kansas	\$41,467	\$14,697	\$1,302	\$57,466
Kentucky	\$42,592	\$14,879	\$1,337	\$58,808
Louisiana	\$40,029	\$14,465	\$1,257	\$55,750
Maine	\$40,737	\$14,579	\$1,279	\$56,595
Maryland	\$54,333	\$16,775	\$1,706	\$72,813
Massachusetts	\$56,369	\$17,104	\$1,770	\$75,242
Michigan	\$54,739	\$16,840	\$1,718	\$73,298
Minnesota	\$48,489	\$15,831	\$1,522	\$65,842
Mississippi	\$40,576	\$14,553	\$1,274	\$56,403
Missouri	\$40,462	\$14,535	\$1,270	\$56,267
Montana	\$39,832	\$14,433	\$1,250	\$55,515
Nebraska	\$40,382	\$14,522	\$1,268	\$56,171
Nevada	\$44,426	\$15,175	\$1,395	\$60,995
New Hampshire	\$45,263	\$15,310	\$1,421	\$61,994
New Jersey	\$58,156	\$17,392	\$1,826	\$77,374
New Mexico	\$41,637	\$14,724	\$1,307	\$57,668
New York	\$57,354	\$17,263	\$1,800	\$76,417
North Carolina	\$43,922	\$15,093	\$1,379	\$60,394
North Dakota	\$37,764	\$14,099	\$1,185	\$53,048
Ohio	\$50,314	\$16,126	\$1,579	\$68,019
Oklahoma	\$38,772	\$14,262	\$1,217	\$54,251
Oregon	\$50,044	\$16,082	\$1,571	\$67,697
Pennsylvania	\$54,027	\$16,725	\$1,696	\$72,448
Rhode Island	\$54,730	\$16,839	\$1,718	\$73,287
South Carolina	\$43,011	\$14,946	\$1,350	\$59,307
South Dakota	\$34,709	\$13,606	\$1,090	\$49,404
Tennessee	\$42,537	\$14,870	\$1,335	\$58,742
Texas	\$41,744	\$14,742	\$1,310	\$57,796
Utah	\$40,007	\$14,461	\$1,256	\$55,724
Vermont	\$46,622	\$15,529	\$1,464	\$63,615
Virginia	\$43,823	\$15,077	\$1,376	\$60,276
Washington	\$46,326	\$15,482	\$1,454	\$63,262
West Virginia	\$38,284	\$14,183	\$1,202	\$53,669
Wisconsin	\$46,390	\$15,492	\$1,456	\$63,338
Wyoming	\$43,255	\$14,986	\$1,358	\$59,599

## **Appendix C**

### **Cost Estimate Output Tables**

**Table C1: State By State Cost Estimates: PreK Eligibility 100% of Poverty, 50% Participation Rate, PreK Class size 15**

State	PreK-3rd Cost Cost Estimate	PreK-3rd Cost Estimate Per Pupil	Estimate of PreK-3rd Current Expenditures	PreK-3rd Expenditures Per Pupil	Difference	Difference Per-Pupil
Alabama	\$2,451,497,643	\$9,811	\$1,923,963,356	\$7,700	\$527,534,287	\$2,111
Alaska	\$472,578,963	\$11,866	\$415,453,133	\$10,432	\$57,125,830	\$1,434
Arizona	\$3,567,879,568	\$10,208	\$1,984,386,840	\$5,678	\$1,583,492,729	\$4,531
Arkansas	\$1,567,638,802	\$9,957	\$1,388,076,923	\$8,816	\$179,561,879	\$1,140
California	\$25,018,019,555	\$12,634	\$17,336,706,375	\$8,755	\$7,681,313,180	\$3,879
Colorado	\$2,453,781,175	\$9,902	\$2,236,083,814	\$9,023	\$217,697,361	\$878
Connecticut	\$2,167,393,550	\$12,475	\$2,283,009,822	\$13,140	(\$115,616,272)	(\$665)
Delaware	\$463,640,061	\$12,203	\$474,002,928	\$12,476	(\$10,362,867)	(\$273)
District of Columbia	\$348,041,139	\$14,829	\$390,419,340	\$16,634	(\$42,378,201)	(\$1,806)
Florida	\$8,774,233,315	\$10,157	\$7,045,975,633	\$8,156	\$1,728,257,682	\$2,001
Georgia	\$5,754,980,621	\$10,883	\$4,699,172,493	\$8,887	\$1,055,808,128	\$1,997
Hawaii	\$626,159,813	\$10,672	\$584,416,554	\$9,961	\$41,743,259	\$711
Idaho	\$782,503,899	\$9,282	\$600,439,457	\$7,122	\$182,064,442	\$2,160
Illinois	\$7,930,703,190	\$12,341	\$6,280,879,594	\$9,773	\$1,649,823,596	\$2,567
Indiana	\$3,563,713,639	\$10,799	\$2,924,860,476	\$8,863	\$638,853,163	\$1,936
Iowa	\$1,363,296,980	\$9,311	\$1,188,524,774	\$8,117	\$174,772,206	\$1,194
Kansas	\$1,402,790,323	\$9,753	\$1,252,259,938	\$8,707	\$150,530,385	\$1,047
Kentucky	\$2,165,929,869	\$10,099	\$1,845,776,125	\$8,607	\$320,153,744	\$1,493
Louisiana	\$2,261,653,430	\$10,104	\$2,012,595,113	\$8,991	\$249,058,317	\$1,113
Maine	\$564,048,784	\$9,763	\$682,037,695	\$11,805	(\$117,988,911)	(\$2,042)
Maryland	\$2,858,174,996	\$11,630	\$2,591,716,107	\$10,546	\$266,458,889	\$1,084
Massachusetts	\$3,533,289,030	\$12,081	\$3,816,456,990	\$13,050	(\$283,167,960)	(\$968)
Michigan	\$6,182,052,302	\$11,764	\$5,369,134,655	\$10,217	\$812,917,646	\$1,547
Minnesota	\$2,605,675,506	\$10,616	\$2,476,249,701	\$10,089	\$129,425,805	\$527
Mississippi	\$1,719,290,447	\$10,014	\$1,295,295,380	\$7,545	\$423,995,066	\$2,470
Missouri	\$2,768,038,438	\$9,683	\$2,281,809,614	\$7,982	\$486,228,824	\$1,701
Montana	\$398,299,501	\$9,278	\$371,477,465	\$8,653	\$26,822,035	\$625
Nebraska	\$819,202,269	\$9,362	\$720,038,193	\$8,228	\$99,164,076	\$1,133
Nevada	\$1,335,225,572	\$10,018	\$913,591,211	\$6,855	\$421,634,361	\$3,164
New Hampshire	\$549,276,511	\$9,780	\$577,258,766	\$10,278	(\$27,982,255)	(\$498)
New Jersey	\$5,379,327,770	\$13,101	\$6,095,448,780	\$14,845	(\$716,121,010)	(\$1,744)
New Mexico	\$1,095,639,488	\$10,254	\$941,646,903	\$8,813	\$153,992,586	\$1,441
New York	\$10,941,436,906	\$13,073	\$11,917,953,306	\$14,240	(\$976,516,400)	(\$1,167)
North Carolina	\$4,757,657,164	\$9,959	\$3,649,499,666	\$7,639	\$1,108,157,498	\$2,320
North Dakota	\$251,108,575	\$8,856	\$236,147,544	\$8,329	\$14,961,031	\$528
Ohio	\$6,269,819,902	\$10,981	\$5,649,112,737	\$9,894	\$620,707,165	\$1,087
Oklahoma	\$1,955,710,365	\$9,588	\$1,641,937,569	\$8,050	\$313,772,796	\$1,538
Oregon	\$1,885,860,836	\$10,840	\$1,570,678,854	\$9,028	\$315,181,983	\$1,812
Pennsylvania	\$6,313,111,230	\$11,673	\$6,000,052,342	\$11,094	\$313,058,888	\$579
Rhode Island	\$528,521,452	\$11,778	\$503,647,876	\$11,223	\$24,873,576	\$554
South Carolina	\$2,253,458,978	\$10,083	\$1,902,521,954	\$8,513	\$350,937,024	\$1,570
South Dakota	\$329,524,821	\$8,490	\$312,228,390	\$8,044	\$17,296,432	\$446
Tennessee	\$3,088,128,752	\$9,873	\$2,207,878,476	\$7,059	\$880,250,276	\$2,814
Texas	\$15,239,375,245	\$10,159	\$11,611,114,194	\$7,740	\$3,628,261,052	\$2,419
Utah	\$1,517,250,450	\$8,917	\$940,924,225	\$5,530	\$576,326,225	\$3,387
Vermont	\$271,366,379	\$10,185	\$352,334,956	\$13,223	(\$80,968,577)	(\$3,039)
Virginia	\$3,843,522,401	\$10,305	\$3,553,507,372	\$9,527	\$290,015,030	\$778
Washington	\$3,220,858,186	\$10,337	\$2,566,186,640	\$8,236	\$654,671,546	\$2,101
West Virginia	\$879,511,801	\$10,099	\$932,663,076	\$10,710	(\$53,151,275)	(\$610)
Wisconsin	\$2,597,013,926	\$10,415	\$2,671,830,955	\$10,715	(\$74,817,029)	(\$300)
Wyoming	\$259,618,540	\$9,987	\$314,823,162	\$12,110	(\$55,204,622)	(\$2,124)
Totals*	\$169,346,832,058	\$11,029	\$143,534,207,436	\$9,348	\$28,366,899,999	\$1,681

**Table C2: State By State Cost Estimates: PreK Eligibility 100% of Poverty, 65% Participation Rate, PreK Class size 15**

State	PreK-3rd Cost Cost Estimate	PreK-3rd Cost Estimate Per Pupil	Estimate of PreK-3rd Current Expenditures	PreK-3rd Expenditures Per Pupil	Difference	Difference Per-Pupil
Alabama	\$2,508,902,873	\$9,837	\$1,923,963,356	\$7,543	\$584,939,517	\$2,293
Alaska	\$475,853,644	\$11,877	\$415,453,133	\$10,370	\$60,400,511	\$1,508
Arizona	\$3,641,399,374	\$10,228	\$1,984,386,840	\$5,574	\$1,657,012,534	\$4,654
Arkansas	\$1,602,488,151	\$9,973	\$1,388,076,923	\$8,638	\$214,411,228	\$1,334
California	\$25,464,561,776	\$12,654	\$17,336,706,375	\$8,615	\$8,127,855,400	\$4,039
Colorado	\$2,494,603,097	\$9,922	\$2,236,083,814	\$8,894	\$258,519,283	\$1,028
Connecticut	\$2,189,220,298	\$12,491	\$2,283,009,822	\$13,026	(\$93,789,525)	(\$535)
Delaware	\$471,280,191	\$12,224	\$474,002,928	\$12,295	(\$2,722,737)	(\$71)
District of Columbia	\$360,353,479	\$14,857	\$390,419,340	\$16,096	(\$30,065,861)	(\$1,240)
Florida	\$8,928,967,158	\$10,174	\$7,045,975,633	\$8,028	\$1,882,991,525	\$2,145
Georgia	\$5,868,976,967	\$10,902	\$4,699,172,493	\$8,729	\$1,169,804,474	\$2,173
Hawaii	\$635,431,097	\$10,687	\$584,416,554	\$9,829	\$51,014,543	\$858
Idaho	\$795,723,229	\$9,298	\$600,439,457	\$7,016	\$195,283,772	\$2,282
Illinois	\$8,063,550,461	\$12,362	\$6,280,879,594	\$9,629	\$1,782,670,867	\$2,733
Indiana	\$3,627,946,535	\$10,819	\$2,924,860,476	\$8,722	\$703,086,060	\$2,097
Iowa	\$1,382,760,249	\$9,327	\$1,188,524,774	\$8,017	\$194,235,475	\$1,310
Kansas	\$1,427,568,240	\$9,771	\$1,252,259,938	\$8,571	\$175,308,303	\$1,200
Kentucky	\$2,213,613,275	\$10,116	\$1,845,776,125	\$8,435	\$367,837,150	\$1,681
Louisiana	\$2,324,832,320	\$10,122	\$2,012,595,113	\$8,763	\$312,237,207	\$1,359
Maine	\$572,112,927	\$9,780	\$682,037,695	\$11,659	(\$109,924,767)	(\$1,879)
Maryland	\$2,893,120,431	\$11,646	\$2,591,716,107	\$10,433	\$301,404,324	\$1,213
Massachusetts	\$3,575,627,742	\$12,100	\$3,816,456,990	\$12,915	(\$240,829,247)	(\$815)
Michigan	\$6,288,698,572	\$11,786	\$5,369,134,655	\$10,062	\$919,563,916	\$1,723
Minnesota	\$2,638,914,709	\$10,634	\$2,476,249,701	\$9,978	\$162,665,008	\$655
Mississippi	\$1,770,538,817	\$10,024	\$1,295,295,380	\$7,334	\$475,243,436	\$2,691
Missouri	\$2,823,290,636	\$9,704	\$2,281,809,614	\$7,843	\$541,481,022	\$1,861
Montana	\$403,259,926	\$9,293	\$371,477,465	\$8,561	\$31,782,461	\$732
Nebraska	\$832,023,385	\$9,380	\$720,038,193	\$8,117	\$111,985,193	\$1,262
Nevada	\$1,353,678,546	\$10,034	\$913,591,211	\$6,772	\$440,087,335	\$3,262
New Hampshire	\$552,622,684	\$9,790	\$577,258,766	\$10,227	(\$24,636,082)	(\$436)
New Jersey	\$5,460,767,613	\$13,123	\$6,095,448,780	\$14,648	(\$634,681,167)	(\$1,525)
New Mexico	\$1,121,054,515	\$10,273	\$941,646,903	\$8,629	\$179,407,612	\$1,644
New York	\$11,177,058,005	\$13,098	\$11,917,953,306	\$13,966	(\$740,895,301)	(\$868)
North Carolina	\$4,852,928,878	\$9,981	\$3,649,499,666	\$7,506	\$1,203,429,212	\$2,475
North Dakota	\$254,247,232	\$8,870	\$236,147,544	\$8,238	\$18,099,689	\$631
Ohio	\$6,398,195,198	\$11,007	\$5,649,112,737	\$9,718	\$749,082,461	\$1,289
Oklahoma	\$1,993,152,152	\$9,603	\$1,641,937,569	\$7,911	\$351,214,583	\$1,692
Oregon	\$1,917,900,839	\$10,858	\$1,570,678,854	\$8,892	\$347,221,986	\$1,966
Pennsylvania	\$6,420,801,289	\$11,694	\$6,000,052,342	\$10,928	\$420,748,947	\$766
Rhode Island	\$539,315,082	\$11,801	\$503,647,876	\$11,020	\$35,667,206	\$780
South Carolina	\$2,299,465,144	\$10,100	\$1,902,521,954	\$8,356	\$396,943,190	\$1,743
South Dakota	\$337,510,259	\$8,512	\$312,228,390	\$7,874	\$25,281,869	\$638
Tennessee	\$3,149,030,630	\$9,892	\$2,207,878,476	\$6,936	\$941,152,154	\$2,956
Texas	\$15,596,652,867	\$10,182	\$11,611,114,194	\$7,580	\$3,985,538,673	\$2,602
Utah	\$1,531,859,507	\$8,931	\$940,924,225	\$5,486	\$590,935,283	\$3,445
Vermont	\$275,596,198	\$10,203	\$352,334,956	\$13,044	(\$76,738,758)	(\$2,841)
Virginia	\$3,897,554,002	\$10,326	\$3,553,507,372	\$9,414	\$344,046,630	\$911
Washington	\$3,267,898,430	\$10,356	\$2,566,186,640	\$8,132	\$701,711,790	\$2,224
West Virginia	\$895,889,207	\$10,118	\$932,663,076	\$10,533	(\$36,773,869)	(\$415)
Wisconsin	\$2,638,898,580	\$10,436	\$2,671,830,955	\$10,566	(\$32,932,375)	(\$130)
Wyoming	\$263,368,333	\$10,002	\$314,823,162	\$11,956	(\$51,454,829)	(\$1,954)
Totals*	\$172,471,064,745	\$11,048	\$143,534,207,436	\$9,194	\$31,012,301,826	\$1,854

**Table C3: State By State Cost Estimates: PreK Eligibility 100% of Poverty, 100% Participation Rate, PreK Class size 15**

State	PreK-3rd Cost Cost Estimate	PreK-3rd Cost Estimate Per Pupil	Estimate of PreK-3rd Current Expenditures	PreK-3rd Expenditures Per Pupil	Difference	Difference Per-Pupil
Alabama	\$2,642,848,410	\$9,893	\$1,923,963,356	\$7,202	\$718,885,054	\$2,691
Alaska	\$483,494,567	\$11,902	\$415,453,133	\$10,227	\$68,041,434	\$1,675
Arizona	\$3,812,945,586	\$10,271	\$1,984,386,840	\$5,346	\$1,828,558,746	\$4,926
Arkansas	\$1,683,803,298	\$10,007	\$1,388,076,923	\$8,249	\$295,726,375	\$1,757
California	\$26,506,493,623	\$12,696	\$17,336,706,375	\$8,304	\$9,169,787,248	\$4,392
Colorado	\$2,589,854,247	\$9,968	\$2,236,083,814	\$8,606	\$353,770,434	\$1,362
Connecticut	\$2,240,149,374	\$12,527	\$2,283,009,822	\$12,766	(\$42,860,448)	(\$240)
Delaware	\$489,107,161	\$12,270	\$474,002,928	\$11,891	\$15,104,233	\$379
District of Columbia	\$389,082,272	\$14,915	\$390,419,340	\$14,967	(\$1,337,068)	(\$51)
Florida	\$9,290,012,791	\$10,211	\$7,045,975,633	\$7,745	\$2,244,037,158	\$2,467
Georgia	\$6,134,968,439	\$10,943	\$4,699,172,493	\$8,382	\$1,435,795,946	\$2,561
Hawaii	\$657,064,093	\$10,719	\$584,416,554	\$9,534	\$72,647,539	\$1,185
Idaho	\$826,568,333	\$9,334	\$600,439,457	\$6,781	\$226,128,876	\$2,554
Illinois	\$8,373,527,425	\$12,409	\$6,280,879,594	\$9,308	\$2,092,647,831	\$3,101
Indiana	\$3,777,823,294	\$10,863	\$2,924,860,476	\$8,410	\$852,962,818	\$2,453
Iowa	\$1,428,174,542	\$9,365	\$1,188,524,774	\$7,793	\$239,649,768	\$1,571
Kansas	\$1,485,383,382	\$9,810	\$1,252,259,938	\$8,270	\$233,123,444	\$1,540
Kentucky	\$2,324,874,557	\$10,154	\$1,845,776,125	\$8,061	\$479,098,432	\$2,092
Louisiana	\$2,472,249,729	\$10,161	\$2,012,595,113	\$8,272	\$459,654,617	\$1,889
Maine	\$590,929,262	\$9,819	\$682,037,695	\$11,333	(\$91,108,432)	(\$1,514)
Maryland	\$2,974,659,778	\$11,683	\$2,591,716,107	\$10,179	\$382,943,671	\$1,504
Massachusetts	\$3,674,418,072	\$12,144	\$3,816,456,990	\$12,613	(\$142,038,918)	(\$469)
Michigan	\$6,537,539,868	\$11,833	\$5,369,134,655	\$9,718	\$1,168,405,213	\$2,115
Minnesota	\$2,716,472,849	\$10,674	\$2,476,249,701	\$9,730	\$240,223,147	\$944
Mississippi	\$1,890,118,347	\$10,046	\$1,295,295,380	\$6,884	\$594,822,966	\$3,161
Missouri	\$2,952,212,431	\$9,752	\$2,281,809,614	\$7,537	\$670,402,817	\$2,215
Montana	\$414,834,252	\$9,328	\$371,477,465	\$8,353	\$43,356,786	\$975
Nebraska	\$861,939,324	\$9,421	\$720,038,193	\$7,870	\$141,901,131	\$1,551
Nevada	\$1,396,735,484	\$10,069	\$913,591,211	\$6,586	\$483,144,273	\$3,483
New Hampshire	\$560,430,420	\$9,814	\$577,258,766	\$10,109	(\$16,828,346)	(\$295)
New Jersey	\$5,650,793,913	\$13,172	\$6,095,448,780	\$14,209	(\$444,654,866)	(\$1,037)
New Mexico	\$1,180,356,243	\$10,314	\$941,646,903	\$8,228	\$238,709,340	\$2,086
New York	\$11,726,840,569	\$13,152	\$11,917,953,306	\$13,366	(\$191,112,737)	(\$214)
North Carolina	\$5,075,229,544	\$10,029	\$3,649,499,666	\$7,212	\$1,425,729,878	\$2,817
North Dakota	\$261,570,767	\$8,900	\$236,147,544	\$8,035	\$25,423,223	\$865
Ohio	\$6,697,737,555	\$11,064	\$5,649,112,737	\$9,332	\$1,048,624,818	\$1,732
Oklahoma	\$2,080,516,323	\$9,635	\$1,641,937,569	\$7,604	\$438,578,754	\$2,031
Oregon	\$1,992,660,846	\$10,898	\$1,570,678,854	\$8,590	\$421,981,992	\$2,308
Pennsylvania	\$6,672,078,093	\$11,743	\$6,000,052,342	\$10,560	\$672,025,751	\$1,183
Rhode Island	\$564,500,220	\$11,852	\$503,647,876	\$10,574	\$60,852,344	\$1,278
South Carolina	\$2,406,812,863	\$10,137	\$1,902,521,954	\$8,013	\$504,290,909	\$2,124
South Dakota	\$356,142,947	\$8,559	\$312,228,390	\$7,504	\$43,914,557	\$1,055
Tennessee	\$3,291,135,011	\$9,934	\$2,207,878,476	\$6,664	\$1,083,256,535	\$3,270
Texas	\$16,430,300,649	\$10,233	\$11,611,114,194	\$7,232	\$4,819,186,455	\$3,002
Utah	\$1,565,947,308	\$8,962	\$940,924,225	\$5,385	\$625,023,083	\$3,577
Vermont	\$285,465,774	\$10,245	\$352,334,956	\$12,644	(\$66,869,182)	(\$2,400)
Virginia	\$4,023,627,736	\$10,372	\$3,553,507,372	\$9,160	\$470,120,364	\$1,212
Washington	\$3,377,658,999	\$10,399	\$2,566,186,640	\$7,901	\$811,472,359	\$2,498
West Virginia	\$934,103,155	\$10,158	\$932,663,076	\$10,142	\$1,440,079	\$16
Wisconsin	\$2,736,629,439	\$10,482	\$2,671,830,955	\$10,234	\$64,798,484	\$248
Wyoming	\$272,117,851	\$10,036	\$314,823,162	\$11,612	(\$42,705,311)	(\$1,575)
Totals*	\$179,760,941,016	\$11,091	\$143,534,207,436	\$8,856	\$37,266,248,887	\$2,235

**Table C4: State By State Cost Estimates: PreK Eligibility 200% of Poverty, 50% Participation Rate, PreK Class size 15**

State	PreK-3rd Cost Cost Estimate	PreK-3rd Cost Estimate Per Pupil	Estimate of PreK-3rd Current Expenditures	PreK-3rd Expenditures Per Pupil	Difference	Difference Per-Pupil
Alabama	\$2,585,097,129	\$9,829	\$1,923,963,356	\$7,315	\$661,133,773	\$2,514
Alaska	\$503,609,629	\$11,934	\$415,453,133	\$9,845	\$88,156,496	\$2,089
Arizona	\$3,843,251,192	\$10,282	\$1,984,386,840	\$5,309	\$1,858,864,352	\$4,973
Arkansas	\$1,679,248,239	\$10,013	\$1,388,076,923	\$8,277	\$291,171,316	\$1,736
California	\$26,913,207,666	\$12,712	\$17,336,706,375	\$8,189	\$9,576,501,291	\$4,523
Colorado	\$2,621,295,039	\$9,984	\$2,236,083,814	\$8,517	\$385,211,225	\$1,467
Connecticut	\$2,255,416,536	\$12,541	\$2,283,009,822	\$12,695	(\$27,593,286)	(\$153)
Delaware	\$497,323,935	\$12,281	\$474,002,928	\$11,705	\$23,321,008	\$576
District of Columbia	\$373,756,521	\$14,872	\$390,419,340	\$15,535	(\$16,662,819)	(\$663)
Florida	\$9,417,787,571	\$10,228	\$7,045,975,633	\$7,652	\$2,371,811,938	\$2,576
Georgia	\$6,131,086,357	\$10,947	\$4,699,172,493	\$8,391	\$1,431,913,864	\$2,557
Hawaii	\$678,457,647	\$10,751	\$584,416,554	\$9,260	\$94,041,093	\$1,490
Idaho	\$864,070,137	\$9,362	\$600,439,457	\$6,506	\$263,630,680	\$2,856
Illinois	\$8,406,548,171	\$12,414	\$6,280,879,594	\$9,275	\$2,125,668,577	\$3,139
Indiana	\$3,814,298,635	\$10,875	\$2,924,860,476	\$8,339	\$889,438,160	\$2,536
Iowa	\$1,454,950,698	\$9,384	\$1,188,524,774	\$7,666	\$266,425,924	\$1,718
Kansas	\$1,513,201,153	\$9,826	\$1,252,259,938	\$8,131	\$260,941,215	\$1,694
Kentucky	\$2,330,032,498	\$10,150	\$1,845,776,125	\$8,040	\$484,256,373	\$2,109
Louisiana	\$2,401,437,984	\$10,142	\$2,012,595,113	\$8,500	\$388,842,872	\$1,642
Maine	\$584,972,572	\$9,811	\$682,037,695	\$11,438	(\$97,065,123)	(\$1,628)
Maryland	\$3,024,837,011	\$11,712	\$2,591,716,107	\$10,035	\$433,120,904	\$1,677
Massachusetts	\$3,688,409,866	\$12,147	\$3,816,456,990	\$12,569	(\$128,047,124)	(\$422)
Michigan	\$6,503,007,095	\$11,829	\$5,369,134,655	\$9,767	\$1,133,872,440	\$2,063
Minnesota	\$2,729,491,420	\$10,685	\$2,476,249,701	\$9,693	\$253,241,719	\$991
Mississippi	\$1,836,083,604	\$10,039	\$1,295,295,380	\$7,082	\$540,788,224	\$2,957
Missouri	\$2,975,219,427	\$9,763	\$2,281,809,614	\$7,488	\$693,409,813	\$2,275
Montana	\$434,529,512	\$9,351	\$371,477,465	\$7,994	\$63,052,047	\$1,357
Nebraska	\$881,829,276	\$9,445	\$720,038,193	\$7,712	\$161,791,084	\$1,733
Nevada	\$1,427,148,410	\$10,105	\$913,591,211	\$6,469	\$513,557,199	\$3,636
New Hampshire	\$570,162,370	\$9,833	\$577,258,766	\$9,955	(\$7,096,396)	(\$122)
New Jersey	\$5,652,024,692	\$13,177	\$6,095,448,780	\$14,211	(\$443,424,087)	(\$1,034)
New Mexico	\$1,189,642,079	\$10,311	\$941,646,903	\$8,162	\$247,995,177	\$2,149
New York	\$11,603,083,191	\$13,143	\$11,917,953,306	\$13,500	(\$314,870,115)	(\$357)
North Carolina	\$5,082,155,386	\$10,032	\$3,649,499,666	\$7,204	\$1,432,655,720	\$2,828
North Dakota	\$265,770,566	\$8,921	\$236,147,544	\$7,927	\$29,623,022	\$994
Ohio	\$6,687,120,265	\$11,059	\$5,649,112,737	\$9,342	\$1,038,007,528	\$1,717
Oklahoma	\$2,105,196,689	\$9,634	\$1,641,937,569	\$7,514	\$463,259,120	\$2,120
Oregon	\$2,027,732,321	\$10,910	\$1,570,678,854	\$8,451	\$457,053,467	\$2,459
Pennsylvania	\$6,680,172,753	\$11,748	\$6,000,052,342	\$10,552	\$680,120,411	\$1,196
Rhode Island	\$557,841,969	\$11,850	\$503,647,876	\$10,698	\$54,194,093	\$1,151
South Carolina	\$2,398,218,944	\$10,135	\$1,902,521,954	\$8,041	\$495,696,990	\$2,095
South Dakota	\$356,269,864	\$8,569	\$312,228,390	\$7,510	\$44,041,474	\$1,059
Tennessee	\$3,323,812,755	\$9,938	\$2,207,878,476	\$6,601	\$1,115,934,279	\$3,337
Texas	\$16,296,021,109	\$10,232	\$11,611,114,194	\$7,290	\$4,684,906,916	\$2,942
Utah	\$1,667,595,480	\$9,032	\$940,924,225	\$5,096	\$726,671,255	\$3,936
Vermont	\$291,713,668	\$10,269	\$352,334,956	\$12,403	(\$60,621,288)	(\$2,134)
Virginia	\$4,054,863,119	\$10,387	\$3,553,507,372	\$9,103	\$501,355,747	\$1,284
Washington	\$3,436,990,715	\$10,421	\$2,566,186,640	\$7,781	\$870,804,075	\$2,640
West Virginia	\$927,399,880	\$10,149	\$932,663,076	\$10,207	(\$5,263,196)	(\$58)
Wisconsin	\$2,771,696,839	\$10,500	\$2,671,830,955	\$10,122	\$99,865,884	\$378
Wyoming	\$280,690,115	\$10,066	\$314,823,162	\$11,290	(\$34,133,047)	(\$1,224)
Totals*	\$180,595,779,700	\$11,097	\$143,534,207,436	\$8,819	\$38,196,348,744	\$2,277

**Table C5: State By State Cost Estimates: PreK Eligibility 200% of Poverty, 65% Participation Rate, PreK Class size 15**

State	PreK-3rd Cost Cost Estimate	PreK-3rd Cost Estimate Per Pupil	Estimate of PreK-3rd Current Expenditures	PreK-3rd Expenditures Per Pupil	Difference	Difference Per-Pupil
Alabama	\$2,682,582,205	\$9,858	\$1,923,963,356	\$7,070	\$758,618,849	\$2,788
Alaska	\$516,193,510	\$11,962	\$415,453,133	\$9,627	\$100,740,377	\$2,334
Arizona	\$3,999,382,484	\$10,319	\$1,984,386,840	\$5,120	\$2,014,995,644	\$5,199
Arkansas	\$1,747,580,419	\$10,042	\$1,388,076,923	\$7,976	\$359,503,496	\$2,066
California	\$27,928,306,320	\$12,749	\$17,336,706,375	\$7,914	\$10,591,599,944	\$4,835
Colorado	\$2,712,371,120	\$10,025	\$2,236,083,814	\$8,265	\$476,287,306	\$1,760
Connecticut	\$2,303,650,179	\$12,575	\$2,283,009,822	\$12,462	\$20,640,357	\$113
Delaware	\$515,069,228	\$12,320	\$474,002,928	\$11,338	\$41,066,300	\$982
District of Columbia	\$393,783,475	\$14,908	\$390,419,340	\$14,781	\$3,364,135	\$127
Florida	\$9,765,587,690	\$10,262	\$7,045,975,633	\$7,404	\$2,719,612,058	\$2,858
Georgia	\$6,357,914,423	\$10,981	\$4,699,172,493	\$8,116	\$1,658,741,930	\$2,865
Hawaii	\$703,418,282	\$10,784	\$584,416,554	\$8,960	\$119,001,728	\$1,824
Idaho	\$901,759,339	\$9,397	\$600,439,457	\$6,257	\$301,319,881	\$3,140
Illinois	\$8,682,148,935	\$12,453	\$6,280,879,594	\$9,008	\$2,401,269,341	\$3,444
Indiana	\$3,953,707,031	\$10,913	\$2,924,860,476	\$8,073	\$1,028,846,556	\$2,840
Iowa	\$1,501,910,082	\$9,419	\$1,188,524,774	\$7,454	\$313,385,308	\$1,965
Kansas	\$1,571,102,320	\$9,861	\$1,252,259,938	\$7,860	\$318,842,382	\$2,001
Kentucky	\$2,426,946,694	\$10,178	\$1,845,776,125	\$7,741	\$581,170,569	\$2,437
Louisiana	\$2,506,552,240	\$10,169	\$2,012,595,113	\$8,165	\$493,957,128	\$2,004
Maine	\$599,313,852	\$9,840	\$682,037,695	\$11,198	(\$82,723,843)	(\$1,358)
Maryland	\$3,109,781,051	\$11,749	\$2,591,716,107	\$9,792	\$518,064,944	\$1,957
Massachusetts	\$3,777,284,829	\$12,183	\$3,816,456,990	\$12,310	(\$39,172,160)	(\$126)
Michigan	\$6,705,939,803	\$11,867	\$5,369,134,655	\$9,501	\$1,336,805,148	\$2,366
Minnesota	\$2,799,875,397	\$10,720	\$2,476,249,701	\$9,481	\$323,625,696	\$1,239
Mississippi	\$1,922,369,922	\$10,055	\$1,295,295,380	\$6,775	\$627,074,541	\$3,280
Missouri	\$3,092,625,921	\$9,804	\$2,281,809,614	\$7,234	\$810,816,308	\$2,570
Montana	\$450,358,941	\$9,384	\$371,477,465	\$7,740	\$78,881,476	\$1,644
Nebraska	\$913,438,495	\$9,484	\$720,038,193	\$7,476	\$193,400,302	\$2,008
Nevada	\$1,473,178,235	\$10,142	\$913,591,211	\$6,290	\$559,587,024	\$3,853
New Hampshire	\$579,774,301	\$9,858	\$577,258,766	\$9,815	\$2,515,535	\$43
New Jersey	\$5,815,273,612	\$13,219	\$6,095,448,780	\$13,856	(\$280,175,167)	(\$637)
New Mexico	\$1,243,257,883	\$10,342	\$941,646,903	\$7,833	\$301,610,981	\$2,509
New York	\$12,037,198,175	\$13,184	\$11,917,953,306	\$13,054	\$119,244,870	\$131
North Carolina	\$5,274,776,567	\$10,071	\$3,649,499,666	\$6,968	\$1,625,276,901	\$3,103
North Dakota	\$273,307,821	\$8,952	\$236,147,544	\$7,734	\$37,160,277	\$1,217
Ohio	\$6,940,685,670	\$11,103	\$5,649,112,737	\$9,037	\$1,291,572,933	\$2,066
Oklahoma	\$2,187,484,374	\$9,659	\$1,641,937,569	\$7,250	\$545,546,805	\$2,409
Oregon	\$2,102,333,769	\$10,945	\$1,570,678,854	\$8,177	\$531,654,915	\$2,768
Pennsylvania	\$6,897,981,269	\$11,789	\$6,000,052,342	\$10,254	\$897,928,927	\$1,535
Rhode Island	\$577,431,754	\$11,890	\$503,647,876	\$10,371	\$73,783,878	\$1,519
South Carolina	\$2,487,653,099	\$10,165	\$1,902,521,954	\$7,774	\$585,131,145	\$2,391
South Dakota	\$372,278,814	\$8,609	\$312,228,390	\$7,220	\$60,050,424	\$1,389
Tennessee	\$3,455,419,834	\$9,972	\$2,207,878,476	\$6,372	\$1,247,541,358	\$3,600
Texas	\$16,970,292,490	\$10,272	\$11,611,114,194	\$7,028	\$5,359,178,296	\$3,244
Utah	\$1,727,308,046	\$9,074	\$940,924,225	\$4,943	\$786,383,821	\$4,131
Vermont	\$302,047,673	\$10,308	\$352,334,956	\$12,024	(\$50,287,283)	(\$1,716)
Virginia	\$4,172,296,935	\$10,429	\$3,553,507,372	\$8,882	\$618,789,563	\$1,547
Washington	\$3,548,870,717	\$10,462	\$2,566,186,640	\$7,565	\$982,684,078	\$2,897
West Virginia	\$958,143,710	\$10,180	\$932,663,076	\$9,909	\$25,480,634	\$271
Wisconsin	\$2,865,986,367	\$10,542	\$2,671,830,955	\$9,828	\$194,155,412	\$714
Wyoming	\$290,761,381	\$10,100	\$314,823,162	\$10,936	(\$24,061,781)	(\$836)
Totals*	\$187,094,696,680	\$11,132	\$143,534,207,436	\$8,540	\$44,036,909,479	\$2,592

**Table C6: State By State Cost Estimates: PreK Eligibility 200% of Poverty, 100% Participation Rate, PreK Class size 15**

State	PreK-3rd Cost Cost Estimate	PreK-3rd Cost Estimate Per Pupil	Estimate of PreK-3rd Current Expenditures	PreK-3rd Expenditures Per Pupil	Difference	Difference Per-Pupil
Alabama	\$2,910,047,382	\$9,918	\$1,923,963,356	\$6,557	\$986,084,027	\$3,361
Alaska	\$545,555,899	\$12,023	\$415,453,133	\$9,156	\$130,102,766	\$2,867
Arizona	\$4,363,688,832	\$10,395	\$1,984,386,840	\$4,727	\$2,379,301,993	\$5,668
Arkansas	\$1,907,022,172	\$10,101	\$1,388,076,923	\$7,353	\$518,945,249	\$2,749
California	\$30,296,869,845	\$12,827	\$17,336,706,375	\$7,340	\$12,960,163,470	\$5,487
Colorado	\$2,924,881,975	\$10,111	\$2,236,083,814	\$7,730	\$688,798,162	\$2,381
Connecticut	\$2,416,195,346	\$12,648	\$2,283,009,822	\$11,951	\$133,185,524	\$697
Delaware	\$556,474,909	\$12,403	\$474,002,928	\$10,565	\$82,471,982	\$1,838
District of Columbia	\$440,513,034	\$14,980	\$390,419,340	\$13,276	\$50,093,694	\$1,703
Florida	\$10,577,121,303	\$10,333	\$7,045,975,633	\$6,884	\$3,531,145,670	\$3,450
Georgia	\$6,887,179,910	\$11,053	\$4,699,172,493	\$7,541	\$2,188,007,417	\$3,511
Hawaii	\$761,659,762	\$10,854	\$584,416,554	\$8,328	\$177,243,208	\$2,526
Idaho	\$989,700,809	\$9,468	\$600,439,457	\$5,744	\$389,261,352	\$3,724
Illinois	\$9,325,217,386	\$12,535	\$6,280,879,594	\$8,443	\$3,044,337,792	\$4,092
Indiana	\$4,278,993,288	\$10,992	\$2,924,860,476	\$7,514	\$1,354,132,812	\$3,479
Iowa	\$1,611,481,977	\$9,493	\$1,188,524,774	\$7,002	\$422,957,203	\$2,492
Kansas	\$1,706,205,042	\$9,933	\$1,252,259,938	\$7,291	\$453,945,104	\$2,643
Kentucky	\$2,653,079,816	\$10,236	\$1,845,776,125	\$7,121	\$807,303,691	\$3,115
Louisiana	\$2,751,818,837	\$10,223	\$2,012,595,113	\$7,477	\$739,223,725	\$2,746
Maine	\$632,776,838	\$9,904	\$682,037,695	\$10,675	(\$49,260,856)	(\$771)
Maryland	\$3,307,983,809	\$11,830	\$2,591,716,107	\$9,269	\$716,267,703	\$2,562
Massachusetts	\$3,984,659,744	\$12,262	\$3,816,456,990	\$11,744	\$168,202,754	\$518
Michigan	\$7,179,449,455	\$11,946	\$5,369,134,655	\$8,934	\$1,810,314,800	\$3,012
Minnesota	\$2,964,104,677	\$10,797	\$2,476,249,701	\$9,020	\$487,854,975	\$1,777
Mississippi	\$2,123,704,662	\$10,086	\$1,295,295,380	\$6,152	\$828,409,282	\$3,934
Missouri	\$3,366,574,408	\$9,888	\$2,281,809,614	\$6,702	\$1,084,764,794	\$3,186
Montana	\$487,294,275	\$9,454	\$371,477,465	\$7,207	\$115,816,809	\$2,247
Nebraska	\$987,193,338	\$9,565	\$720,038,193	\$6,976	\$267,155,146	\$2,588
Nevada	\$1,580,581,160	\$10,222	\$913,591,211	\$5,909	\$666,989,949	\$4,314
New Hampshire	\$602,202,139	\$9,914	\$577,258,766	\$9,504	\$24,943,373	\$411
New Jersey	\$6,196,187,758	\$13,308	\$6,095,448,780	\$13,092	\$100,738,979	\$216
New Mexico	\$1,368,361,425	\$10,406	\$941,646,903	\$7,161	\$426,714,523	\$3,245
New York	\$13,050,133,139	\$13,271	\$11,917,953,306	\$12,119	\$1,132,179,833	\$1,151
North Carolina	\$5,724,225,989	\$10,153	\$3,649,499,666	\$6,473	\$2,074,726,323	\$3,680
North Dakota	\$290,894,749	\$9,017	\$236,147,544	\$7,320	\$54,747,206	\$1,697
Ohio	\$7,532,338,281	\$11,196	\$5,649,112,737	\$8,397	\$1,883,225,544	\$2,799
Oklahoma	\$2,379,488,972	\$9,712	\$1,641,937,569	\$6,701	\$737,551,403	\$3,010
Oregon	\$2,276,403,815	\$11,018	\$1,570,678,854	\$7,602	\$705,724,961	\$3,416
Pennsylvania	\$7,406,201,140	\$11,874	\$6,000,052,342	\$9,620	\$1,406,148,798	\$2,254
Rhode Island	\$623,141,254	\$11,976	\$503,647,876	\$9,679	\$119,493,378	\$2,296
South Carolina	\$2,696,332,794	\$10,226	\$1,902,521,954	\$7,215	\$793,810,840	\$3,011
South Dakota	\$409,633,031	\$8,691	\$312,228,390	\$6,624	\$97,404,641	\$2,067
Tennessee	\$3,762,503,017	\$10,044	\$2,207,878,476	\$5,894	\$1,554,624,541	\$4,150
Texas	\$18,543,592,377	\$10,356	\$11,611,114,194	\$6,484	\$6,932,478,184	\$3,871
Utah	\$1,866,637,367	\$9,163	\$940,924,225	\$4,619	\$925,713,142	\$4,544
Vermont	\$326,160,351	\$10,390	\$352,334,956	\$11,224	(\$26,174,604)	(\$834)
Virginia	\$4,446,309,171	\$10,519	\$3,553,507,372	\$8,407	\$892,801,800	\$2,112
Washington	\$3,809,924,056	\$10,548	\$2,566,186,640	\$7,104	\$1,243,737,417	\$3,443
West Virginia	\$1,029,879,314	\$10,244	\$932,663,076	\$9,277	\$97,216,238	\$967
Wisconsin	\$3,085,995,265	\$10,630	\$2,671,830,955	\$9,203	\$414,164,310	\$1,427
Wyoming	\$314,261,001	\$10,173	\$314,823,162	\$10,191	(\$562,161)	(\$18)
Totals*	\$202,258,836,300	\$11,207	\$143,534,207,436	\$7,953	\$58,800,626,485	\$3,254

**Table C7: State By State Cost Estimates: PreK Eligibility All 3 and 4 Year Old Children, 50% Participation Rate, PreK Class size 15**

State	PreK-3rd Cost Cost Estimate	PreK-3rd Cost Estimate Per Pupil	Estimate of PreK-3rd Current Expenditures	PreK-3rd Expenditures Per Pupil	Difference	Difference Per-Pupil
Alabama	\$2,881,788,194	\$9,863	\$1,923,963,356	\$6,585	\$957,824,838	\$3,278
Alaska	\$576,820,034	\$12,020	\$415,453,133	\$8,658	\$161,366,901	\$3,363
Arizona	\$4,316,139,698	\$10,328	\$1,984,386,840	\$4,748	\$2,331,752,858	\$5,580
Arkansas	\$1,832,960,042	\$10,025	\$1,388,076,923	\$7,592	\$444,883,119	\$2,433
California	\$30,804,623,965	\$12,754	\$17,336,706,375	\$7,178	\$13,467,917,590	\$5,576
Colorado	\$3,064,827,826	\$10,088	\$2,236,083,814	\$7,360	\$828,744,013	\$2,728
Connecticut	\$2,708,690,510	\$12,702	\$2,283,009,822	\$10,706	\$425,680,688	\$1,996
Delaware	\$593,536,818	\$12,384	\$474,002,928	\$9,890	\$119,533,891	\$2,494
District of Columbia	\$421,912,309	\$14,894	\$390,419,340	\$13,782	\$31,492,969	\$1,112
Florida	\$10,699,467,953	\$10,282	\$7,045,975,633	\$6,771	\$3,653,492,320	\$3,511
Georgia	\$6,943,471,509	\$10,988	\$4,699,172,493	\$7,436	\$2,244,299,016	\$3,551
Hawaii	\$826,603,963	\$10,839	\$584,416,554	\$7,663	\$242,187,409	\$3,176
Idaho	\$974,843,519	\$9,413	\$600,439,457	\$5,798	\$374,404,062	\$3,615
Illinois	\$9,808,959,202	\$12,490	\$6,280,879,594	\$7,998	\$3,528,079,608	\$4,492
Indiana	\$4,385,004,198	\$10,943	\$2,924,860,476	\$7,299	\$1,460,143,723	\$3,644
Iowa	\$1,681,549,515	\$9,468	\$1,188,524,774	\$6,692	\$493,024,741	\$2,776
Kansas	\$1,726,979,983	\$9,885	\$1,252,259,938	\$7,168	\$474,720,045	\$2,717
Kentucky	\$2,606,142,079	\$10,179	\$1,845,776,125	\$7,209	\$760,365,954	\$2,970
Louisiana	\$2,736,416,262	\$10,155	\$2,012,595,113	\$7,469	\$723,821,149	\$2,686
Maine	\$655,336,428	\$9,876	\$682,037,695	\$10,278	(\$26,701,266)	(\$402)
Maryland	\$3,697,610,905	\$11,864	\$2,591,716,107	\$8,316	\$1,105,894,798	\$3,548
Massachusetts	\$4,470,397,551	\$12,307	\$3,816,456,990	\$10,507	\$653,940,562	\$1,800
Michigan	\$7,510,595,238	\$11,906	\$5,369,134,655	\$8,511	\$2,141,460,583	\$3,395
Minnesota	\$3,265,455,556	\$10,811	\$2,476,249,701	\$8,198	\$789,205,855	\$2,613
Mississippi	\$2,029,121,279	\$10,029	\$1,295,295,380	\$6,402	\$733,825,899	\$3,627
Missouri	\$3,409,791,997	\$9,836	\$2,281,809,614	\$6,582	\$1,127,982,383	\$3,254
Montana	\$489,783,494	\$9,400	\$371,477,465	\$7,130	\$118,306,029	\$2,271
Nebraska	\$1,017,029,511	\$9,521	\$720,038,193	\$6,740	\$296,991,319	\$2,780
Nevada	\$1,634,015,311	\$10,184	\$913,591,211	\$5,694	\$720,424,100	\$4,490
New Hampshire	\$688,612,284	\$10,014	\$577,258,766	\$8,394	\$111,353,518	\$1,619
New Jersey	\$6,800,444,468	\$13,339	\$6,095,448,780	\$11,956	\$704,995,689	\$1,383
New Mexico	\$1,286,959,884	\$10,326	\$941,646,903	\$7,555	\$345,312,982	\$2,771
New York	\$13,597,807,090	\$13,211	\$11,917,953,306	\$11,579	\$1,679,853,785	\$1,632
North Carolina	\$5,774,729,197	\$10,095	\$3,649,499,666	\$6,380	\$2,125,229,531	\$3,715
North Dakota	\$303,992,024	\$9,005	\$236,147,544	\$6,995	\$67,844,481	\$2,010
Ohio	\$7,696,391,462	\$11,144	\$5,649,112,737	\$8,180	\$2,047,278,725	\$2,964
Oklahoma	\$2,323,624,247	\$9,653	\$1,641,937,569	\$6,821	\$681,686,678	\$2,832
Oregon	\$2,291,721,417	\$10,957	\$1,570,678,854	\$7,510	\$721,042,563	\$3,447
Pennsylvania	\$7,750,337,538	\$11,837	\$6,000,052,342	\$9,164	\$1,750,285,196	\$2,673
Rhode Island	\$648,842,338	\$11,939	\$503,647,876	\$9,267	\$145,194,462	\$2,672
South Carolina	\$2,703,755,586	\$10,169	\$1,902,521,954	\$7,155	\$801,233,632	\$3,013
South Dakota	\$399,914,163	\$8,629	\$312,228,390	\$6,737	\$87,685,774	\$1,892
Tennessee	\$3,735,909,222	\$9,983	\$2,207,878,476	\$5,900	\$1,528,030,746	\$4,083
Texas	\$18,139,040,964	\$10,281	\$11,611,114,194	\$6,581	\$6,527,926,770	\$3,700
Utah	\$1,943,465,991	\$9,134	\$940,924,225	\$4,422	\$1,002,541,766	\$4,712
Vermont	\$340,527,056	\$10,362	\$352,334,956	\$10,721	(\$11,807,900)	(\$359)
Virginia	\$4,854,898,541	\$10,546	\$3,553,507,372	\$7,719	\$1,301,391,169	\$2,827
Washington	\$3,966,505,654	\$10,523	\$2,566,186,640	\$6,808	\$1,400,319,015	\$3,715
West Virginia	\$1,016,710,590	\$10,180	\$932,663,076	\$9,339	\$84,047,514	\$842
Wisconsin	\$3,241,507,249	\$10,609	\$2,671,830,955	\$8,745	\$569,676,294	\$1,864
Wyoming	\$317,491,631	\$10,131	\$314,823,162	\$10,045	\$2,668,469	\$85
Totals*	\$207,593,063,446	\$11,181	\$143,534,207,436	\$7,731	\$64,097,365,176	\$3,450

**Table C8: State By State Cost Estimates: PreK Eligibility All 3 and 4 Year Old Children, 65% Participation Rate, PreK Class size 15**

State	PreK-3rd Cost Cost Estimate	PreK-3rd Cost Estimate Per Pupil	Estimate of PreK-3rd Current Expenditures	PreK-3rd Expenditures Per Pupil	Difference	Difference Per-Pupil
Alabama	\$3,068,280,589	\$9,896	\$1,923,963,356	\$6,205	\$1,144,317,234	\$3,691
Alaska	\$611,367,037	\$12,064	\$415,453,133	\$8,198	\$195,913,904	\$3,866
Arizona	\$4,614,137,542	\$10,370	\$1,984,386,840	\$4,460	\$2,629,750,702	\$5,910
Arkansas	\$1,947,405,763	\$10,054	\$1,388,076,923	\$7,166	\$559,328,840	\$2,888
California	\$32,987,147,509	\$12,796	\$17,336,706,375	\$6,725	\$15,650,441,133	\$6,071
Colorado	\$3,288,963,743	\$10,144	\$2,236,083,814	\$6,897	\$1,052,879,930	\$3,247
Connecticut	\$2,892,906,345	\$12,765	\$2,283,009,822	\$10,074	\$609,896,523	\$2,691
Delaware	\$640,145,975	\$12,437	\$474,002,928	\$9,209	\$166,143,048	\$3,228
District of Columbia	\$456,386,000	\$14,929	\$390,419,340	\$12,771	\$65,966,660	\$2,158
Florida	\$11,431,772,187	\$10,323	\$7,045,975,633	\$6,362	\$4,385,796,554	\$3,960
Georgia	\$7,414,015,120	\$11,026	\$4,699,172,493	\$6,988	\$2,714,842,627	\$4,037
Hawaii	\$896,008,493	\$10,884	\$584,416,554	\$7,099	\$311,591,939	\$3,785
Idaho	\$1,045,764,735	\$9,454	\$600,439,457	\$5,428	\$445,325,278	\$4,026
Illinois	\$10,505,283,276	\$12,539	\$6,280,879,594	\$7,497	\$4,224,403,682	\$5,042
Indiana	\$4,695,624,263	\$10,990	\$2,924,860,476	\$6,846	\$1,770,763,787	\$4,145
Iowa	\$1,796,488,544	\$9,516	\$1,188,524,774	\$6,295	\$607,963,770	\$3,220
Kansas	\$1,849,014,798	\$9,927	\$1,252,259,938	\$6,723	\$596,754,860	\$3,204
Kentucky	\$2,785,889,148	\$10,210	\$1,845,776,125	\$6,765	\$940,113,023	\$3,446
Louisiana	\$2,942,024,001	\$10,180	\$2,012,595,113	\$6,964	\$929,428,888	\$3,216
Maine	\$690,786,865	\$9,917	\$682,037,695	\$9,792	\$8,749,170	\$126
Maryland	\$3,984,387,113	\$11,926	\$2,591,716,107	\$7,757	\$1,392,671,006	\$4,168
Massachusetts	\$4,793,868,820	\$12,371	\$3,816,456,990	\$9,849	\$977,411,831	\$2,522
Michigan	\$8,015,804,389	\$11,954	\$5,369,134,655	\$8,007	\$2,646,669,734	\$3,947
Minnesota	\$3,496,628,774	\$10,868	\$2,476,249,701	\$7,697	\$1,020,379,072	\$3,172
Mississippi	\$2,173,318,899	\$10,041	\$1,295,295,380	\$5,984	\$878,023,518	\$4,056
Missouri	\$3,657,570,262	\$9,887	\$2,281,809,614	\$6,168	\$1,375,760,648	\$3,719
Montana	\$522,189,117	\$9,440	\$371,477,465	\$6,716	\$150,711,652	\$2,725
Nebraska	\$1,089,198,800	\$9,570	\$720,038,193	\$6,326	\$369,160,608	\$3,244
Nevada	\$1,742,105,207	\$10,234	\$913,591,211	\$5,367	\$828,513,996	\$4,867
New Hampshire	\$733,759,188	\$10,075	\$577,258,766	\$7,926	\$156,500,422	\$2,149
New Jersey	\$7,308,219,321	\$13,407	\$6,095,448,780	\$11,182	\$1,212,770,541	\$2,225
New Mexico	\$1,369,771,030	\$10,358	\$941,646,903	\$7,120	\$428,124,127	\$3,237
New York	\$14,630,339,244	\$13,259	\$11,917,953,306	\$10,801	\$2,712,385,939	\$2,458
North Carolina	\$6,175,122,521	\$10,142	\$3,649,499,666	\$5,994	\$2,525,622,855	\$4,148
North Dakota	\$322,995,717	\$9,050	\$236,147,544	\$6,616	\$86,848,173	\$2,433
Ohio	\$8,252,738,225	\$11,200	\$5,649,112,737	\$7,667	\$2,603,625,488	\$3,533
Oklahoma	\$2,471,440,199	\$9,680	\$1,641,937,569	\$6,431	\$829,502,630	\$3,249
Oregon	\$2,445,519,593	\$10,998	\$1,570,678,854	\$7,063	\$874,840,740	\$3,934
Pennsylvania	\$8,289,195,489	\$11,891	\$6,000,052,342	\$8,607	\$2,289,143,147	\$3,284
Rhode Island	\$695,732,234	\$11,992	\$503,647,876	\$8,681	\$192,084,358	\$3,311
South Carolina	\$2,884,850,734	\$10,201	\$1,902,521,954	\$6,728	\$982,328,780	\$3,474
South Dakota	\$429,016,404	\$8,677	\$312,228,390	\$6,315	\$116,788,014	\$2,362
Tennessee	\$3,991,145,240	\$10,023	\$2,207,878,476	\$5,545	\$1,783,266,764	\$4,478
Texas	\$19,366,218,300	\$10,327	\$11,611,114,194	\$6,191	\$7,755,104,107	\$4,135
Utah	\$2,085,939,711	\$9,192	\$940,924,225	\$4,146	\$1,145,015,486	\$5,046
Vermont	\$365,505,077	\$10,415	\$352,334,956	\$10,040	\$13,170,122	\$375
Virginia	\$5,212,342,983	\$10,615	\$3,553,507,372	\$7,236	\$1,658,835,611	\$3,378
Washington	\$4,237,240,139	\$10,580	\$2,566,186,640	\$6,407	\$1,671,053,499	\$4,172
West Virginia	\$1,074,247,633	\$10,214	\$932,663,076	\$8,868	\$141,584,557	\$1,346
Wisconsin	\$3,476,739,900	\$10,667	\$2,671,830,955	\$8,198	\$804,908,945	\$2,470
Wyoming	\$338,603,352	\$10,175	\$314,823,162	\$9,460	\$23,780,190	\$715
Totals*	\$222,191,165,549	\$11,230	\$143,534,207,436	\$7,254	\$78,656,958,113	\$3,975

**Table C9: State By State Cost Estimates: PreK Eligibility All 3 and 4 Year Old Children, 100% Participation Rate, PreK Class size 15**

State	PreK-3rd Cost Cost Estimate	PreK-3rd Cost Estimate Per Pupil	Estimate of PreK-3rd Current Expenditures	PreK-3rd Expenditures Per Pupil	Difference	Difference Per-Pupil
Alabama	\$3,503,429,512	\$9,960	\$1,923,963,356	\$5,470	\$1,579,466,157	\$4,490
Alaska	\$691,976,710	\$12,151	\$415,453,133	\$7,295	\$276,523,577	\$4,856
Arizona	\$5,309,465,844	\$10,451	\$1,984,386,840	\$3,906	\$3,325,079,005	\$6,545
Arkansas	\$2,214,445,778	\$10,110	\$1,388,076,923	\$6,337	\$826,368,855	\$3,773
California	\$38,079,702,443	\$12,874	\$17,336,706,375	\$5,861	\$20,742,996,068	\$7,013
Colorado	\$3,811,947,550	\$10,252	\$2,236,083,814	\$6,014	\$1,575,863,736	\$4,238
Connecticut	\$3,322,743,293	\$12,886	\$2,283,009,822	\$8,854	\$1,039,733,471	\$4,032
Delaware	\$748,900,675	\$12,537	\$474,002,928	\$7,935	\$274,897,748	\$4,602
District of Columbia	\$536,824,611	\$14,995	\$390,419,340	\$10,905	\$146,405,271	\$4,089
Florida	\$13,140,482,066	\$10,402	\$7,045,975,633	\$5,577	\$6,094,506,433	\$4,824
Georgia	\$8,511,950,213	\$11,099	\$4,699,172,493	\$6,128	\$3,812,777,720	\$4,972
Hawaii	\$1,057,952,394	\$10,966	\$584,416,554	\$6,058	\$473,535,840	\$4,908
Idaho	\$1,211,247,573	\$9,532	\$600,439,457	\$4,725	\$610,808,116	\$4,807
Illinois	\$12,130,039,448	\$12,633	\$6,280,879,594	\$6,542	\$5,849,159,854	\$6,092
Indiana	\$5,420,404,414	\$11,080	\$2,924,860,476	\$5,979	\$2,495,543,938	\$5,101
Iowa	\$2,064,679,612	\$9,608	\$1,188,524,774	\$5,531	\$876,154,837	\$4,077
Kansas	\$2,133,762,701	\$10,009	\$1,252,259,938	\$5,874	\$881,502,763	\$4,135
Kentucky	\$3,205,298,977	\$10,270	\$1,845,776,125	\$5,914	\$1,359,522,852	\$4,356
Louisiana	\$3,421,775,393	\$10,227	\$2,012,595,113	\$6,015	\$1,409,180,280	\$4,212
Maine	\$773,504,551	\$10,000	\$682,037,695	\$8,818	\$91,466,857	\$1,183
Maryland	\$4,653,531,597	\$12,043	\$2,591,716,107	\$6,707	\$2,061,815,490	\$5,336
Massachusetts	\$5,548,635,114	\$12,494	\$3,816,456,990	\$8,593	\$1,732,178,125	\$3,900
Michigan	\$9,194,625,742	\$12,047	\$5,369,134,655	\$7,035	\$3,825,491,087	\$5,012
Minnesota	\$4,036,032,948	\$10,977	\$2,476,249,701	\$6,735	\$1,559,783,247	\$4,242
Mississippi	\$2,509,780,012	\$10,062	\$1,295,295,380	\$5,193	\$1,214,484,631	\$4,869
Missouri	\$4,235,719,548	\$9,983	\$2,281,809,614	\$5,378	\$1,953,909,934	\$4,605
Montana	\$597,802,238	\$9,517	\$371,477,465	\$5,914	\$226,324,773	\$3,603
Nebraska	\$1,257,593,808	\$9,664	\$720,038,193	\$5,533	\$537,555,616	\$4,131
Nevada	\$1,994,314,964	\$10,331	\$913,591,211	\$4,733	\$1,080,723,753	\$5,599
New Hampshire	\$839,101,966	\$10,195	\$577,258,766	\$7,014	\$261,843,200	\$3,181
New Jersey	\$8,493,027,310	\$13,537	\$6,095,448,780	\$9,715	\$2,397,578,531	\$3,821
New Mexico	\$1,562,997,035	\$10,419	\$941,646,903	\$6,277	\$621,350,132	\$4,142
New York	\$17,039,580,937	\$13,350	\$11,917,953,306	\$9,337	\$5,121,627,632	\$4,013
North Carolina	\$7,109,373,610	\$10,234	\$3,649,499,666	\$5,253	\$3,459,873,944	\$4,980
North Dakota	\$367,337,667	\$9,138	\$236,147,544	\$5,874	\$131,190,123	\$3,264
Ohio	\$9,550,880,674	\$11,307	\$5,649,112,737	\$6,688	\$3,901,767,937	\$4,619
Oklahoma	\$2,816,344,088	\$9,732	\$1,641,937,569	\$5,674	\$1,174,406,519	\$4,058
Oregon	\$2,804,382,006	\$11,075	\$1,570,678,854	\$6,203	\$1,233,703,153	\$4,872
Pennsylvania	\$9,546,530,709	\$11,994	\$6,000,052,342	\$7,538	\$3,546,478,367	\$4,456
Rhode Island	\$805,141,992	\$12,094	\$503,647,876	\$7,565	\$301,494,116	\$4,529
South Carolina	\$3,307,406,079	\$10,264	\$1,902,521,954	\$5,904	\$1,404,884,125	\$4,360
South Dakota	\$496,921,631	\$8,769	\$312,228,390	\$5,510	\$184,693,241	\$3,259
Tennessee	\$4,586,695,950	\$10,100	\$2,207,878,476	\$4,862	\$2,378,817,474	\$5,238
Texas	\$22,229,632,086	\$10,416	\$11,611,114,194	\$5,440	\$10,618,517,892	\$4,975
Utah	\$2,418,378,389	\$9,303	\$940,924,225	\$3,619	\$1,477,454,165	\$5,683
Vermont	\$423,787,128	\$10,516	\$352,334,956	\$8,743	\$71,452,172	\$1,773
Virginia	\$6,046,380,014	\$10,746	\$3,553,507,372	\$6,315	\$2,492,872,643	\$4,430
Washington	\$4,868,953,935	\$10,689	\$2,566,186,640	\$5,634	\$2,302,767,296	\$5,055
West Virginia	\$1,208,500,734	\$10,282	\$932,663,076	\$7,936	\$275,837,658	\$2,347
Wisconsin	\$4,025,616,085	\$10,779	\$2,671,830,955	\$7,154	\$1,353,785,130	\$3,625
Wyoming	\$387,864,034	\$10,261	\$314,823,162	\$8,328	\$73,040,872	\$1,932
Totals*	\$256,253,403,791	\$11,323	\$143,534,207,436	\$6,343	\$112,719,196,355	\$4,981

**Table C10: State By State Cost Estimates: PreK Eligibility 100% of Poverty, 50% Participation Rate, PreK Class size 20**

State	PreK-3rd Cost Cost Estimate	PreK-3rd Cost Estimate Per Pupil	Estimate of PreK-3rd Current Expenditures	PreK-3rd Expenditures Per Pupil	Difference	Difference Per-Pupil
Alabama	\$2,431,788,114	\$9,732	\$1,923,963,356	\$7,700	\$507,824,758	\$2,032
Alaska	\$471,413,944	\$11,837	\$415,453,133	\$10,432	\$55,960,811	\$1,405
Arizona	\$3,540,834,132	\$10,131	\$1,984,386,840	\$5,678	\$1,556,447,292	\$4,453
Arkansas	\$1,554,670,848	\$9,874	\$1,388,076,923	\$8,816	\$166,593,925	\$1,058
California	\$24,844,586,636	\$12,547	\$17,336,706,375	\$8,755	\$7,507,880,261	\$3,792
Colorado	\$2,438,875,223	\$9,842	\$2,236,083,814	\$9,023	\$202,791,409	\$818
Connecticut	\$2,159,256,955	\$12,428	\$2,283,009,822	\$13,140	(\$123,752,867)	(\$712)
Delaware	\$460,878,231	\$12,131	\$474,002,928	\$12,476	(\$13,124,696)	(\$345)
District of Columbia	\$343,871,866	\$14,651	\$390,419,340	\$16,634	(\$46,547,474)	(\$1,983)
Florida	\$8,718,563,863	\$10,092	\$7,045,975,633	\$8,156	\$1,672,588,230	\$1,936
Georgia	\$5,712,552,154	\$10,803	\$4,699,172,493	\$8,887	\$1,013,379,661	\$1,916
Hawaii	\$622,597,241	\$10,612	\$584,416,554	\$9,961	\$38,180,687	\$651
Idaho	\$777,583,000	\$9,223	\$600,439,457	\$7,122	\$177,143,543	\$2,101
Illinois	\$7,879,824,450	\$12,261	\$6,280,879,594	\$9,773	\$1,598,944,856	\$2,488
Indiana	\$3,540,481,662	\$10,729	\$2,924,860,476	\$8,863	\$615,621,186	\$1,866
Iowa	\$1,356,249,444	\$9,262	\$1,188,524,774	\$8,117	\$167,724,670	\$1,145
Kansas	\$1,393,929,351	\$9,692	\$1,252,259,938	\$8,707	\$141,669,413	\$985
Kentucky	\$2,148,590,908	\$10,019	\$1,845,776,125	\$8,607	\$302,814,783	\$1,412
Louisiana	\$2,239,573,997	\$10,005	\$2,012,595,113	\$8,991	\$226,978,884	\$1,014
Maine	\$561,277,016	\$9,715	\$682,037,695	\$11,805	(\$120,760,678)	(\$2,090)
Maryland	\$2,845,096,518	\$11,577	\$2,591,716,107	\$10,546	\$253,380,411	\$1,031
Massachusetts	\$3,517,816,803	\$12,028	\$3,816,456,990	\$13,050	(\$298,640,187)	(\$1,021)
Michigan	\$6,141,928,506	\$11,688	\$5,369,134,655	\$10,217	\$772,793,851	\$1,471
Minnesota	\$2,593,564,399	\$10,567	\$2,476,249,701	\$10,089	\$117,314,698	\$478
Mississippi	\$1,700,419,116	\$9,904	\$1,295,295,380	\$7,545	\$405,123,736	\$2,360
Missouri	\$2,748,733,486	\$9,615	\$2,281,809,614	\$7,982	\$466,923,873	\$1,633
Montana	\$396,565,664	\$9,237	\$371,477,465	\$8,653	\$25,088,199	\$584
Nebraska	\$814,649,988	\$9,310	\$720,038,193	\$8,228	\$94,611,796	\$1,081
Nevada	\$1,328,481,429	\$9,968	\$913,591,211	\$6,855	\$414,890,218	\$3,113
New Hampshire	\$548,095,970	\$9,759	\$577,258,766	\$10,278	(\$29,162,796)	(\$519)
New Jersey	\$5,350,440,479	\$13,030	\$6,095,448,780	\$14,845	(\$745,008,301)	(\$1,814)
New Mexico	\$1,086,740,925	\$10,171	\$941,646,903	\$8,813	\$145,094,022	\$1,358
New York	\$10,856,504,280	\$12,971	\$11,917,953,306	\$14,240	(\$1,061,449,025)	(\$1,268)
North Carolina	\$4,722,893,377	\$9,886	\$3,649,499,666	\$7,639	\$1,073,393,711	\$2,247
North Dakota	\$249,992,607	\$8,817	\$236,147,544	\$8,329	\$13,845,063	\$488
Ohio	\$6,222,311,975	\$10,898	\$5,649,112,737	\$9,894	\$573,199,238	\$1,004
Oklahoma	\$1,942,524,778	\$9,523	\$1,641,937,569	\$8,050	\$300,587,209	\$1,474
Oregon	\$1,873,671,366	\$10,770	\$1,570,678,854	\$9,028	\$302,992,513	\$1,742
Pennsylvania	\$6,272,932,536	\$11,598	\$6,000,052,342	\$11,094	\$272,880,194	\$505
Rhode Island	\$524,422,662	\$11,686	\$503,647,876	\$11,223	\$20,774,786	\$463
South Carolina	\$2,236,661,956	\$10,008	\$1,902,521,954	\$8,513	\$334,140,002	\$1,495
South Dakota	\$326,715,857	\$8,418	\$312,228,390	\$8,044	\$14,487,467	\$373
Tennessee	\$3,066,028,673	\$9,802	\$2,207,878,476	\$7,059	\$858,150,197	\$2,744
Texas	\$15,115,210,542	\$10,076	\$11,611,114,194	\$7,740	\$3,504,096,348	\$2,336
Utah	\$1,512,046,145	\$8,886	\$940,924,225	\$5,530	\$571,121,921	\$3,357
Vermont	\$269,791,956	\$10,125	\$352,334,956	\$13,223	(\$82,543,000)	(\$3,098)
Virginia	\$3,825,169,223	\$10,255	\$3,553,507,372	\$9,527	\$271,661,852	\$728
Washington	\$3,203,848,383	\$10,282	\$2,566,186,640	\$8,236	\$637,661,744	\$2,046
West Virginia	\$874,192,966	\$10,038	\$932,663,076	\$10,710	(\$58,470,110)	(\$671)
Wisconsin	\$2,581,915,083	\$10,355	\$2,671,830,955	\$10,715	(\$89,915,872)	(\$361)
Wyoming	\$258,267,638	\$9,935	\$314,823,162	\$12,110	(\$56,555,524)	(\$2,176)
Totals*	\$168,205,034,322	\$10,954	\$143,534,207,436	\$9,348	\$27,396,757,416	\$1,607

**Table C11: State By State Cost Estimates: PreK Eligibility 100% of Poverty, 65% Participation Rate, PreK Class size 20**

State	PreK-3rd Cost Cost Estimate	PreK-3rd Cost Estimate Per Pupil	Estimate of PreK-3rd Current Expenditures	PreK-3rd Expenditures Per Pupil	Difference	Difference Per-Pupil
Alabama	\$2,483,280,485	\$9,736	\$1,923,963,356	\$7,543	\$559,317,130	\$2,193
Alaska	\$474,339,120	\$11,839	\$415,453,133	\$10,370	\$58,885,987	\$1,470
Arizona	\$3,606,240,306	\$10,129	\$1,984,386,840	\$5,574	\$1,621,853,466	\$4,555
Arkansas	\$1,585,629,811	\$9,868	\$1,388,076,923	\$8,638	\$197,552,888	\$1,229
California	\$25,239,098,981	\$12,542	\$17,336,706,375	\$8,615	\$7,902,392,605	\$3,927
Colorado	\$2,475,225,359	\$9,845	\$2,236,083,814	\$8,894	\$239,141,545	\$951
Connecticut	\$2,178,642,724	\$12,430	\$2,283,009,822	\$13,026	(\$104,367,098)	(\$595)
Delaware	\$467,689,812	\$12,131	\$474,002,928	\$12,295	(\$6,313,115)	(\$164)
District of Columbia	\$354,933,424	\$14,633	\$390,419,340	\$16,096	(\$35,485,916)	(\$1,463)
Florida	\$8,856,596,870	\$10,091	\$7,045,975,633	\$8,028	\$1,810,621,237	\$2,063
Georgia	\$5,813,819,958	\$10,799	\$4,699,172,493	\$8,729	\$1,114,647,465	\$2,071
Hawaii	\$630,799,754	\$10,609	\$584,416,554	\$9,829	\$46,383,200	\$780
Idaho	\$789,326,061	\$9,223	\$600,439,457	\$7,016	\$188,886,604	\$2,207
Illinois	\$7,997,408,099	\$12,260	\$6,280,879,594	\$9,629	\$1,716,528,505	\$2,632
Indiana	\$3,597,744,965	\$10,729	\$2,924,860,476	\$8,722	\$672,884,489	\$2,007
Iowa	\$1,373,598,452	\$9,265	\$1,188,524,774	\$8,017	\$185,073,678	\$1,248
Kansas	\$1,416,048,977	\$9,692	\$1,252,259,938	\$8,571	\$163,789,039	\$1,121
Kentucky	\$2,191,072,626	\$10,013	\$1,845,776,125	\$8,435	\$345,296,501	\$1,578
Louisiana	\$2,296,129,057	\$9,997	\$2,012,595,113	\$8,763	\$283,533,944	\$1,234
Maine	\$568,509,630	\$9,719	\$682,037,695	\$11,659	(\$113,528,065)	(\$1,941)
Maryland	\$2,876,118,409	\$11,578	\$2,591,716,107	\$10,433	\$284,402,302	\$1,145
Massachusetts	\$3,555,513,847	\$12,032	\$3,816,456,990	\$12,915	(\$260,943,143)	(\$883)
Michigan	\$6,236,537,637	\$11,688	\$5,369,134,655	\$10,062	\$867,402,982	\$1,626
Minnesota	\$2,623,170,270	\$10,570	\$2,476,249,701	\$9,978	\$146,920,568	\$592
Mississippi	\$1,746,006,087	\$9,885	\$1,295,295,380	\$7,334	\$450,710,707	\$2,552
Missouri	\$2,798,194,199	\$9,618	\$2,281,809,614	\$7,843	\$516,384,585	\$1,775
Montana	\$401,005,939	\$9,241	\$371,477,465	\$8,561	\$29,528,474	\$680
Nebraska	\$826,105,420	\$9,313	\$720,038,193	\$8,117	\$106,067,228	\$1,196
Nevada	\$1,344,911,160	\$9,969	\$913,591,211	\$6,772	\$431,319,949	\$3,197
New Hampshire	\$551,087,980	\$9,763	\$577,258,766	\$10,227	(\$26,170,786)	(\$464)
New Jersey	\$5,423,214,134	\$13,033	\$6,095,448,780	\$14,648	(\$672,234,645)	(\$1,615)
New Mexico	\$1,109,486,382	\$10,167	\$941,646,903	\$8,629	\$167,839,480	\$1,538
New York	\$11,066,645,592	\$12,968	\$11,917,953,306	\$13,966	(\$851,307,714)	(\$998)
North Carolina	\$4,807,735,955	\$9,888	\$3,649,499,666	\$7,506	\$1,158,236,289	\$2,382
North Dakota	\$252,796,474	\$8,819	\$236,147,544	\$8,238	\$16,648,930	\$581
Ohio	\$6,336,434,892	\$10,901	\$5,649,112,737	\$9,718	\$687,322,155	\$1,182
Oklahoma	\$1,976,010,889	\$9,520	\$1,641,937,569	\$7,911	\$334,073,320	\$1,609
Oregon	\$1,902,054,528	\$10,768	\$1,570,678,854	\$8,892	\$331,375,674	\$1,876
Pennsylvania	\$6,368,568,987	\$11,599	\$6,000,052,342	\$10,928	\$368,516,645	\$671
Rhode Island	\$533,986,655	\$11,684	\$503,647,876	\$11,020	\$30,338,779	\$664
South Carolina	\$2,277,629,015	\$10,004	\$1,902,521,954	\$8,356	\$375,107,061	\$1,648
South Dakota	\$333,858,605	\$8,420	\$312,228,390	\$7,874	\$21,630,215	\$545
Tennessee	\$3,120,300,527	\$9,802	\$2,207,878,476	\$6,936	\$912,422,051	\$2,866
Texas	\$15,435,238,752	\$10,077	\$11,611,114,194	\$7,580	\$3,824,124,558	\$2,497
Utah	\$1,525,093,911	\$8,891	\$940,924,225	\$5,486	\$584,169,686	\$3,406
Vermont	\$273,549,447	\$10,127	\$352,334,956	\$13,044	(\$78,785,508)	(\$2,917)
Virginia	\$3,873,694,870	\$10,262	\$3,553,507,372	\$9,414	\$320,187,499	\$848
Washington	\$3,245,785,686	\$10,286	\$2,566,186,640	\$8,132	\$679,599,047	\$2,154
West Virginia	\$888,974,722	\$10,039	\$932,663,076	\$10,533	(\$43,688,354)	(\$493)
Wisconsin	\$2,619,270,084	\$10,358	\$2,671,830,955	\$10,566	(\$52,560,871)	(\$208)
Wyoming	\$261,612,161	\$9,935	\$314,823,162	\$11,956	(\$53,211,001)	(\$2,021)
Totals*	\$170,986,727,689	\$10,953	\$143,534,207,436	\$9,194	\$29,751,116,469	\$1,759

**Table C12: State By State Cost Estimates: PreK Eligibility 100% of Poverty, 100% Participation Rate, PreK Class size 20**

State	PreK-3rd Cost Cost Estimate	PreK-3rd Cost Estimate Per Pupil	Estimate of PreK-3rd Current Expenditures	PreK-3rd Expenditures Per Pupil	Difference	Difference Per-Pupil
Alabama	\$2,603,429,352	\$9,745	\$1,923,963,356	\$7,202	\$679,465,997	\$2,543
Alaska	\$481,164,530	\$11,844	\$415,453,133	\$10,227	\$65,711,397	\$1,618
Arizona	\$3,758,854,712	\$10,126	\$1,984,386,840	\$5,346	\$1,774,467,873	\$4,780
Arkansas	\$1,657,867,391	\$9,853	\$1,388,076,923	\$8,249	\$269,790,468	\$1,603
California	\$26,159,627,785	\$12,530	\$17,336,706,375	\$8,304	\$8,822,921,410	\$4,226
Colorado	\$2,560,042,343	\$9,853	\$2,236,083,814	\$8,606	\$323,958,530	\$1,247
Connecticut	\$2,223,876,185	\$12,436	\$2,283,009,822	\$12,766	(\$59,133,637)	(\$331)
Delaware	\$483,583,502	\$12,131	\$474,002,928	\$11,891	\$9,580,574	\$240
District of Columbia	\$380,743,725	\$14,596	\$390,419,340	\$14,967	(\$9,675,615)	(\$371)
Florida	\$9,178,673,887	\$10,089	\$7,045,975,633	\$7,745	\$2,132,698,254	\$2,344
Georgia	\$6,050,111,503	\$10,792	\$4,699,172,493	\$8,382	\$1,350,939,010	\$2,410
Hawaii	\$649,938,950	\$10,603	\$584,416,554	\$9,534	\$65,522,396	\$1,069
Idaho	\$816,726,536	\$9,223	\$600,439,457	\$6,781	\$216,287,079	\$2,443
Illinois	\$8,271,769,945	\$12,258	\$6,280,879,594	\$9,308	\$1,990,890,351	\$2,950
Indiana	\$3,731,359,340	\$10,729	\$2,924,860,476	\$8,410	\$806,498,865	\$2,319
Iowa	\$1,414,079,470	\$9,272	\$1,188,524,774	\$7,793	\$225,554,696	\$1,479
Kansas	\$1,467,661,438	\$9,693	\$1,252,259,938	\$8,270	\$215,401,500	\$1,423
Kentucky	\$2,290,196,635	\$10,002	\$1,845,776,125	\$8,061	\$444,420,510	\$1,941
Louisiana	\$2,428,090,863	\$9,979	\$2,012,595,113	\$8,272	\$415,495,750	\$1,708
Maine	\$585,385,727	\$9,727	\$682,037,695	\$11,333	(\$96,651,967)	(\$1,606)
Maryland	\$2,948,502,822	\$11,581	\$2,591,716,107	\$10,179	\$356,786,716	\$1,401
Massachusetts	\$3,643,473,617	\$12,041	\$3,816,456,990	\$12,613	(\$172,983,373)	(\$572)
Michigan	\$6,457,292,277	\$11,688	\$5,369,134,655	\$9,718	\$1,088,157,622	\$1,970
Minnesota	\$2,692,250,635	\$10,578	\$2,476,249,701	\$9,730	\$216,000,933	\$849
Mississippi	\$1,852,375,686	\$9,845	\$1,295,295,380	\$6,884	\$557,080,306	\$2,961
Missouri	\$2,913,602,527	\$9,624	\$2,281,809,614	\$7,537	\$631,792,913	\$2,087
Montana	\$411,366,579	\$9,250	\$371,477,465	\$8,353	\$39,889,114	\$897
Nebraska	\$852,834,762	\$9,321	\$720,038,193	\$7,870	\$132,796,570	\$1,451
Nevada	\$1,383,247,200	\$9,972	\$913,591,211	\$6,586	\$469,655,989	\$3,386
New Hampshire	\$558,069,338	\$9,773	\$577,258,766	\$10,109	(\$19,189,428)	(\$336)
New Jersey	\$5,593,019,330	\$13,038	\$6,095,448,780	\$14,209	(\$502,429,449)	(\$1,171)
New Mexico	\$1,162,559,116	\$10,158	\$941,646,903	\$8,228	\$220,912,214	\$1,930
New York	\$11,556,975,318	\$12,961	\$11,917,953,306	\$13,366	(\$360,977,988)	(\$405)
North Carolina	\$5,005,701,970	\$9,892	\$3,649,499,666	\$7,212	\$1,356,202,304	\$2,680
North Dakota	\$259,338,831	\$8,824	\$236,147,544	\$8,035	\$23,191,287	\$789
Ohio	\$6,602,721,701	\$10,907	\$5,649,112,737	\$9,332	\$953,608,964	\$1,575
Oklahoma	\$2,054,145,149	\$9,513	\$1,641,937,569	\$7,604	\$412,207,580	\$1,909
Oregon	\$1,968,281,906	\$10,764	\$1,570,678,854	\$8,590	\$397,603,052	\$2,174
Pennsylvania	\$6,591,720,706	\$11,601	\$6,000,052,342	\$10,560	\$591,668,364	\$1,041
Rhode Island	\$556,302,639	\$11,680	\$503,647,876	\$10,574	\$52,654,763	\$1,105
South Carolina	\$2,373,218,819	\$9,996	\$1,902,521,954	\$8,013	\$470,696,865	\$1,982
South Dakota	\$350,525,017	\$8,424	\$312,228,390	\$7,504	\$38,296,627	\$920
Tennessee	\$3,246,934,853	\$9,801	\$2,207,878,476	\$6,664	\$1,039,056,377	\$3,136
Texas	\$16,181,971,242	\$10,079	\$11,611,114,194	\$7,232	\$4,570,857,048	\$2,847
Utah	\$1,555,538,698	\$8,902	\$940,924,225	\$5,385	\$614,614,473	\$3,517
Vermont	\$282,316,928	\$10,132	\$352,334,956	\$12,644	(\$70,018,028)	(\$2,513)
Virginia	\$3,986,921,380	\$10,278	\$3,553,507,372	\$9,160	\$433,414,008	\$1,117
Washington	\$3,343,639,393	\$10,294	\$2,566,186,640	\$7,901	\$777,452,754	\$2,394
West Virginia	\$923,465,486	\$10,042	\$932,663,076	\$10,142	(\$9,197,590)	(\$100)
Wisconsin	\$2,706,431,754	\$10,366	\$2,671,830,955	\$10,234	\$34,600,799	\$133
Wyoming	\$269,416,048	\$9,937	\$314,823,162	\$11,612	(\$45,407,114)	(\$1,675)
Totals*	\$177,477,345,544	\$10,950	\$143,534,207,436	\$8,856	\$35,288,802,299	\$2,094

**Table C13: State By State Cost Estimates: PreK Eligibility 200% of Poverty, 50% Participation Rate, PreK Class size 20**

State	PreK-3rd Cost Cost Estimate	PreK-3rd Cost Estimate Per Pupil	Estimate of PreK-3rd Current Expenditures	PreK-3rd Expenditures Per Pupil	Difference	Difference Per-Pupil
Alabama	\$2,550,397,423	\$9,697	\$1,923,963,356	\$7,315	\$626,434,067	\$2,382
Alaska	\$498,980,174	\$11,824	\$415,453,133	\$9,845	\$83,527,041	\$1,979
Arizona	\$3,785,975,571	\$10,129	\$1,984,386,840	\$5,309	\$1,801,588,732	\$4,820
Arkansas	\$1,653,987,445	\$9,863	\$1,388,076,923	\$8,277	\$265,910,522	\$1,586
California	\$26,518,984,534	\$12,525	\$17,336,706,375	\$8,189	\$9,182,278,159	\$4,337
Colorado	\$2,588,111,691	\$9,858	\$2,236,083,814	\$8,517	\$352,027,877	\$1,341
Connecticut	\$2,237,527,217	\$12,442	\$2,283,009,822	\$12,695	(\$45,482,605)	(\$253)
Delaware	\$490,867,854	\$12,122	\$474,002,928	\$11,705	\$16,864,926	\$416
District of Columbia	\$366,940,304	\$14,601	\$390,419,340	\$15,535	(\$23,479,036)	(\$934)
Florida	\$9,293,094,451	\$10,093	\$7,045,975,633	\$7,652	\$2,247,118,818	\$2,440
Georgia	\$6,046,979,500	\$10,797	\$4,699,172,493	\$8,391	\$1,347,807,007	\$2,407
Hawaii	\$668,876,072	\$10,599	\$584,416,554	\$9,260	\$84,459,518	\$1,338
Idaho	\$849,889,303	\$9,208	\$600,439,457	\$6,506	\$249,449,846	\$2,703
Illinois	\$8,300,997,017	\$12,258	\$6,280,879,594	\$9,275	\$2,020,117,423	\$2,983
Indiana	\$3,763,964,754	\$10,731	\$2,924,860,476	\$8,339	\$839,104,278	\$2,392
Iowa	\$1,437,919,056	\$9,274	\$1,188,524,774	\$7,666	\$249,394,282	\$1,609
Kansas	\$1,492,461,727	\$9,691	\$1,252,259,938	\$8,131	\$240,201,789	\$1,560
Kentucky	\$2,294,635,083	\$9,995	\$1,845,776,125	\$8,040	\$448,858,958	\$1,955
Louisiana	\$2,364,692,778	\$9,987	\$2,012,595,113	\$8,500	\$352,097,666	\$1,487
Maine	\$580,070,091	\$9,728	\$682,037,695	\$11,438	(\$101,967,604)	(\$1,710)
Maryland	\$2,993,249,369	\$11,589	\$2,591,716,107	\$10,035	\$401,533,262	\$1,555
Massachusetts	\$3,655,837,037	\$12,040	\$3,816,456,990	\$12,569	(\$160,619,952)	(\$529)
Michigan	\$6,426,825,637	\$11,691	\$5,369,134,655	\$9,767	\$1,057,690,982	\$1,924
Minnesota	\$2,703,987,066	\$10,585	\$2,476,249,701	\$9,693	\$227,737,365	\$891
Mississippi	\$1,804,372,596	\$9,866	\$1,295,295,380	\$7,082	\$509,077,215	\$2,784
Missouri	\$2,934,322,763	\$9,629	\$2,281,809,614	\$7,488	\$652,513,149	\$2,141
Montana	\$428,812,189	\$9,228	\$371,477,465	\$7,994	\$57,334,724	\$1,234
Nebraska	\$870,589,281	\$9,325	\$720,038,193	\$7,712	\$150,551,088	\$1,613
Nevada	\$1,410,529,492	\$9,987	\$913,591,211	\$6,469	\$496,938,281	\$3,519
New Hampshire	\$566,690,042	\$9,773	\$577,258,766	\$9,955	(\$10,568,724)	(\$182)
New Jersey	\$5,594,370,352	\$13,043	\$6,095,448,780	\$14,211	(\$501,078,427)	(\$1,168)
New Mexico	\$1,170,750,656	\$10,147	\$941,646,903	\$8,162	\$229,103,753	\$1,986
New York	\$11,446,958,491	\$12,966	\$11,917,953,306	\$13,500	(\$470,994,815)	(\$534)
North Carolina	\$5,011,933,876	\$9,893	\$3,649,499,666	\$7,204	\$1,362,434,210	\$2,689
North Dakota	\$263,105,721	\$8,832	\$236,147,544	\$7,927	\$26,958,177	\$905
Ohio	\$6,593,057,994	\$10,903	\$5,649,112,737	\$9,342	\$943,945,257	\$1,561
Oklahoma	\$2,075,968,436	\$9,500	\$1,641,937,569	\$7,514	\$434,030,867	\$1,986
Oregon	\$1,999,225,664	\$10,757	\$1,570,678,854	\$8,451	\$428,546,810	\$2,306
Pennsylvania	\$6,599,204,060	\$11,606	\$6,000,052,342	\$10,552	\$599,151,718	\$1,054
Rhode Island	\$550,467,717	\$11,693	\$503,647,876	\$10,698	\$46,819,841	\$995
South Carolina	\$2,365,601,400	\$9,998	\$1,902,521,954	\$8,041	\$463,079,446	\$1,957
South Dakota	\$350,686,085	\$8,435	\$312,228,390	\$7,510	\$38,457,696	\$925
Tennessee	\$3,275,834,576	\$9,795	\$2,207,878,476	\$6,601	\$1,067,956,100	\$3,193
Texas	\$16,062,894,955	\$10,086	\$11,611,114,194	\$7,290	\$4,451,780,761	\$2,795
Utah	\$1,645,957,095	\$8,914	\$940,924,225	\$5,096	\$705,032,870	\$3,818
Vermont	\$287,864,074	\$10,133	\$352,334,956	\$12,403	(\$64,470,881)	(\$2,269)
Virginia	\$4,015,138,758	\$10,285	\$3,553,507,372	\$9,103	\$461,631,387	\$1,183
Washington	\$3,396,545,356	\$10,299	\$2,566,186,640	\$7,781	\$830,358,716	\$2,518
West Virginia	\$917,400,253	\$10,040	\$932,663,076	\$10,207	(\$15,262,823)	(\$167)
Wisconsin	\$2,737,783,011	\$10,372	\$2,671,830,955	\$10,122	\$65,952,056	\$250
Wyoming	\$277,053,444	\$9,935	\$314,823,162	\$11,290	(\$37,769,718)	(\$1,354)
Totals*	\$178,218,369,491	\$10,951	\$143,534,207,436	\$8,819	\$36,115,856,641	\$2,131

**Table C14: State By State Cost Estimates: PreK Eligibility 200% of Poverty, 65% Participation Rate, PreK Class size 20**

State	PreK-3rd Cost Cost Estimate	PreK-3rd Cost Estimate Per Pupil	Estimate of PreK-3rd Current Expenditures	PreK-3rd Expenditures Per Pupil	Difference	Difference Per-Pupil
Alabama	\$2,637,472,587	\$9,692	\$1,923,963,356	\$7,070	\$713,509,232	\$2,622
Alaska	\$510,175,219	\$11,822	\$415,453,133	\$9,627	\$94,722,086	\$2,195
Arizona	\$3,924,924,177	\$10,127	\$1,984,386,840	\$5,120	\$1,940,537,338	\$5,007
Arkansas	\$1,714,741,388	\$9,853	\$1,388,076,923	\$7,976	\$326,664,465	\$1,877
California	\$27,415,816,249	\$12,515	\$17,336,706,375	\$7,914	\$10,079,109,873	\$4,601
Colorado	\$2,669,232,767	\$9,866	\$2,236,083,814	\$8,265	\$433,148,954	\$1,601
Connecticut	\$2,280,394,065	\$12,448	\$2,283,009,822	\$12,462	(\$2,615,758)	(\$14)
Delaware	\$506,676,322	\$12,120	\$474,002,928	\$11,338	\$32,673,394	\$782
District of Columbia	\$384,922,394	\$14,573	\$390,419,340	\$14,781	(\$5,496,946)	(\$208)
Florida	\$9,603,486,635	\$10,092	\$7,045,975,633	\$7,404	\$2,557,511,002	\$2,688
Georgia	\$6,248,575,509	\$10,792	\$4,699,172,493	\$8,116	\$1,549,403,016	\$2,676
Hawaii	\$690,962,234	\$10,593	\$584,416,554	\$8,960	\$106,545,680	\$1,633
Idaho	\$883,324,254	\$9,205	\$600,439,457	\$6,257	\$282,884,797	\$2,948
Illinois	\$8,544,932,436	\$12,256	\$6,280,879,594	\$9,008	\$2,264,052,842	\$3,247
Indiana	\$3,888,272,985	\$10,732	\$2,924,860,476	\$8,073	\$963,412,510	\$2,659
Iowa	\$1,479,768,948	\$9,280	\$1,188,524,774	\$7,454	\$291,244,174	\$1,826
Kansas	\$1,544,141,066	\$9,691	\$1,252,259,938	\$7,860	\$291,881,128	\$1,832
Kentucky	\$2,380,930,053	\$9,985	\$1,845,776,125	\$7,741	\$535,153,928	\$2,244
Louisiana	\$2,458,783,473	\$9,975	\$2,012,595,113	\$8,165	\$446,188,360	\$1,810
Maine	\$592,940,626	\$9,735	\$682,037,695	\$11,198	(\$89,097,068)	(\$1,463)
Maryland	\$3,068,717,116	\$11,594	\$2,591,716,107	\$9,792	\$477,001,009	\$1,802
Massachusetts	\$3,734,940,152	\$12,047	\$3,816,456,990	\$12,310	(\$81,516,838)	(\$263)
Michigan	\$6,606,903,908	\$11,691	\$5,369,134,655	\$9,501	\$1,237,769,253	\$2,190
Minnesota	\$2,766,719,737	\$10,593	\$2,476,249,701	\$9,481	\$290,470,035	\$1,112
Mississippi	\$1,881,145,611	\$9,839	\$1,295,295,380	\$6,775	\$585,850,230	\$3,064
Missouri	\$3,039,460,259	\$9,635	\$2,281,809,614	\$7,234	\$757,650,645	\$2,402
Montana	\$442,926,420	\$9,229	\$371,477,465	\$7,740	\$71,448,955	\$1,489
Nebraska	\$898,826,501	\$9,332	\$720,038,193	\$7,476	\$178,788,308	\$1,856
Nevada	\$1,451,573,642	\$9,994	\$913,591,211	\$6,290	\$537,982,431	\$3,704
New Hampshire	\$575,260,274	\$9,781	\$577,258,766	\$9,815	(\$1,998,492)	(\$34)
New Jersey	\$5,740,322,970	\$13,049	\$6,095,448,780	\$13,856	(\$355,125,810)	(\$807)
New Mexico	\$1,218,699,032	\$10,138	\$941,646,903	\$7,833	\$277,052,129	\$2,305
New York	\$11,834,236,065	\$12,962	\$11,917,953,306	\$13,054	(\$83,717,241)	(\$92)
North Carolina	\$5,183,488,603	\$9,897	\$3,649,499,666	\$6,968	\$1,533,988,937	\$2,929
North Dakota	\$269,843,522	\$8,838	\$236,147,544	\$7,734	\$33,695,979	\$1,104
Ohio	\$6,818,404,717	\$10,908	\$5,649,112,737	\$9,037	\$1,169,291,980	\$1,871
Oklahoma	\$2,149,487,644	\$9,491	\$1,641,937,569	\$7,250	\$507,550,076	\$2,241
Oregon	\$2,065,275,115	\$10,752	\$1,570,678,854	\$8,177	\$494,596,261	\$2,575
Pennsylvania	\$6,792,721,968	\$11,609	\$6,000,052,342	\$10,254	\$792,669,626	\$1,355
Rhode Island	\$567,845,226	\$11,693	\$503,647,876	\$10,371	\$64,197,350	\$1,322
South Carolina	\$2,445,250,292	\$9,992	\$1,902,521,954	\$7,774	\$542,728,338	\$2,218
South Dakota	\$365,019,902	\$8,441	\$312,228,390	\$7,220	\$52,791,513	\$1,221
Tennessee	\$3,393,048,201	\$9,792	\$2,207,878,476	\$6,372	\$1,185,169,725	\$3,420
Texas	\$16,667,228,489	\$10,089	\$11,611,114,194	\$7,028	\$5,056,114,295	\$3,061
Utah	\$1,699,178,146	\$8,926	\$940,924,225	\$4,943	\$758,253,921	\$3,983
Vermont	\$297,043,201	\$10,137	\$352,334,956	\$12,024	(\$55,291,754)	(\$1,887)
Virginia	\$4,120,655,266	\$10,300	\$3,553,507,372	\$8,882	\$567,147,894	\$1,418
Washington	\$3,496,291,750	\$10,307	\$2,566,186,640	\$7,565	\$930,105,111	\$2,742
West Virginia	\$945,144,194	\$10,042	\$932,663,076	\$9,909	\$12,481,118	\$133
Wisconsin	\$2,821,898,390	\$10,380	\$2,671,830,955	\$9,828	\$150,067,436	\$552
Wyoming	\$286,033,708	\$9,936	\$314,823,162	\$10,936	(\$28,789,454)	(\$1,000)
Totals*	\$184,004,063,408	\$10,948	\$143,534,207,436	\$8,540	\$41,173,505,333	\$2,408

**Table C15: State By State Cost Estimates: PreK Eligibility 200% of Poverty, 100% Participation Rate, PreK Class size 20**

State	PreK-3rd Cost Cost Estimate	PreK-3rd Cost Estimate Per Pupil	Estimate of PreK-3rd Current Expenditures	PreK-3rd Expenditures Per Pupil	Difference	Difference Per-Pupil
Alabama	\$2,840,647,970	\$9,681	\$1,923,963,356	\$6,557	\$916,684,615	\$3,124
Alaska	\$536,296,990	\$11,819	\$415,453,133	\$9,156	\$120,843,857	\$2,663
Arizona	\$4,249,137,591	\$10,123	\$1,984,386,840	\$4,727	\$2,264,750,752	\$5,395
Arkansas	\$1,856,500,586	\$9,834	\$1,388,076,923	\$7,353	\$468,423,663	\$2,481
California	\$29,508,423,582	\$12,493	\$17,336,706,375	\$7,340	\$12,171,717,206	\$5,153
Colorado	\$2,858,515,279	\$9,881	\$2,236,083,814	\$7,730	\$622,431,466	\$2,152
Connecticut	\$2,380,416,708	\$12,461	\$2,283,009,822	\$11,951	\$97,406,886	\$510
Delaware	\$543,562,747	\$12,115	\$474,002,928	\$10,565	\$69,559,819	\$1,550
District of Columbia	\$426,880,602	\$14,516	\$390,419,340	\$13,276	\$36,461,262	\$1,240
Florida	\$10,327,735,063	\$10,090	\$7,045,975,633	\$6,884	\$3,281,759,430	\$3,206
Georgia	\$6,718,966,197	\$10,783	\$4,699,172,493	\$7,541	\$2,019,793,704	\$3,241
Hawaii	\$742,496,612	\$10,581	\$584,416,554	\$8,328	\$158,080,057	\$2,253
Idaho	\$961,339,141	\$9,197	\$600,439,457	\$5,744	\$360,899,684	\$3,453
Illinois	\$9,114,115,079	\$12,252	\$6,280,879,594	\$8,443	\$2,833,235,485	\$3,809
Indiana	\$4,178,325,525	\$10,734	\$2,924,860,476	\$7,514	\$1,253,465,049	\$3,220
Iowa	\$1,577,418,694	\$9,293	\$1,188,524,774	\$7,002	\$388,893,920	\$2,291
Kansas	\$1,664,726,190	\$9,692	\$1,252,259,938	\$7,291	\$412,466,252	\$2,401
Kentucky	\$2,582,284,985	\$9,963	\$1,845,776,125	\$7,121	\$736,508,860	\$2,842
Louisiana	\$2,678,328,426	\$9,950	\$2,012,595,113	\$7,477	\$665,733,313	\$2,473
Maine	\$622,971,876	\$9,751	\$682,037,695	\$10,675	(\$59,065,819)	(\$924)
Maryland	\$3,244,808,525	\$11,604	\$2,591,716,107	\$9,269	\$653,092,418	\$2,336
Massachusetts	\$3,919,514,086	\$12,061	\$3,816,456,990	\$11,744	\$103,057,096	\$317
Michigan	\$7,027,086,540	\$11,693	\$5,369,134,655	\$8,934	\$1,657,951,885	\$2,759
Minnesota	\$2,913,095,968	\$10,611	\$2,476,249,701	\$9,020	\$436,846,267	\$1,591
Mississippi	\$2,060,282,645	\$9,785	\$1,295,295,380	\$6,152	\$764,987,265	\$3,633
Missouri	\$3,284,781,081	\$9,648	\$2,281,809,614	\$6,702	\$1,002,971,467	\$2,946
Montana	\$475,859,628	\$9,232	\$371,477,465	\$7,207	\$104,382,163	\$2,025
Nebraska	\$964,713,348	\$9,347	\$720,038,193	\$6,976	\$244,675,155	\$2,371
Nevada	\$1,547,343,325	\$10,007	\$913,591,211	\$5,909	\$633,752,114	\$4,099
New Hampshire	\$595,257,482	\$9,800	\$577,258,766	\$9,504	\$17,998,716	\$296
New Jersey	\$6,080,879,078	\$13,060	\$6,095,448,780	\$13,092	(\$14,569,702)	(\$31)
New Mexico	\$1,330,578,578	\$10,119	\$941,646,903	\$7,161	\$388,931,675	\$2,958
New York	\$12,737,883,738	\$12,953	\$11,917,953,306	\$12,119	\$819,930,433	\$834
North Carolina	\$5,583,782,968	\$9,904	\$3,649,499,666	\$6,473	\$1,934,283,302	\$3,431
North Dakota	\$285,565,059	\$8,851	\$236,147,544	\$7,320	\$49,417,515	\$1,532
Ohio	\$7,344,213,738	\$10,916	\$5,649,112,737	\$8,397	\$1,695,101,001	\$2,520
Oklahoma	\$2,321,032,465	\$9,473	\$1,641,937,569	\$6,701	\$679,094,896	\$2,772
Oregon	\$2,219,390,501	\$10,742	\$1,570,678,854	\$7,602	\$648,711,647	\$3,140
Pennsylvania	\$7,244,263,753	\$11,615	\$6,000,052,342	\$9,620	\$1,244,211,411	\$1,995
Rhode Island	\$608,392,749	\$11,692	\$503,647,876	\$9,679	\$104,744,873	\$2,013
South Carolina	\$2,631,097,706	\$9,979	\$1,902,521,954	\$7,215	\$728,575,752	\$2,763
South Dakota	\$398,465,475	\$8,454	\$312,228,390	\$6,624	\$86,237,085	\$1,830
Tennessee	\$3,666,546,659	\$9,788	\$2,207,878,476	\$5,894	\$1,458,668,183	\$3,894
Texas	\$18,077,340,068	\$10,095	\$11,611,114,194	\$6,484	\$6,466,225,874	\$3,611
Utah	\$1,823,360,597	\$8,950	\$940,924,225	\$4,619	\$882,436,372	\$4,332
Vermont	\$318,461,164	\$10,145	\$352,334,956	\$11,224	(\$33,873,791)	(\$1,079)
Virginia	\$4,366,860,450	\$10,331	\$3,553,507,372	\$8,407	\$813,353,078	\$1,924
Washington	\$3,729,033,338	\$10,324	\$2,566,186,640	\$7,104	\$1,162,846,698	\$3,219
West Virginia	\$1,009,880,059	\$10,045	\$932,663,076	\$9,277	\$77,216,983	\$768
Wisconsin	\$3,018,167,609	\$10,396	\$2,671,830,955	\$9,203	\$346,336,654	\$1,193
Wyoming	\$306,987,659	\$9,937	\$314,823,162	\$10,191	(\$7,835,503)	(\$254)
Totals*	\$197,504,015,882	\$10,944	\$143,534,207,436	\$7,953	\$54,085,153,261	\$2,991

**Table C16: State By State Cost Estimates: PreK Eligibility All 3 and 4 Year Old Children, 50% Participation Rate, PreK Class size 20**

State	PreK-3rd Cost Cost Estimate	PreK-3rd Cost Estimate Per Pupil	Estimate of PreK-3rd Current Expenditures	PreK-3rd Expenditures Per Pupil	Difference	Difference Per-Pupil
Alabama	\$2,813,799,052	\$9,631	\$1,923,963,356	\$6,585	\$889,835,696	\$3,046
Alaska	\$563,754,036	\$11,748	\$415,453,133	\$8,658	\$148,300,903	\$3,090
Arizona	\$4,203,900,107	\$10,059	\$1,984,386,840	\$4,748	\$2,219,513,268	\$5,311
Arkansas	\$1,789,574,185	\$9,788	\$1,388,076,923	\$7,592	\$401,497,262	\$2,196
California	\$29,930,350,460	\$12,392	\$17,336,706,375	\$7,178	\$12,593,644,084	\$5,214
Colorado	\$2,980,427,565	\$9,810	\$2,236,083,814	\$7,360	\$744,343,751	\$2,450
Connecticut	\$2,637,395,396	\$12,368	\$2,283,009,822	\$10,706	\$354,385,574	\$1,662
Delaware	\$576,105,030	\$12,020	\$474,002,928	\$9,890	\$102,102,103	\$2,130
District of Columbia	\$409,999,872	\$14,473	\$390,419,340	\$13,782	\$19,580,532	\$691
Florida	\$10,429,385,045	\$10,022	\$7,045,975,633	\$6,771	\$3,383,409,412	\$3,251
Georgia	\$6,763,515,225	\$10,703	\$4,699,172,493	\$7,436	\$2,064,342,732	\$3,267
Hawaii	\$799,183,757	\$10,480	\$584,416,554	\$7,663	\$214,767,203	\$2,816
Idaho	\$947,600,948	\$9,150	\$600,439,457	\$5,798	\$347,161,491	\$3,352
Illinois	\$9,532,319,305	\$12,138	\$6,280,879,594	\$7,998	\$3,251,439,711	\$4,140
Indiana	\$4,269,389,788	\$10,655	\$2,924,860,476	\$7,299	\$1,344,529,312	\$3,355
Iowa	\$1,638,380,028	\$9,224	\$1,188,524,774	\$6,692	\$449,855,254	\$2,533
Kansas	\$1,682,058,667	\$9,628	\$1,252,259,938	\$7,168	\$429,798,729	\$2,460
Kentucky	\$2,539,126,980	\$9,917	\$1,845,776,125	\$7,209	\$693,350,855	\$2,708
Louisiana	\$2,662,603,320	\$9,881	\$2,012,595,113	\$7,469	\$650,008,207	\$2,412
Maine	\$642,695,880	\$9,686	\$682,037,695	\$10,278	(\$39,341,814)	(\$593)
Maryland	\$3,587,019,018	\$11,509	\$2,591,716,107	\$8,316	\$995,302,911	\$3,193
Massachusetts	\$4,346,771,795	\$11,967	\$3,816,456,990	\$10,507	\$530,314,805	\$1,460
Michigan	\$7,313,796,299	\$11,594	\$5,369,134,655	\$8,511	\$1,944,661,644	\$3,083
Minnesota	\$3,177,648,692	\$10,521	\$2,476,249,701	\$8,198	\$701,398,991	\$2,322
Mississippi	\$1,975,142,376	\$9,762	\$1,295,295,380	\$6,402	\$679,846,995	\$3,360
Missouri	\$3,320,896,260	\$9,580	\$2,281,809,614	\$6,582	\$1,039,086,647	\$2,997
Montana	\$477,721,535	\$9,169	\$371,477,465	\$7,130	\$106,244,070	\$2,039
Nebraska	\$990,424,783	\$9,272	\$720,038,193	\$6,740	\$270,386,591	\$2,531
Nevada	\$1,593,553,560	\$9,932	\$913,591,211	\$5,694	\$679,962,349	\$4,238
New Hampshire	\$671,556,169	\$9,766	\$577,258,766	\$8,394	\$94,297,403	\$1,371
New Jersey	\$6,615,619,873	\$12,976	\$6,095,448,780	\$11,956	\$520,171,094	\$1,020
New Mexico	\$1,257,215,167	\$10,087	\$941,646,903	\$7,555	\$315,568,264	\$2,532
New York	\$13,214,247,630	\$12,838	\$11,917,953,306	\$11,579	\$1,296,294,325	\$1,259
North Carolina	\$5,624,103,726	\$9,831	\$3,649,499,666	\$6,380	\$1,974,604,060	\$3,452
North Dakota	\$297,048,224	\$8,799	\$236,147,544	\$6,995	\$60,900,681	\$1,804
Ohio	\$7,483,629,803	\$10,836	\$5,649,112,737	\$8,180	\$1,834,517,066	\$2,656
Oklahoma	\$2,269,919,979	\$9,430	\$1,641,937,569	\$6,821	\$627,982,410	\$2,609
Oregon	\$2,231,210,876	\$10,668	\$1,570,678,854	\$7,510	\$660,532,022	\$3,158
Pennsylvania	\$7,542,800,522	\$11,520	\$6,000,052,342	\$9,164	\$1,542,748,180	\$2,356
Rhode Island	\$630,653,259	\$11,604	\$503,647,876	\$9,267	\$127,005,383	\$2,337
South Carolina	\$2,635,841,752	\$9,913	\$1,902,521,954	\$7,155	\$733,319,798	\$2,758
South Dakota	\$389,541,635	\$8,406	\$312,228,390	\$6,737	\$77,313,246	\$1,668
Tennessee	\$3,640,436,689	\$9,728	\$2,207,878,476	\$5,900	\$1,432,558,213	\$3,828
Texas	\$17,703,701,954	\$10,034	\$11,611,114,194	\$6,581	\$6,092,587,761	\$3,453
Utah	\$1,889,930,894	\$8,883	\$940,924,225	\$4,422	\$949,006,669	\$4,460
Vermont	\$330,928,882	\$10,070	\$352,334,956	\$10,721	(\$21,406,073)	(\$651)
Virginia	\$4,729,175,185	\$10,273	\$3,553,507,372	\$7,719	\$1,175,667,813	\$2,554
Washington	\$3,865,356,526	\$10,254	\$2,566,186,640	\$6,808	\$1,299,169,886	\$3,447
West Virginia	\$997,435,068	\$9,987	\$932,663,076	\$9,339	\$64,771,992	\$649
Wisconsin	\$3,154,073,624	\$10,323	\$2,671,830,955	\$8,745	\$482,242,669	\$1,578
Wyoming	\$309,677,686	\$9,881	\$314,823,162	\$10,045	(\$5,145,476)	(\$164)
Totals*	\$202,078,644,089	\$10,884	\$143,534,207,436	\$7,731	\$58,610,330,016	\$3,153

**Table C17: State By State Cost Estimates: PreK Eligibility All 3 and 4 Year Old Children, 65% Participation Rate, PreK Class size 20**

State	PreK-3rd Cost Cost Estimate	PreK-3rd Cost Estimate Per Pupil	Estimate of PreK-3rd Current Expenditures	PreK-3rd Expenditures Per Pupil	Difference	Difference Per-Pupil
Alabama	\$2,979,894,704	\$9,611	\$1,923,963,356	\$6,205	\$1,055,931,349	\$3,406
Alaska	\$594,381,240	\$11,729	\$415,453,133	\$8,198	\$178,928,107	\$3,531
Arizona	\$4,468,226,074	\$10,042	\$1,984,386,840	\$4,460	\$2,483,839,234	\$5,582
Arkansas	\$1,891,004,149	\$9,763	\$1,388,076,923	\$7,166	\$502,927,226	\$2,596
California	\$31,850,591,952	\$12,355	\$17,336,706,375	\$6,725	\$14,513,885,576	\$5,630
Colorado	\$3,179,243,403	\$9,806	\$2,236,083,814	\$6,897	\$943,159,590	\$2,909
Connecticut	\$2,800,222,697	\$12,356	\$2,283,009,822	\$10,074	\$517,212,875	\$2,282
Delaware	\$617,484,651	\$11,997	\$474,002,928	\$9,209	\$143,481,723	\$2,788
District of Columbia	\$440,899,831	\$14,423	\$390,419,340	\$12,771	\$50,480,491	\$1,651
Florida	\$11,080,664,407	\$10,006	\$7,045,975,633	\$6,362	\$4,034,688,774	\$3,643
Georgia	\$7,180,071,952	\$10,678	\$4,699,172,493	\$6,988	\$2,480,899,459	\$3,690
Hawaii	\$860,362,225	\$10,451	\$584,416,554	\$7,099	\$275,945,671	\$3,352
Idaho	\$1,010,349,393	\$9,134	\$600,439,457	\$5,428	\$409,909,936	\$3,706
Illinois	\$10,145,651,410	\$12,110	\$6,280,879,594	\$7,497	\$3,864,771,816	\$4,613
Indiana	\$4,545,325,529	\$10,638	\$2,924,860,476	\$6,846	\$1,620,465,053	\$3,793
Iowa	\$1,740,368,211	\$9,218	\$1,188,524,774	\$6,295	\$551,843,437	\$2,923
Kansas	\$1,790,617,088	\$9,614	\$1,252,259,938	\$6,723	\$538,357,150	\$2,890
Kentucky	\$2,698,769,520	\$9,891	\$1,845,776,125	\$6,765	\$852,993,395	\$3,126
Louisiana	\$2,846,067,176	\$9,848	\$2,012,595,113	\$6,964	\$833,472,064	\$2,884
Maine	\$674,354,153	\$9,681	\$682,037,695	\$9,792	(\$7,683,542)	(\$110)
Maryland	\$3,840,617,659	\$11,496	\$2,591,716,107	\$7,757	\$1,248,901,552	\$3,738
Massachusetts	\$4,633,155,337	\$11,957	\$3,816,456,990	\$9,849	\$816,698,347	\$2,108
Michigan	\$7,759,965,769	\$11,572	\$5,369,134,655	\$8,007	\$2,390,831,113	\$3,565
Minnesota	\$3,382,479,850	\$10,513	\$2,476,249,701	\$7,697	\$906,230,149	\$2,817
Mississippi	\$2,103,146,325	\$9,716	\$1,295,295,380	\$5,984	\$807,850,944	\$3,732
Missouri	\$3,542,005,805	\$9,574	\$2,281,809,614	\$6,168	\$1,260,196,191	\$3,406
Montana	\$506,508,571	\$9,157	\$371,477,465	\$6,716	\$135,031,106	\$2,441
Nebraska	\$1,054,612,654	\$9,266	\$720,038,193	\$6,326	\$334,574,461	\$2,940
Nevada	\$1,689,504,931	\$9,225	\$913,591,211	\$5,367	\$775,913,720	\$4,558
New Hampshire	\$711,586,239	\$9,771	\$577,258,766	\$7,926	\$134,327,473	\$1,844
New Jersey	\$7,067,947,347	\$12,966	\$6,095,448,780	\$11,182	\$972,498,568	\$1,784
New Mexico	\$1,331,102,897	\$10,065	\$941,646,903	\$7,120	\$389,455,994	\$2,945
New York	\$14,131,711,947	\$12,807	\$11,917,953,306	\$10,801	\$2,213,758,641	\$2,006
North Carolina	\$5,979,309,408	\$9,821	\$3,649,499,666	\$5,994	\$2,329,809,742	\$3,827
North Dakota	\$313,968,777	\$8,797	\$236,147,544	\$6,616	\$77,821,233	\$2,180
Ohio	\$7,976,148,070	\$10,825	\$5,649,112,737	\$7,667	\$2,327,035,333	\$3,158
Oklahoma	\$2,401,624,651	\$9,407	\$1,641,937,569	\$6,431	\$759,687,082	\$2,975
Oregon	\$2,366,855,891	\$10,644	\$1,570,678,854	\$7,063	\$796,177,037	\$3,580
Pennsylvania	\$8,019,397,369	\$11,504	\$6,000,052,342	\$8,607	\$2,019,345,027	\$2,897
Rhode Island	\$672,086,432	\$11,585	\$503,647,876	\$8,681	\$168,438,556	\$2,903
South Carolina	\$2,796,562,749	\$9,889	\$1,902,521,954	\$6,728	\$894,040,795	\$3,161
South Dakota	\$415,532,117	\$8,405	\$312,228,390	\$6,315	\$103,303,727	\$2,089
Tennessee	\$3,867,030,948	\$9,712	\$2,207,878,476	\$5,545	\$1,659,152,472	\$4,167
Texas	\$18,800,277,588	\$10,025	\$11,611,114,194	\$6,191	\$7,189,163,394	\$3,834
Utah	\$2,016,344,085	\$8,886	\$940,924,225	\$4,146	\$1,075,419,860	\$4,739
Vermont	\$353,027,452	\$10,060	\$352,334,956	\$10,040	\$692,496	\$20
Virginia	\$5,048,902,620	\$10,282	\$3,553,507,372	\$7,236	\$1,495,395,249	\$3,045
Washington	\$4,105,746,272	\$10,251	\$2,566,186,640	\$6,407	\$1,539,559,632	\$3,844
West Virginia	\$1,049,189,454	\$9,976	\$932,663,076	\$8,868	\$116,526,378	\$1,108
Wisconsin	\$3,363,076,187	\$10,319	\$2,671,830,955	\$8,198	\$691,245,232	\$2,121
Wyoming	\$328,445,224	\$9,870	\$314,823,162	\$9,460	\$13,622,062	\$409
Totals*	\$215,022,420,385	\$10,867	\$143,534,207,436	\$7,254	\$71,495,896,491	\$3,613

**Table C18: State By State Cost Estimates: PreK Eligibility All 3 and 4 Year Old Children, 100% Participation Rate, PreK Class size 20**

State	PreK-3rd Cost	PreK-3rd Cost	Estimate of PreK-3rd	PreK-3rd Expenditures	Difference	
	Cost Estimate	Estimate Per Pupil	Current Expenditures	Per Pupil	Difference	Per-Pupil
Alabama	\$3,367,451,228	\$9,574	\$1,923,963,356	\$5,470	\$1,443,487,872	\$4,104
Alaska	\$665,844,714	\$11,692	\$415,453,133	\$7,295	\$250,391,581	\$4,397
Arizona	\$5,084,986,663	\$10,009	\$1,984,386,840	\$3,906	\$3,100,599,824	\$6,103
Arkansas	\$2,127,674,065	\$9,713	\$1,388,076,923	\$6,337	\$739,597,142	\$3,376
California	\$36,331,155,432	\$12,283	\$17,336,706,375	\$5,861	\$18,994,449,057	\$6,422
Colorado	\$3,643,147,027	\$9,798	\$2,236,083,814	\$6,014	\$1,407,063,213	\$3,784
Connecticut	\$3,180,153,066	\$12,333	\$2,283,009,822	\$8,854	\$897,143,244	\$3,479
Delaware	\$714,037,099	\$11,954	\$474,002,928	\$7,935	\$240,034,172	\$4,018
District of Columbia	\$512,999,737	\$14,327	\$390,419,340	\$10,905	\$122,580,397	\$3,424
Florida	\$12,600,316,251	\$9,974	\$7,045,975,633	\$5,577	\$5,554,340,618	\$4,397
Georgia	\$8,152,037,646	\$10,630	\$4,699,172,493	\$6,128	\$3,452,865,153	\$4,502
Hawaii	\$1,003,111,982	\$10,398	\$584,416,554	\$6,058	\$418,695,428	\$4,340
Idaho	\$1,156,762,432	\$9,104	\$600,439,457	\$4,725	\$556,322,975	\$4,378
Illinois	\$11,576,759,655	\$12,057	\$6,280,879,594	\$6,542	\$5,295,880,061	\$5,516
Indiana	\$5,189,175,592	\$10,608	\$2,924,860,476	\$5,979	\$2,264,315,117	\$4,629
Iowa	\$1,978,340,638	\$9,206	\$1,188,524,774	\$5,531	\$789,815,864	\$3,676
Kansas	\$2,043,920,070	\$9,587	\$1,252,259,938	\$5,874	\$791,660,132	\$3,713
Kentucky	\$3,071,268,779	\$9,841	\$1,845,776,125	\$5,914	\$1,225,492,654	\$3,927
Louisiana	\$3,274,149,509	\$9,786	\$2,012,595,113	\$6,015	\$1,261,554,396	\$3,771
Maine	\$748,223,455	\$9,673	\$682,037,695	\$8,818	\$66,185,761	\$856
Maryland	\$4,432,347,822	\$11,470	\$2,591,716,107	\$6,707	\$1,840,631,715	\$4,763
Massachusetts	\$5,301,383,602	\$11,937	\$3,816,456,990	\$8,593	\$1,484,926,612	\$3,344
Michigan	\$8,801,027,864	\$11,532	\$5,369,134,655	\$7,035	\$3,431,893,208	\$4,497
Minnesota	\$3,860,419,220	\$10,499	\$2,476,249,701	\$6,735	\$1,384,169,519	\$3,765
Mississippi	\$2,401,822,205	\$9,629	\$1,295,295,380	\$5,193	\$1,106,526,825	\$4,436
Missouri	\$4,057,928,075	\$9,564	\$2,281,809,614	\$5,378	\$1,776,118,461	\$4,186
Montana	\$573,678,321	\$9,133	\$371,477,465	\$5,914	\$202,200,855	\$3,219
Nebraska	\$1,204,384,352	\$9,255	\$720,038,193	\$5,533	\$484,346,160	\$3,722
Nevada	\$1,913,391,461	\$9,912	\$913,591,211	\$4,733	\$999,800,250	\$5,179
New Hampshire	\$804,989,736	\$9,781	\$577,258,766	\$7,014	\$227,730,970	\$2,767
New Jersey	\$8,123,378,120	\$12,947	\$6,095,448,780	\$9,715	\$2,027,929,341	\$3,232
New Mexico	\$1,503,507,601	\$10,023	\$941,646,903	\$6,277	\$561,860,698	\$3,746
New York	\$16,272,462,018	\$12,749	\$11,917,953,306	\$9,337	\$4,354,508,712	\$3,412
North Carolina	\$6,808,122,667	\$9,800	\$3,649,499,666	\$5,253	\$3,158,623,001	\$4,547
North Dakota	\$353,450,066	\$8,793	\$236,147,544	\$5,874	\$117,302,522	\$2,918
Ohio	\$9,125,357,358	\$10,803	\$5,649,112,737	\$6,688	\$3,476,244,621	\$4,115
Oklahoma	\$2,708,935,551	\$9,361	\$1,641,937,569	\$5,674	\$1,066,997,982	\$3,687
Oregon	\$2,683,360,926	\$10,598	\$1,570,678,854	\$6,203	\$1,112,682,072	\$4,394
Pennsylvania	\$9,131,456,678	\$11,472	\$6,000,052,342	\$7,538	\$3,131,404,336	\$3,934
Rhode Island	\$768,763,835	\$11,547	\$503,647,876	\$7,565	\$265,115,959	\$3,982
South Carolina	\$3,171,578,410	\$9,843	\$1,902,521,954	\$5,904	\$1,269,056,456	\$3,938
South Dakota	\$476,176,574	\$8,403	\$312,228,390	\$5,510	\$163,948,185	\$2,893
Tennessee	\$4,395,750,885	\$9,680	\$2,207,878,476	\$4,862	\$2,187,872,409	\$4,818
Texas	\$21,358,954,067	\$10,008	\$11,611,114,194	\$5,440	\$9,747,839,873	\$4,567
Utah	\$2,311,308,196	\$8,891	\$940,924,225	\$3,619	\$1,370,383,971	\$5,271
Vermont	\$404,590,780	\$10,039	\$352,334,956	\$8,743	\$52,255,825	\$1,297
Virginia	\$5,794,933,303	\$10,299	\$3,553,507,372	\$6,315	\$2,241,425,931	\$3,984
Washington	\$4,666,655,678	\$10,245	\$2,566,186,640	\$5,634	\$2,100,469,038	\$4,611
West Virginia	\$1,169,949,689	\$9,954	\$932,663,076	\$7,936	\$237,286,613	\$2,019
Wisconsin	\$3,850,748,834	\$10,311	\$2,671,830,955	\$7,154	\$1,178,917,879	\$3,157
Wyoming	\$372,236,144	\$9,847	\$314,823,162	\$8,328	\$57,412,982	\$1,519
Totals*	\$245,224,565,078	\$10,836	\$143,534,207,436	\$6,343	\$101,690,357,641	\$4,494