

**Testimony  
2015 Joint Legislative Hearing  
Elementary and Secondary Education Committee**

**Steven Krokoff, Chief of Police, City of Albany  
Debra Scullary, Brigadier General (ret.), Air Force  
Mark Eagan, President, Albany-Colonie Regional Chamber  
of Commerce**

**February 3, 2015**

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Good afternoon.

I am Steven Krokoff, Chief of Police for the City of Albany. Thank you, Members of the Committee for allowing us to testify today.

Law enforcement leaders across the State know that if we don't pay now, New Yorkers will pay law enforcement later. We would rather fill Pre-K classes—both in schools and in community-based organizations—than fill jails and prisons. That is why we are asking our State to Keep the Promise of Pre-K by making these investments.

I am here as a member of Fight Crime: Invest in Kids NY. Our membership of 248 sheriffs, police chiefs, district attorneys, and crime survivors represent constituencies across New York State. We urge you to remember that about one half of all Pre-K eligible 4 year olds live outside of New York City and currently receive less than 12 percent of the funding.

We do applaud the Governor for his continued commitment to universal, full-day, high-quality Pre-K, and acknowledge his proposed expansion of \$25 million for 3 year olds, but ask you to keep the promise for Universal Full-Day Prekindergarten for four-year-olds with an additional investment of at least \$150 million, and fully support New York City's plan to reach universal service in the 2015-16 school year.

We ask you to ensure all districts awarded full-day Pre-K grants receive the state funding on a predictable payment schedule, as is the case with Universal Prekindergarten and Priority Pre-K programs.

The Governor's Pre-K program for high-need three-year-olds should build on the expertise in community-based organizations already serving young children. The investment should support quality standards and practices appropriate for three-year-olds.

For the sake of our children, we cannot make an assumption of quality in our Pre-K programs. We need to ensure that this investment has the rate of return that we know is only possible if we measure program quality and provide opportunities to improve it. Therefore, we strongly support the Governor's proposal of \$3 million for QUALITYstarsNY.

As law enforcement leaders, it's our job to do everything possible to protect public safety. Incarcerating people who commit crimes is one way we do that.

But we know from personal experience that we can't simply arrest, prosecute and incarcerate our way out of crime problems. We have to implement strategies that keep people from turning to crime in the first place.

Education needs to be the focal point of that strategy. In New York State, more than 40 percent of inmates in state prisons don't have high school diplomas. And the research shows that involvement in high-quality Pre-K increases high school graduation rates.

So there's a simple wisdom of investing in quality Pre-K now... as opposed to paying much more to lock people up in the years to come. But that investment must be statewide.

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I am Brigadier General Debra Scullary, a member of Mission: Readiness, retired admirals and generals dedicated to ensuring the success of our young people.

You've heard from law enforcement who view high-quality Pre-K as a valuable crime prevention tool. I'm here to tell you why it's a matter of national security.

An estimated 75 percent of all young Americans are unable to join the military. There are three primary reasons: they are too poorly educated, they have serious criminal records, or they are too overweight. Twenty-two percent of young people in this country do not graduate on time from high school, and the military rarely takes anyone without a diploma anymore. Even among those who graduate from high school, in New York, 21 percent of those seeking to enlist in the Army cannot join because of low scores on the military's entrance exam.

One in 10 young adults cannot join because they have at least one prior conviction for a felony or serious misdemeanor. National surveys commissioned for the military show that approximately one in four young adults is unable to serve because of excess body fat.

Whether students choose to go into the military or not, they need to be prepared for whatever they do upon graduation. But not having enough young people educationally fit to serve—this is, in fact, a threat to national security.

While trends in education reform come and go, research shows that there is a solution that is consistently proven over time. It's high-quality Pre-K.

We know that many of you have great concern about the cost of the investment in high-quality Pre-K. But failing to make this investment means a higher cost to society in the future.

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Good afternoon. I am Mark Eagan. I am the President and CEO of the Albany-Colonie Regional Chamber of Commerce.

You've heard from law enforcement and military leaders about why high quality Pre-K is important to them. I'm here to tell you why it's important to the business community.

I am a member of ReadyNationNY , an organization of more than 150 business owners and other key members of senior management around the State.

Investing in high-quality early learning programs will strengthen the economy in the short-term with each new \$1 invested generating roughly \$2 in sales of goods and services from local businesses, resulting in billions of dollars in new spending.

The immediate economic boost to local businesses from early learning investments is as high or higher than investments in other major sectors, including construction, retail trade, manufacturing, transportation and utilities.

Access to quality early learning also decreases absenteeism among parents - which costs U.S. businesses \$3 billion annually - because their children are in stable and reliable programs.

Communities with these programs attract and retain better and more qualified employees and are also more competitive in attracting new businesses.

We are also aware that if we want our children to be successful in life, we not only need to give children the right start in life, but also support their success throughout

the education continuum. That's why I'm going to say a few words about offering opportunities for older students.

We have been very supportive of multiple pathways to graduation. We believe that not all students will succeed by following the traditional pathway and should be given every opportunity to pursue other avenues to graduation. Not only will multiple pathways help improve New York State's graduation rate, but our graduates will be better prepared for college and/or careers.

We support the NYS Board of Regents proposal of the implementation of the 4 + 1 program, but urge that implementation take into account all issues pertaining to access for all students as well as how outcomes (and success) will be measured. We strongly believe that the pathway exams must be rigorous enough to reflect an adequate mastery of the studies. We hope that it is rolled out across the State in a thoughtful manner, with plenty of supports available to educators, administrators, parents, and students. Successful implementation will require adequate investment in these supports as outlined in the Regents proposal:

- \$66 million in increased Special Services Aid for 2015-16;
- Changes to the reimbursement rules for BOCES offering career and technical education programs in that school year; and
- \$50 million in capital funding for new, state-of-the-art career and technology education facilities.

As business leaders, we are concerned that two-thirds of students in our State are not proficient in core subjects on the Nation's Report Card. There are many reasons why we are falling behind, but use of learning time is one of them. New York State currently spends, on average, \$19,550 per public school student each year. Because of skills they lose over the summer, low-income students are effectively only getting eight out of the ten months of education that tax payers pay for, wasting \$3,910 per

child for the two months lost. That totals \$2.3 billion per year for all low-income children in New York. The wasted educational spending for higher-income children is not as large, but still substantial. We ask that you support the continued funding for extended learning time opportunities included in the Governor's proposal.

On behalf of Chief Krokoff, General Scullary and our collective member organizations, I thank you for the opportunity to testify today and look forward to New York State moving forward and providing high-quality educational programs to all children. Our organizations stand in support of Winning Beginning NY's budget request, which includes funding for childcare and is attached to our testimony. We have also attached copies of our organizations' reports, which cite all of the research we have referenced here today.







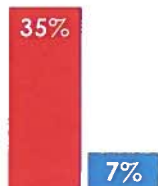
# High Quality Early Learning: A Key to Reducing Future Crime in New York

*FIGHT CRIME: INVEST IN KIDS is a nonpartisan anti-crime organization made up of more than 5,000 law enforcement leaders and crime survivors, including almost 300 in New York. Its sheriffs, police chiefs, prosecutors and crime victims promote greater public investments in programs proven to direct kids to a better path in life, leading them away from crime and towards success.*

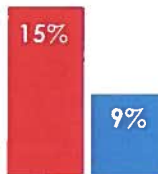
Early learning helps children get the right start in life, avoid future crime, and save taxpayers' money, but programs must be high quality to make a difference in kids' lives.

**Early Learning Cuts Crime:** In addition to tough policing, prosecution and corrections, New York State also needs to invest in programs that prevent kids from becoming criminals in the first place. As law enforcement leaders, we support effective investments that can make all New York communities safer places to live, work and raise a family. The research shows that early learning is such an investment. For example:

- A long-term study of Michigan's Perry Preschool found that at-risk children left out of the high-quality program were five times more likely to be chronic offenders by age 27 than children who did attend.<sup>1</sup>



- At-risk kids who did not participate in Chicago's Child-Parent Centers were 70 percent more likely to be arrested for a violent crime by age 18, according to a study published in the *Journal of the American Medical Association*.<sup>2</sup>



## High-Quality Early Learning Programs Save Money:

Research shows that high-quality early learning programs provide enormous societal benefits – nearly **\$11 in benefits for every \$1 dollar invested**, according to a long-term study of children who

participated in Chicago's Child-Parent Centers. Of the \$11 in benefits, \$5 result from lower costs for crime and corrections.<sup>3</sup>

These early learning programs delivered impressive results because they were high-quality. Unfortunately, too many early learning programs are not high-quality.

## Corrections Spending Outpaces Early Learning Spending:

New York and the nation spend more on corrections than on early learning.

- Total state and federal corrections spending to house, feed and provide 24-hour supervision of criminals, at \$58 billion in 2011, is more than double the total 2010 state and federal early care and education spending, at \$26 billion.<sup>4</sup>
- New York State spends over \$3.1 billion per year to house, feed and provide 24-hour supervision for its state criminals.<sup>5</sup> In contrast, New York spent only a fraction as much — \$584 million — on early childhood education.<sup>6</sup> Federal investments in early learning in New York included \$473 million for Head Start and \$673 million for the Child Care and Development Block Grant.<sup>7</sup>

**Quality Early Learning in New York:** The quality of early learning programs for infants, toddlers, and preschoolers is critical to supporting young children's healthy development and future success.<sup>8</sup>



## Endnotes

- 1 Schweinhart, L. J., Barnes, H. V., & Weikart, D. P. (1993). *Significant benefits: The High/Scope Perry Preschool study through age 27*. Ypsilanti, MI: High/Scope Press.
- 2 Reynolds, A. J., Temple, J. A., Robertson, D. L., & Mann, E. A. (2001). Long-term effects of an early childhood intervention on educational achievement and juvenile arrest. *Journal of the American Medical Association*, 285, 2339-2380.
- 3 Reynolds, A. J., Temple, J. A., White, B. A., Ou, S. R., & Robertson, D. L. (2011). Age 26 cost-benefit analysis of the Child-Parent Center Early Education Program. *Child Development*, 82(1), pp. 379-404.
- 4 Federal early care and education investments, based on Fiscal Year 2010 funding levels, include: Head Start funding (\$7.234 billion), the federal portions of funding for the Child Care and Development Fund (\$7.189 billion), the federal portions of Temporary Assistance to Needy Families spent on child care (\$1.325 billion), and the portion of Title I funds of Elementary and Secondary Education Act allocated to early care and education teacher salaries (an estimated \$300 million, according to the Government Accountability Office). State early care and education funding for all 50 states includes state pre-k and state Head Start spending (\$5.637 billion, comprised predominantly of state pre-k spending, \$5.492 billion, plus \$145 million in state Head Start spending), CCDF state spending (via state match and maintenance of effort funds, \$2.283 billion), and TANF state child care spending (via maintenance of effort funds, \$1.750 billion). Federal and state corrections spending (\$6.185 billion) includes Fiscal Year 2010 Federal prison spending, and state corrections spending (\$51.053 billion) including Fiscal Year 2010 state spending from general fund, federal funds, other state funds and bonds. Administration for Children and Families. (2011) *FY 2010 CCDF All Expenditures By State- Categorical Summary*. Retrieved on June 19, 2012 from [http://www.acf.hhs.gov/programs/ccb/data/expenditures/10ac696/exp\\_categorical.htm](http://www.acf.hhs.gov/programs/ccb/data/expenditures/10ac696/exp_categorical.htm); Administration for Children and Families. (2011) *FY 2010 Final CCDF Allotment (Including Reallocated Funds)*. Retrieved on June 19, 2012 from [http://www.acf.hhs.gov/programs/ccb/law/allocations/current/state2010/final\\_allotments\\_2010.htm](http://www.acf.hhs.gov/programs/ccb/law/allocations/current/state2010/final_allotments_2010.htm); Administration for Children and Families. (2010) *Head Start Program Fact Sheet, Fiscal Year 2009 state data*. Retrieved on June 19, 2012 from <http://www.acf.hhs.gov/programs/ohs/about/fy2010.html>. Does not include tribal or migrant Head Start programs; Barnett, W.S., Carolan, M. E., Fitzgerald, J., & Squires, J.H. (2011). *The state of preschool 2011 - State preschool yearbook*. New Brunswick, NJ: Rutgers University, National Institute for Early Education Research; U.S. Government Accountability Office. (2012, February). *Early Child Care and Education: HHS and Education are taking steps to improve workforce data and enhance worker quality*. (GAO-12-248). Washington, DC: Author; U.S. Department of Justice. (2012). *Federal Prison Systems (BOP)*. Retrieved on January 23, 2013 from <http://www.justice.gov/jmd/2012summary/pdf/fy12-bop-bud-summary.pdf>; National Association of State Budget Officers (2012). *State Expenditure Report*. Retrieved January 23, 2013 from [http://www.nasbo.org/sites/default/files/State%20Expenditure%20Report\\_1.pdf](http://www.nasbo.org/sites/default/files/State%20Expenditure%20Report_1.pdf). Table 32. Capital Inclusive.
- 5 National Association of State Budget Officers (2012). *State Expenditure Report*. Retrieved January 23, 2013 from [http://www.nasbo.org/sites/default/files/State%20Expenditure%20Report\\_1.pdf](http://www.nasbo.org/sites/default/files/State%20Expenditure%20Report_1.pdf). Table 32. Capital Inclusive. Includes spending from general fund, federal funds, other state funds and bonds.
- 6 Barnett, W.S., Carolan, M. E., Fitzgerald, J., & Squires, J.H. (2011). *The state of preschool 2011 - State preschool yearbook*. New Brunswick, NJ: Rutgers University, National Institute for Early Education Research [state pre-k]; Administration for Children and Families. (2011) *FFY 2010 CCDF State Expenditure Data*. Retrieved on February 19, 2013 from [http://www.acf.hhs.gov/sites/default/files/occ/2010appropriations\\_1.pdf](http://www.acf.hhs.gov/sites/default/files/occ/2010appropriations_1.pdf) [includes state match and MOE expenditures];
- 7 Administration for Children and Families. (2011) *FFY 2010 CCDF State Expenditure Data*. Retrieved on February 19, 2013 from [http://www.acf.hhs.gov/sites/default/files/occ/2010appropriations\\_1.pdf](http://www.acf.hhs.gov/sites/default/files/occ/2010appropriations_1.pdf) [includes discretionary, mandatory and federal match expenditures]; Administration for Children and Families. (2013) *Head Start Program Facts, Fiscal Year 2011 state data*. Allocations. Retrieved on February 19, 2013 from <http://eclkc.ohs.acf.hhs.gov/hslc/mr/factsheets/docs/hslc-program-fact-sheet-2011-final.pdf>. Does not include tribal or migrant Head Start programs.
- 8 Shonkoff, J.P., & Phillips, D.A. (Eds.). (2000). *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: National Academy Press.
- 9 Shonkoff, J.P., & Phillips, D.A. (Eds.). (2000). *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: National Academy Press.
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- 12 American Academy of Pediatrics, American Public Health Association, and National Resource Center for Health and Safety in Child Care and Early Education (2002). *Caring for our children: National health and safety performance standards: Guidelines for out-of-home child care programs, 2nd edition*. Elk Grove Village, IL: American Academy of Pediatrics and Washington, DC: American Public Health Association.
- 13 Barnett, W.S., Carolan, M. E., Fitzgerald, J., & Squires, J.H. (2011). *The state of preschool 2011 - State preschool yearbook*. New Brunswick, NJ: Rutgers University, National Institute for Early Education Research.
- 14 Barnett, W.S., Carolan, M. E., Fitzgerald, J., & Squires, J.H. (2011). *The state of preschool 2011 - State preschool yearbook*. New Brunswick, NJ: Rutgers University, National Institute for Early Education Research.
- 15 Pinto-Martin, J. A., Dunkle, M., Earls, M., Fliedner, D., & Landes, C. (2005). Developmental stages of developmental screening: Steps to implementation of a successful program. *American Journal of Public Health*, 95(11): 1928-1932; Peisner-Feinberg, E.S., Burchinal, M.R., Clifford, R.M., Yezjian, N., Culkin, M.L., Zelazo, J., Howes, C., Byler, P., Kagan, S.L., & Rustici, J. (1999). *The children of the cost, quality, and outcomes study go to school*. Retrieved on May 17, 2012 from <http://www.fpg.unc.edu/resources/children-cost-quality-and-outcomes-study-go-school-executive-summary>; Burchinal, M., Vandergrift, N., Pianta, R., & Mashburn, A. (2010). Threshold analysis of association between child care quality and child outcomes for low-income children in pre-kindergarten programs. *Early Childhood Research Quarterly*, 25, 166-176; Goffin, S.G. (2010). *NCRECE in focus: Increasing knowledge in early childhood*. Charlottesville, VA: University of Virginia, National Center for Research on Early Childhood Education.
- 15 New York State Early Childhood Advisory Council. (n.d.). *QUALITYstarsNY: Quality standards*. Brooklyn, NY: Author. Retrieved on February 27, 2013 from <http://www.qualitystarsny.org/standards.php>

Only high-quality early learning programs have been shown to significantly reduce crime and enhance school success. Researchers have found that high-quality early learning programs have several key components, including:

- Highly skilled teachers with appropriate compensation;<sup>9</sup>
- Comprehensive and age-appropriate curricula;<sup>10</sup>
- Strong family involvement and effective parent coaching;<sup>11</sup>
- Low child-to-staff ratios to ensure each child gets sufficient attention;<sup>12</sup>
- Small, age-appropriate class sizes;<sup>13</sup> and
- Screening and referral services for developmental, health or behavior problems.<sup>14</sup>

These components are included in New York State's quality rating and improvement system, **QUALITYstarsNY**, which has been piloted across the state.<sup>15</sup>

**Conclusion:** Law enforcement leaders across New York want to make sure more New York children receive high-quality care and education in their early years — the help they need to succeed in life and avoid later crime and violence. We call on policymakers to support investments in quality early learning for zero to age eight, including pre-k programs, to ensure all New York's young children get the right start in life.

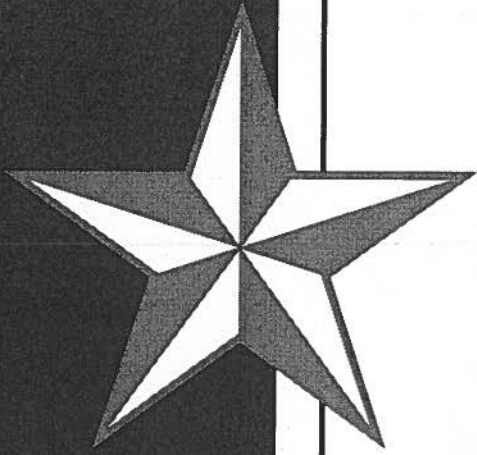
FIGHT CRIME: INVEST IN KIDS New York is supported by tax-deductible contributions from foundations, individuals, and corporations. FIGHT CRIME: INVEST IN KIDS New York accepts no funds from federal, state, or local governments.

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A Commitment to  
**Pre-Kindergarten**  
A Commitment to  
**IS National Security**

High-Quality Early Childhood Education  
Saves Billions While Strengthening Our  
Military and Our Nation



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**MISSION: READINESS**  
MILITARY LEADERS FOR KIDS

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## MISSION: READINESS

MILITARY LEADERS FOR KIDS

### Who We Are



Shown in the photo are (left to right): Major General David M. Edgington, US Air Force (Ret.), Admiral James M. Loy, US Coast Guard (Ret.) and General Richard E. Hawley, US Air Force (Ret.) on the deck of the *Battleship Wisconsin*, in Norfolk, VA, February 2012 at a news conference supporting high-quality early education.

MISSION: READINESS is the nonprofit, nonpartisan national security organization of more than 350 retired generals, admirals and other senior retired military leaders calling for smart investments in America's children. It operates under the umbrella of the nonprofit Council for a Strong America.

For a full listing of our membership, please see our website at [www.missionreadiness.org](http://www.missionreadiness.org).

### Acknowledgments

MISSION: READINESS is supported by tax-deductible contributions from foundations, individuals, and corporations. MISSION: READINESS accepts no funds from federal, state, or local governments.

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This report was written by William Christeson, Sandra Bishop-Josef, Amy Dawson Taggart and Chris Beakey.

David Kass, Miriam Rollin, Nick Alexander and Soren Messner-Zidell also contributed to this report.

Photos on summary page courtesy of US Department of Defense.



## Summary

Today's military is an exacting environment sustained by complex technology and systems unimagined in generations past. It demands the very best of its service members.

Alarming, the Department of Defense estimates that **75 percent of all young Americans are unable to join the military** primarily because they are too poorly educated, have a serious criminal record, or are too overweight. **More than 1 in 5 high school graduates who tried to join the Army could not score highly enough on the military's entrance exam to be allowed to serve.**

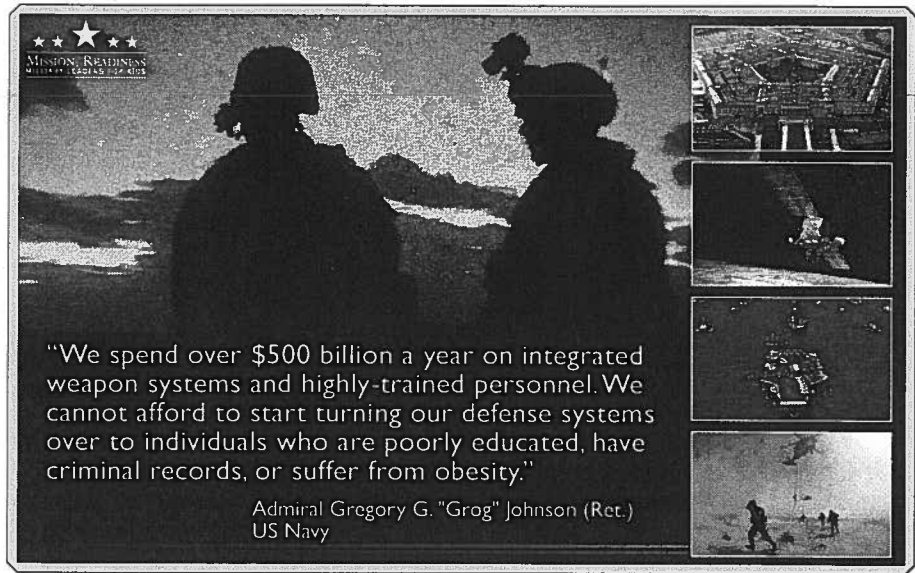
The retired admirals and generals of MISSION: READINESS recognize that there are many factors impacting educational achievement. But there is one factor that has been proven to have a crucial impact on children from all backgrounds, and that is high-quality early learning.

New data from across New Jersey confirm that pre-kindergarten can be brought to scale with strong and lasting results. By the time they were beyond third grade, children who participated in **New Jersey's** high-quality program for two years were three-quarters of an academic year ahead in math and two-thirds of an academic year ahead in literacy compared to those who did not. Numerous studies of voluntary high-quality programs in states such as **Tennessee, Michigan, Arkansas, West Virginia, New Mexico** and **Pennsylvania** have also shown impressive gains in literacy and reductions in the number of children needing special education services or being held back in school.

These new and emerging research results are bolstered by long-term studies of participants from high-quality programs in **Michigan** and **Illinois**, which found they were far more likely to graduate from high school and far less likely to be involved in criminal activity in later years.

While debate about education policy is often contentious, the value of high-quality early learning is recognized by policymakers across the political spectrum. Numerous states have invested in and benefited from high-quality pre-K and, in 2013, **Republican and Democratic governors in Colorado, Michigan, Mississippi, New Mexico, New York, North Dakota, Pennsylvania** and **Virginia** have made bold moves in support of new investments in quality pre-K.

This support coincides with an extremely challenging economic environment for states. States have tried to protect, and in some states even expand programs during



Admiral Gregory G. "Grog" Johnson (Ret.)  
US Navy

these difficult times. Overall, however, in 2011 and 2012 enrollment levels nationally stalled and the funding available to maintain quality in state programs decreased significantly.

The Administration recently proposed a state-federal partnership that offers states the resources to create, strengthen and expand quality early learning programs for children from low- and moderate-income families. The proposal puts states and local communities in the driver's seat when it comes to developing their programs. The partnership would enable states to offer children well-qualified teachers, small student-teacher ratios, and other elements that have a proven impact on learning. It could also lead to a **15 percent increase in graduation rates for low- and moderate-income children, which would amount to nearly two million more graduates nationwide from the 10-year investment.**

Based on an independent analysis, high-quality pre-kindergarten can **cut crime, welfare and other societal costs and produce average net benefits to society of \$15,000 for every child served. Nationwide, that could produce \$150 billion in net benefits from the \$75 billion proposed investment in the next 10 years.**

America has bipartisan support for our sophisticated 21<sup>st</sup> Century military systems. But without qualified personnel, those investments will be severely compromised and our national security will be put at risk. Support from both Republican and Democratic policymakers demonstrates a commitment to high-quality school readiness programs from both sides of the aisle. The more than 350 retired generals and admirals of MISSION: READINESS know that investing in high-quality early childhood education, from birth to kindergarten entry, is essential for the future strength of our military and our nation.



# A Commitment to Pre-Kindergarten Is a Commitment to National Security

## High-Quality Early Childhood Education Saves Billions While Strengthening Our Military and Our Nation

### 75 Percent of Young Americans Are Not Eligible to Serve in the Military

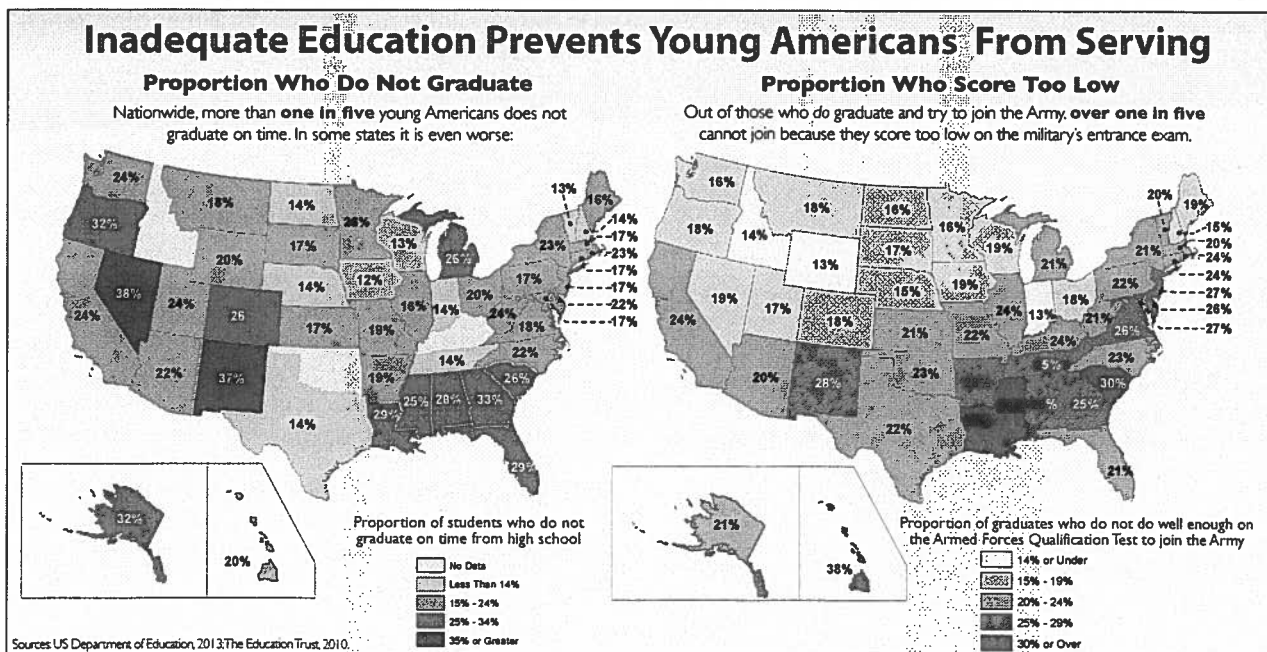
Military service is out of reach for an estimated 75 percent of all young Americans between the ages of 17 and 24. There are three primary reasons: they are too poorly educated, they have serious criminal records, or they are too overweight.<sup>1</sup> Twenty-two percent of young people do not graduate on time from high school, and the military rarely takes anyone without a diploma anymore.<sup>2</sup> Even among young adults who do finish high school, 23 percent who seek to enlist in the Army cannot score highly enough on the military's exam for math, literacy and problem-solving to be allowed to serve.<sup>3</sup> One in 10 young adults cannot join because they have at least one prior conviction for a felony or serious misdemeanor.<sup>4</sup> National surveys conducted for the military and by the Centers for Disease Control and Prevention (CDC) show that approximately one in four young adults is unable to serve because of excess body fat.<sup>5</sup> The limited pool of young people qualified for military service jeopardizes our military readiness and threatens future national security.

### High-Quality Early Childhood Education Programs Work: Better Outcomes for Children

While trends in education reform come and go, research shows that there is a solution that is consistently proven over time. High-quality early childhood education can prepare children to start school ready to learn. It can improve student performance, boost high school graduation rates, deter youth from crime, and, by helping children develop healthy early exercise and good nutrition habits, even help reduce childhood obesity rates.

### New Findings from New Jersey Prove Early Childhood Education Can Be Brought to Scale with Strong Results

By 4<sup>th</sup> or 5<sup>th</sup> grade, children who attended New Jersey's preschool program for two years were three-quarters of an academic year ahead in math and two-thirds of an academic year ahead in literacy compared to their peers who did not attend. Children who attended the preschools were also 40





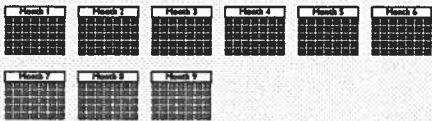
## Strong New Results from New Jersey

By the time pre-K children in New Jersey were past third grade, they were:

**Three-fourths of a Year**  
ahead in math.



**Two-thirds of a Year**  
ahead in literacy.



New Jersey pre-K reduces costly grade retention and special education.



Source: National Institute for Early Education Research, 2013

percent less likely to be held back in school and 31 percent less likely to need special education services. There was no “fade out” of program effects: children who attended the New Jersey program significantly outperformed similar children who did not attend in kindergarten, in second grade, and now in 4<sup>th</sup> and 5<sup>th</sup> grades. The study is ongoing, so future impacts will also be tracked.<sup>6</sup>

Long-term studies of model programs had already shown that high-quality early education can transform the lives of disadvantaged children. For example, studies of the Perry Preschool program that followed the participants over 40 years have found they were 44 percent more likely to graduate from high school, while those who did not attend were five times more likely to be chronic criminal offenders by age 27.<sup>7</sup>

The Chicago Child-Parent Centers took this approach to scale, having served over 100,000 children, with long-term results: children left out of the program were 70 percent more likely to be arrested for a violent crime by age 18 and 24 percent more likely to have been incarcerated as young adults than similar children not served. Participants, on the other hand, were 40 percent less likely to be placed in special education and, by age 20, were 29 percent more likely to have graduated from high school.<sup>8</sup>

The researchers studying the New Jersey preschool program state that their results are on par with initial results for the

Chicago Child-Parent Centers, so they expect, as the New Jersey children mature, to see strong high school graduation and crime prevention results, as well as economic benefits exceeding program costs. Meanwhile, the New Jersey program is reducing the substantial costs associated with special education and children repeating a grade.<sup>9</sup>

### Studies in Other States and Cities

Studies of high-quality early childhood education programs in other states and localities also report benefits such as impressive gains on literacy, and reductions in the numbers of children needing special education services or being held back in school.

**Tennessee:** A rigorous study of Tennessee’s pre-K program found that literacy results and overall academic improvements for children who attended were 50 percent greater than for those who did not attend.<sup>10</sup>

**Michigan:** While most state pre-K evaluations do not yet have results on children’s school performance beyond the early elementary school years, an evaluation of Michigan’s Great Start Readiness Program (GSRP) shows longer-term results. GSRP participation had a dramatic impact on reducing grade repetition: children who attended the program were 51 percent less likely to be held back a grade by 8<sup>th</sup> grade when compared to a similar group of children



## State Early Education Improves Educational Outcomes

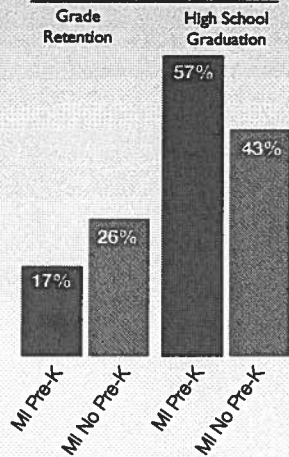
Answered more questions correctly on a literacy test

↑ **Arkansas**  
23% More

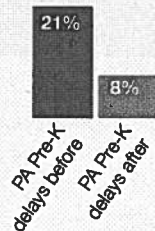
↑ **West Virginia**  
23% More

↑ **New Mexico**  
24% More

Held back in school less often and graduate more than non-attendees



Had fewer developmental delays after attending



Sources: Frede 2009; Maloffeva 2007; Lamy 2006; Hustedt 2007; Hustedt 2009; Bagnato 2009

an average of 24 percent more questions correctly on a literacy test. Significant impacts were found in math for all three years and in vocabulary for two of the three initial years.<sup>15</sup>

**Pennsylvania:** A recent evaluation of Pennsylvania's Pre-K Counts (PKC) program showed especially strong results for children who might otherwise be in special education during their K-12 years. For example, 21 percent of children were classified as developmentally delayed and qualified for early intervention services as they began PKC. By the end of PKC, only eight percent of children were classified as delayed. Similarly, the portion of three-year-old children at risk for problematic social and self-control behavior fell from 21.5 percent at the start of the program to 3.6 percent at the end of PKC.<sup>16</sup>

who did not attend the program.<sup>11</sup> And children who attended the GSRP were 35 percent more likely to graduate from high school on time than a comparison group of children not in the program.<sup>12</sup>

**Arkansas:** An evaluation of the Arkansas Better Chance program found that children who attended pre-K developed an extra four months' worth of vocabulary knowledge, beyond the gains that would be expected as a child naturally ages. Pre-K attendance also resulted in 23 percent more correct answers on a literacy test and improved math scores. Researchers are following children for five years to evaluate the longer-term effects of the program.<sup>13</sup>

**West Virginia:** Over half of West Virginia's four-year-olds are enrolled in the voluntary West Virginia Universal Pre-K System. An evaluation of the program found that children made an extra three months of progress on their vocabulary development, answered 23 percent more items correctly on an early literacy test, and increased their average math scores, when compared to the progress that would normally be expected over the course of a year.<sup>14</sup>

**New Mexico:** New Mexico launched a pre-K program in 2005 that is already seeing strong results. Across the first three years of the initiative, participating children answered

Promising local studies show that very high-quality programs produce even larger effects. A recent study of a very high-quality, universal pre-kindergarten program in the **Boston Public Schools** found that children who participated in the program had improvements in mathematics, literacy and language skills equivalent to seven months of additional learning by the end of the program, compared to children who did not attend. Both disadvantaged children and their more advantaged peers benefited from the program.<sup>17</sup>

A study of disadvantaged children in the **San Francisco Bay Area** who received high-quality pre-kindergarten for two years showed that the children actually outperformed more well-off children in reading by second grade: 61 percent of those attending the program for two years were proficient in reading, compared to 55 percent of students who did not attend the program (most of whom attended private preschool programs).<sup>18</sup>

### Reducing Obesity

There is also emerging evidence that teaching young children healthier eating and exercise habits can contribute to reversing the epidemic of childhood obesity. A randomized controlled

To see individual state trends in spending and access for each state, see the National Institute for Early Education Research's *The State of Preschool 2012* at <http://nieer.org/publications/state-preschool-2012>





**DECLINES IN CHILDHOOD OBESITY:** Data in Philadelphia, Mississippi and New York City indicate that innovative preschool efforts to improve early childhood nutrition and physical activity and to educate parents in each locality may be part of the solution to childhood obesity.

| LOCALITY             | CHILDHOOD OBESITY MEASURED   | DECLINE IN OBESITY |
|----------------------|--|--------------------|
| <b>Philadelphia</b>  | Over a 4-year period, <b>K-12</b> children, overall obesity measured                             | <b>5% decline</b>  |
| <b>Mississippi</b>   | Over a 6-year period, <b>K-5</b> children, overweight & obesity measured                         | <b>13% decline</b> |
| <b>New York City</b> | Over a 4-year period, <b>5- to 6-year olds</b> , obesity measured for all public-school children |                    |
| Black                |  | <b>7% decline</b>  |
| Hispanic             |  | <b>6% decline</b>  |
| White                |  | <b>24% decline</b> |

Source(s): Pennsylvania School District, 2012; Journal of the Mississippi State Medical Association, 2012; Centers for Disease Control and Prevention, 2012; New York City of Health and Mental Hygiene, 2012; Robert Wood Johnson Foundation, 2012.

study in **Chicago** demonstrated that working with preschool-aged children and their parents can reduce weight gain: children not in the program gained 16 percent more weight over the next two years than those receiving the program.<sup>19</sup> In **New York City, Philadelphia** and **Mississippi**, schools improved the nutritional quality of the food served to children, increased their physical activity, and coached their parents on children’s healthy nutrition and physical activity needs. As a result of these efforts, along with other broader reforms, rates of childhood obesity dropped 5 to 24 percent.<sup>20</sup>

**In sum, research demonstrates that high-quality early learning programs can help solve the serious problems—poor educational achievement, criminal behavior and obesity—that cause the majority of our young people to be ineligible for military service.** Solving these problems will have additional positive social and economic consequences because succeeding in school and avoiding criminal involvement also opens the doors to success in college and careers, whether young people choose to serve in the military or not.

**Moving America Forward: States Are Already Investing in High-Quality Early Education**

States understand that quality early learning programs provide an extraordinary return on investment and 40 states and the District of Columbia have preschool programs.

Nationwide, the proportion of four-year-olds served in state preschool doubled over the past decade, growing from 14 percent in 2001-2002 to 28 percent in 2011-2012.<sup>21</sup> Support

for quality programs from both Republican and Democratic policymakers demonstrates a commitment to high quality school readiness programs from both sides of the aisle. In 2013 alone, Republican and Democratic governors in **Colorado, Michigan, Mississippi, New Mexico, New York, North Dakota, Pennsylvania** and **Virginia** have proposed and/or signed into law expansions in quality early learning.<sup>22</sup>

While significant progress has been made, access to preschool varies widely by state and most states fall well short of serving most of their preschool-aged children.<sup>23</sup> As of 2012:

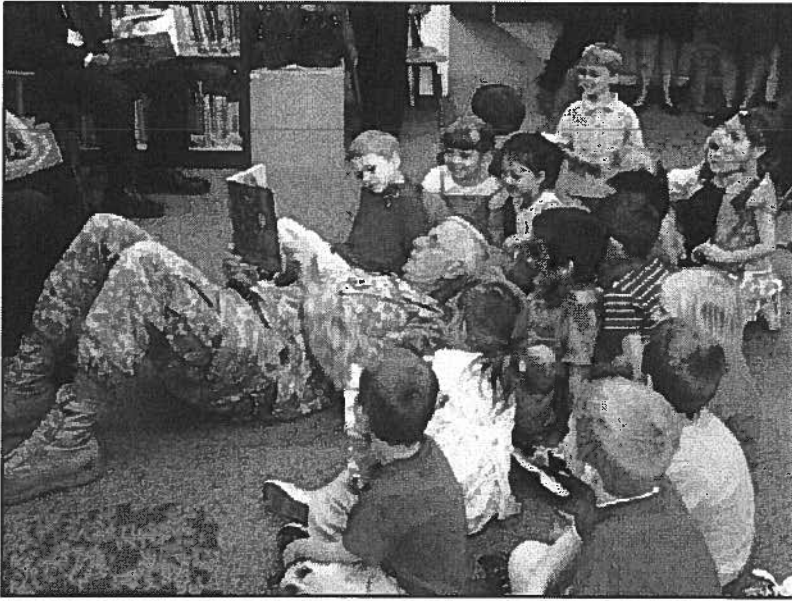
- more than half of the states serve 30 percent or fewer of their four-year-olds: and
- another 10 states still have no state preschool programs.<sup>24</sup>

Further, in 2011-2012, preschool enrollment stalled and state funding decreased significantly, due to lingering effects of the recession and the end of the additional American Recovery and Reinvestment Act (ARRA) funding.

Clearly, a top national and state priority must be to increase the number of children served in early education programs. However, it is equally important to deliver high-quality programs. The research is clear that high-quality programs deliver stronger results.

**High-Quality Early Childhood Education Benefits Society**

In its 2014 budget proposal, **the Administration has proposed \$75 billion over 10 years for a state-federal partnership to**



John W. "Bill" Libby, former Maine Adjutant General, reads to children at a pre-kindergarten center in Bangor, Maine, June 2010.

provide high-quality preschool programs to every low- and moderate-income four-year-old in the nation.<sup>25</sup> The proposal also includes a \$750 million competitive grant program, to help states build their capacity for implementing high-quality preschool and an initiative to expand access to high-quality child care for children from birth through age three. The child care initiative proposes a new competitive grant program for child care partnerships with Early Head Start, as well as an increase in Child Care and Development Block Grant (CCDBG) funds. A comprehensive system of high-quality care and education, from child care through preschool, will result in more children entering school prepared to succeed.

The new preschool initiative will allow states without preschool to establish high-quality programs, as New Jersey and others have done. States with preschool could increase the number of slots or increase the quality of their existing programs, or do some combination of each. The research shows that investing in high-quality preschool can result in substantial increases in graduation rates for more disadvantaged students.

Our projections of additional graduates conservatively assume there could be a 15 percent increase in graduation rates for low- and moderate-income children under 200 percent of the federal poverty level, if the state-federal partnership is implemented nationwide. We could have used Chicago's high-quality pre-kindergarten program's increased graduation rate of 29 percent, Perry Preschool's 44 percent,

or Michigan's statewide Great Start program's 35 percent. But, to be conservative, we used the lower Chicago figure and then cut it roughly in half.

Even with such a modest estimate, the 15 percent increase in graduation rates for these children would raise their graduation rates from 70 percent nationally to 81 percent. That would total nearly two million more graduates nationwide from the proposed ten-year increase in pre-kindergarten funding. That is almost as many individuals as are currently serving in active duty, National Guard, and Reserves.<sup>26</sup> (See Appendix I for the number of additional graduates for each state.)

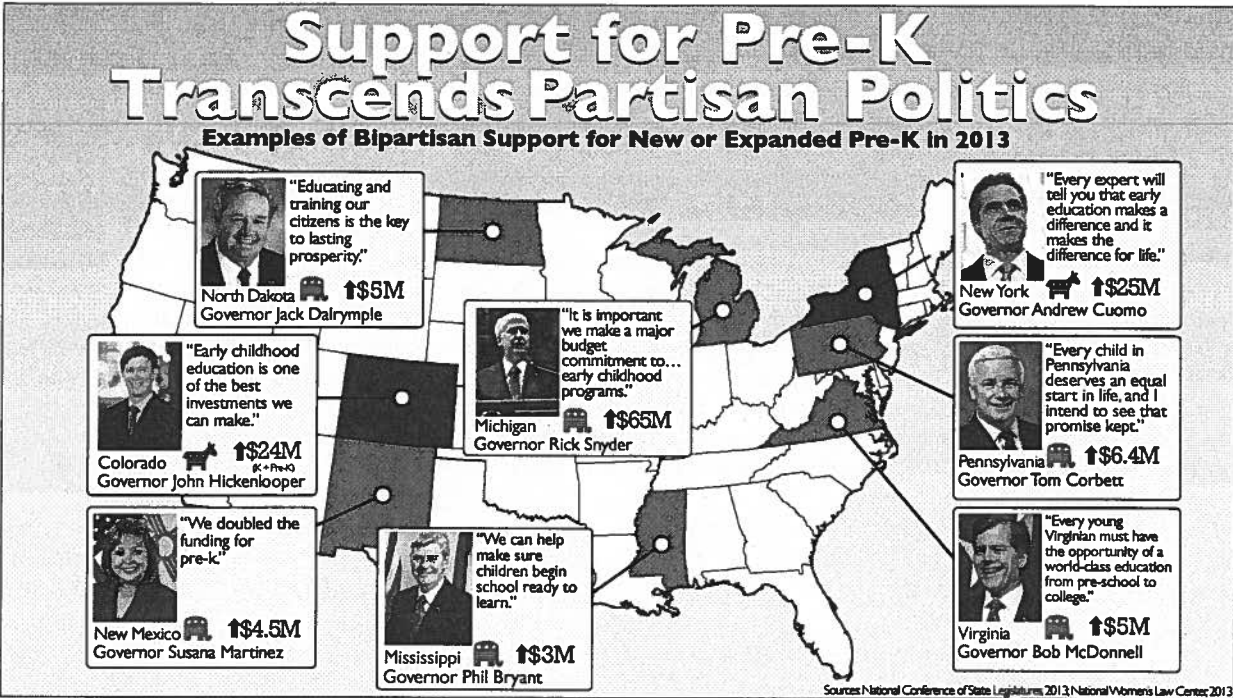
Many people are understandably concerned about the cost of early childhood education programs in a time when budget cuts are the norm. But failing to make effective investments in children when they are very young means a higher cost to society down the road. A child who drops out of school, uses drugs and becomes a career criminal costs society, on average, \$2.5 million.<sup>27</sup>

### Early Education Quality Matters

Numerous research studies have documented the key characteristics of high-quality early learning programs, including:

- Highly skilled teachers with appropriate compensation;<sup>30</sup>
- Comprehensive and age-appropriate curricula;<sup>31</sup>
- Strong family involvement and effective parent coaching;<sup>32</sup>
- Higher staff-to-child ratios to ensure each child gets sufficient attention;<sup>33</sup>
- Small, age-appropriate class sizes;<sup>34</sup> and
- Screening and referral services for developmental, health or behavior problems.<sup>35</sup>

These are the key features of early learning programs that research indicates are essential for delivering good early education and care.



An independent analysis of the research studies shows that **high-quality early learning programs cut crime, welfare and other societal costs so much that they produce average net benefits to society of \$15,000 for every child served.**<sup>28</sup> These benefits result from outcomes such as schools avoiding the cost of giving children an extra year of education when they are held back, lower special education costs, fewer children in detention facilities and fewer adults in prison, and fewer direct expenses for victims of crime, as well as savings from lower welfare costs.

Using the \$15,000 net benefit analysis yields **roughly \$150 billion in net benefits to society from the state-federal early education proposal, after subtracting costs.**<sup>29</sup> Other estimates, based on the higher-quality programs, produce even greater financial benefits. (See Appendix I for state-by-state benefits minus costs).

### Conclusion

Our nation has prioritized investments that keep America's military the most technologically advanced in the world. But we will need educated, fit and moral individuals who are ready to serve in tomorrow's modern battlefields – sophisticated weapon systems alone cannot protect us. Many states are making solid progress in early education, states with both Republican and Democratic governors and legislatures. As retired admirals and generals, we know that early education, from birth to kindergarten entry, is essential for a strong America. This is not just an essential investment in a 21<sup>st</sup> century education system. It is an essential investment in our national security.

“ Even when you lowball the numbers on what this ten year investment in pre-kindergarten could produce, you get \$150 billion in net benefits and 2 million more young people graduating from high school. That will strengthen America. ”

Lieutenant General Norman R. Seip  
US Air Force (Ret.)



## Appendix I. Projections

**Benefits Minus Costs:** Based on studies of more than 20 programs around the nation, the independent Washington State Institute for Public Policy determined that pre-kindergarten averages \$15,000 in net benefits (average benefits minus average costs) per child served, or **two dollars in net benefits for every dollar invested**. This is a conservative estimate; other estimates are much higher. Applying that analysis to the proposed **\$75 billion to be spent over ten years** to bring pre-kindergarten to scale for low- and moderate-income children nationwide produces **\$150 billion in net benefits**.

**Additional Graduates:** Chicago's high-quality pre-kindergarten program produced 29 percent more high school graduates, the Perry Preschool produced 44 percent more graduates, and the state program in Michigan increased graduation rates by 35 percent. A reasonable assumption might be that high-quality prekindergarten for low-income children could produce a 29 percent increase in graduation rates. But since not all low- and moderate-income children will be served, even when pre-kindergarten is expanded, and many programs may take time to deliver strong results, we simply cut that figure in half – to a 15 percent increase in graduation rates – in order to be conservative. Even at that modest rate, bringing pre-kindergarten to scale for low-income children in America would produce **roughly 2 million new graduates from the proposed ten-year increase in pre-kindergarten funding**. For our full methodology, see [missionreadiness.org](http://missionreadiness.org).

| ESTIMATES OF NET ECONOMIC BENEFITS AND ADDITIONAL GRADUATES | POSSIBLE FEDERAL FUNDING (Rounded)<br>nationally and by state for Pre-K over 10 yrs based on the proposed \$75 billion over ten years. (a) | BENEFITS MINUS COSTS (Rounded)<br>realized from 10 years of funding (based on \$15,000 average net benefits per child served or \$2 net benefits per \$1 spent). (b) | CURRENT HIGH SCHOOL GRADUATION RATE<br>for low-income children in the state (c) | NEW HIGH SCHOOL GRADUATION RATE<br>if it is 15% higher than before for low-income children | # OF ADDITIONAL GRADUATES OVER TEN YEARS (Rounded)<br>among children < 200% of poverty (Nearly 2 million nationwide over 10 years) |
|---|--|--|---|--|--|
| <b>UNITED STATES</b>  | <b>\$75,000,000,000</b>  | <b>\$150,000,000,000</b>   | <b>70%</b>  | <b>81%</b>   | <b>1,947,860 / 10 years</b>  |
| Alabama   | \$1,300,000,000  | \$2,600,000,000  | 62%   | 71%  | 29,000   |
| Alaska  | \$170,000,000  | \$340,000,000  | 56%   | 64%  | 3,500  |
| Arizona   | \$2,000,000,000  | \$4,000,000,000  | 73%   | 84%  | 54,000   |
| Arkansas  | \$910,000,000  | \$1,800,000,000  | 75%   | 86%  | 25,000   |
| California  | \$10,000,000,000   | \$20,000,000,000   | 70%   | 81%  | 260,000  |
| Colorado  | \$1,100,000,000  | \$2,300,000,000  | 62%   | 71%  | 26,000   |
| Connecticut   | \$510,000,000  | \$1,000,000,000  | 62%   | 71%  | 12,000   |
| Delaware  | \$180,000,000  | \$370,000,000  | 71%   | 82%  | 4,800  |
| District of Columbia  | \$190,000,000  | \$380,000,000  | 58%   | 67%  | 4,100  |
| Florida   | \$4,500,000,000  | \$8,900,000,000  | 60%   | 69%  | 99,000   |
| Georgia   | \$2,900,000,000  | \$5,700,000,000  | 59%   | 68%  | 62,000   |
| Hawaii  | \$250,000,000  | \$510,000,000  | 75%   | 86%  | 7,000  |
| Idaho   | \$480,000,000  | \$960,000,000  | NA  | NA   | NA   |
| Illinois  | \$2,900,000,000  | \$5,900,000,000  | 75%   | 86%  | 82,000   |
| Indiana   | \$1,600,000,000  | \$3,200,000,000  | 79%   | 90%*   | 44,000*  |
| Iowa  | \$670,000,000  | \$1,300,000,000  | 78%   | 90%  | 19,000   |
| Kansas  | \$710,000,000  | \$1,400,000,000  | 73%   | 84%  | 19,000   |
| Kentucky  | \$1,100,000,000  | \$2,300,000,000  | NA  | NA   | NA   |
| Louisiana   | \$1,300,000,000  | \$2,600,000,000  | 64%   | 74%  | 31,000   |
| Maine   | \$250,000,000  | \$500,000,000  | 73%   | 84%  | 6,700  |
| Maryland  | \$900,000,000  | \$1,800,000,000  | 74%   | 85%  | 24,000   |
| Massachusetts   | \$910,000,000  | \$1,800,000,000  | 70%   | 81%  | 23,000   |
| Michigan  | \$2,300,000,000  | \$4,500,000,000  | 63%   | 72%  | 53,000   |



| ESTIMATES OF NET ECONOMIC BENEFITS AND ADDITIONAL GRADUATES | POSSIBLE FEDERAL FUNDING (Rounded)   | BENEFITS MINUS COSTS (Rounded)   | CURRENT HIGH SCHOOL GRADUATION RATE      | NEW HIGH SCHOOL GRADUATION RATE                         | # OF ADDITIONAL GRADUATES OVER TEN YEARS (Rounded)                           |
|---|--|--|--|---|--|
|   | nationally and by state for Pre-K over 10 yrs based on the proposed \$75 billion over ten years. (a) | realized from 10 years of funding (based on \$15,000 average net benefits per child served or \$2 net benefits per \$1 spent). (b) | for low-income children in the state (c) | if it is 15% higher than before for low-income children | among children < 200% of poverty (Nearly 2 million nationwide over 10 years) |
| Minnesota   | \$1,000,000,000  | \$2,000,000,000  | 58%                                      | 67%   | 22,000   |
| Mississippi   | \$1,000,000,000  | \$2,100,000,000  | 69%                                      | 79%   | 26,000   |
| Missouri  | \$1,400,000,000  | \$2,900,000,000  | 74%                                      | 85%   | 39,000   |
| Montana   | \$240,000,000  | \$480,000,000  | 71%                                      | 82%   | 6,300  |
| Nebraska  | \$440,000,000  | \$880,000,000  | 78%                                      | 90%   | 13,000   |
| Nevada  | \$770,000,000  | \$1,500,000,000  | 53%                                      | 61%   | 15,000   |
| New Hampshire   | \$170,000,000  | \$340,000,000  | 72%                                      | 83%   | 4,500  |
| New Jersey  | \$1,400,000,000  | \$2,800,000,000  | 71%                                      | 82%   | 37,000   |
| New Mexico  | \$680,000,000  | \$1,400,000,000  | 56%                                      | 64%   | 14,000   |
| New York  | \$4,000,000,000  | \$8,100,000,000  | 69%                                      | 79%   | 100,000  |
| North Carolina  | \$2,600,000,000  | \$5,200,000,000  | 71%                                      | 82%   | 69,000   |
| North Dakota  | \$130,000,000  | \$260,000,000  | 76%                                      | 87%   | 3,600  |
| Ohio  | \$2,700,000,000  | \$5,300,000,000  | 65%                                      | 75%   | 64,000   |
| Oklahoma  | \$1,100,000,000  | \$2,100,000,000  | NA                                       | NA  | NA   |
| Oregon  | \$920,000,000  | \$1,800,000,000  | 61%                                      | 70%   | 21,000   |
| Pennsylvania  | \$2,400,000,000  | \$4,800,000,000  | 71%                                      | 82%   | 63,000   |
| Rhode Island  | \$190,000,000  | \$380,000,000  | 66%                                      | 76%   | 4,700  |
| South Carolina  | \$1,300,000,000  | \$2,600,000,000  | 67%                                      | 77%   | 33,000   |
| South Dakota  | \$200,000,000  | \$400,000,000  | 86%                                      | 90%*  | 2,000*   |
| Tennessee   | \$1,700,000,000  | \$3,400,000,000  | 80%                                      | 90%*  | 41,000*  |
| Texas   | \$8,100,000,000  | \$16,000,000,000   | 84%                                      | 90%*  | 120,000*   |
| Utah  | \$850,000,000  | \$1,700,000,000  | 65%                                      | 75%   | 21,000   |
| Vermont   | \$97,000,000   | \$190,000,000  | 77%                                      | 89%   | 2,800  |
| Virginia  | \$1,400,000,000  | \$2,900,000,000  | 70%                                      | 81%   | 37,000   |
| Washington  | \$1,400,000,000  | \$2,900,000,000  | 66%                                      | 76%   | 35,000   |
| West Virginia   | \$420,000,000  | \$830,000,000  | 68%                                      | 78%   | 11,000   |
| Wisconsin   | \$1,200,000,000  | \$2,400,000,000  | 74%                                      | 85%   | 33,000   |
| Wyoming   | \$130,000,000  | \$250,000,000  | 66%                                      | 76%   | 3,100  |

\* The increase in graduation rates was capped at 90% to be conservative.  
 SEE MISSIONREADINESS.ORG FOR A DOCUMENT WITH THE FULL METHODOLOGY.  
 Sources:<sup>30</sup> a) Kids Count Data Center for data to project the percentage of 4-year olds under 200% of poverty in each state b) Washington State Institute for Public Policy, data on average net benefits of pre-K, and c) U.S. Department of Education, Ed Data Express, for graduation rates by state for children eligible for free or reduced price meals. See endnote 36 for full citations and links.



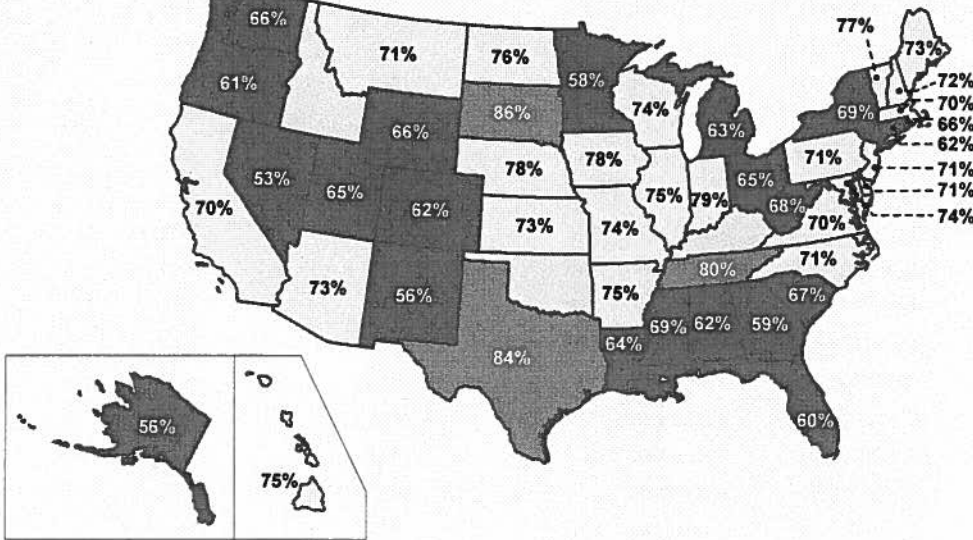
## Changes in graduation rates if Pre-K is brought to scale for low-income children

(Assuming a 15 percent increase in graduation rates)

### CURRENTLY

Graduation rates for low-income children

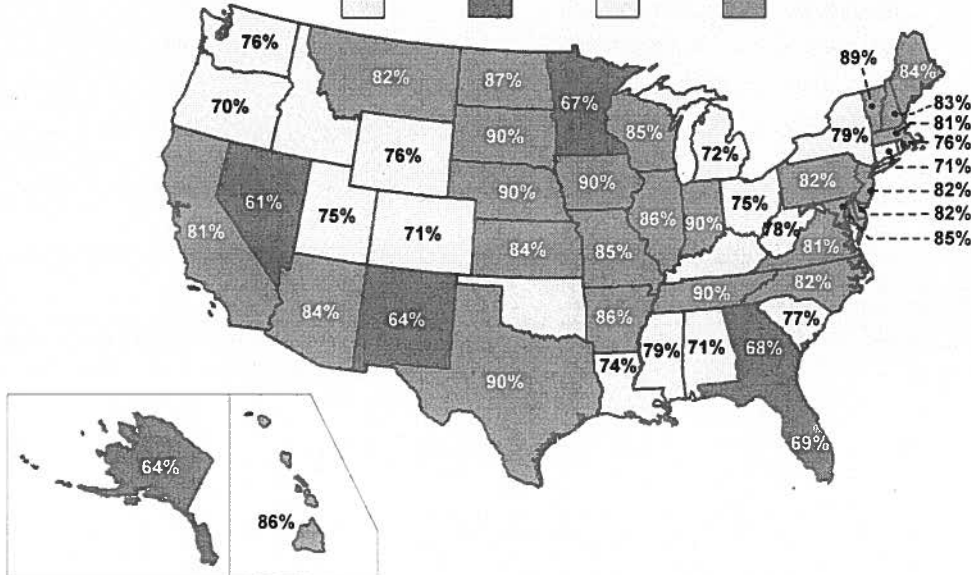
No Data    Less than 70%    70 - 79%    80% or Greater



### IF PRE-K IS FULLY IMPLEMENTED NATIONWIDE

Graduation rates for low-income children

No Data    Less than 70%    70 - 79%    80% or Greater





## Endnotes

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- 3 Theokas, C. (2010). *Shut out of the military: Today's high school education doesn't mean you're ready for today's Army*. Washington, DC: The Education Trust. Retrieved on February 12, 2013 from [http://www.edtrust.org/sites/edtrust.org/files/publications/files/ASVAB\\_4.pdf](http://www.edtrust.org/sites/edtrust.org/files/publications/files/ASVAB_4.pdf)
- 4 Center for Accessions Research (CAR), United States Army Accessions Command, Fort Knox, KY. Data provided by Lt. Colonel Gregory Lamm, Chief, Marketing and Research Analysis Division, February 25, 2010.
- 5 Center for Accessions Research (CAR), United States Army Accessions Command, Fort Knox, KY. Data provided by Lt. Colonel Gregory Lamm, Chief, Marketing and Research Analysis Division, February 25, 2010; Cawley, J., & Maclean, J.C. (2010). Unfit for service: The implications of rising obesity for US Military recruitment. Cambridge, MA: National Bureau of Economic Research. The Accession Command's estimate that 27 percent of 17- to 24-year-old Americans are too heavy to join is based in part on a survey done for them by the Lewin Group in 2005. The National Bureau Economic Research (NBER) study is an analysis of data from the National Health and Nutrition Examination Survey (NHANES) study. The NBER analysis looks at eligibility rates for males and females based on BMI, body fat and exclusion criteria broken out for the different services. Based on the NBER analysis, we conclude that approximately 23 percent of adults eligible by age would not be able to join the Army because of excess body fat. Taking both studies into account – the NBER analysis of NHANES data and the Accessions Command's analysis – we conclude that approximately one-quarter of young Americans would be too heavy to join the military if they chose to do so. For a more recent military reference to the one in four figure see: Associated Press. (February 10, 2012). Military to fight fat in food upgrade. *Boston Globe*. Retrieved on February 24, 2012 from <http://www.boston-globe.com/news/nation/2012/02/10/military-fight-fat-food-upgrade/9Aw1M6HOruUVXJFzAA6BAP/story.htm>
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- 7 Schweinhart, L. J., Barnes, H. V., & Weikart, D. P. (1993). *Significant benefits: The High/Scope Perry Pre-kindergarten study through age 27*. Ypsilanti, MI: High/Scope Press; Schweinhart, L.J., Montie, J., Xiang, Z., Barnett, W.S., Belfield, C.R., & Nores, M. (2005). *Lifetime effects: The High/Scope Perry Preschool study through age 40*. Ypsilanti, MI: High/Scope Press.
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