

November 2008

## The Pre-K Pinch: Early Education and the Middle Class

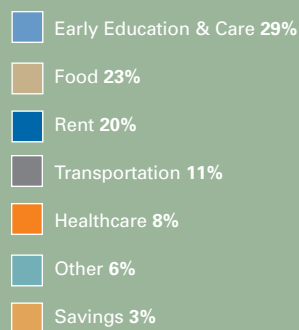
Albert Wat  
Pre-K Now  
Washington, DC



For middle-class families, who earn too much to qualify for state pre-kindergarten programs, private early education and care is among the most onerous expenses. By providing high-quality, voluntary pre-k to all three and four year olds, policymakers can help these strapped families while enhancing children's school readiness and our nation's human capital.

---

**Average Monthly Expenses for a Middle-Class Family of Four with Two Young Children<sup>a</sup>**



<sup>a</sup> For states that use family income as an eligibility criterion for state pre-k programs.

---

Jennifer V. Doctors wrote the individual family stories in this report.

Rosalinda Ortega provided research and interview assistance for the family stories.

## Introduction

Across the nation, policymakers are paying increasing attention to the latest research on early childhood development – from brain development to cost-benefit analyses to longitudinal studies – and they are coming away with one conclusion: high-quality pre-kindergarten programs make the most of young children’s immense learning potential and give them a foundation for success in school and in life. With the support of diverse groups of advocates, including business leaders and law enforcement officers, states have increased their investments in state pre-k programs by almost 37 percent since 2005, and enrollment has increased by about 28 percent.<sup>1</sup> As of 2007, more than one million three and four year olds attend state pre-k programs.<sup>2</sup>

Despite that growth, state pre-k remains – unlike K-12 education – a program primarily for low-income children. Of the 38 states that fund pre-k programs, 20 use family income as an important or the sole criterion for eligibility.<sup>3</sup> In most of these states, families earning more than 200 percent of the federal poverty threshold (\$42,400 for a family of four),<sup>4</sup> are not eligible. One assumption underlying this policy decision is that such families can afford other kinds of early education and care programs.<sup>5</sup> Another is that children from these families don’t need and wouldn’t benefit significantly from pre-k. Overwhelming evidence indicates, however, that neither of these assumptions is valid, and policymakers who make them run the risk of compromising the future success of young children, the financial security of middle-class families, and the long-term economic health of communities and states.

Many children do not have access to this valuable educational opportunity, or if they do, it comes at an alarming cost. Hardworking, middle-class parents nationwide are suffering a financial “squeeze,” caught between flat incomes and rising prices. As home values continue to decline, credit evaporates, wages stagnate,

and the cost of living, including early learning and care, increases, more and more middle-class families are finding themselves in the “pre-k pinch.” These families earn too much to qualify for state programs but not enough to pay for private, quality ones on their own and face an untenable choice between financial security and their children’s school readiness. Either their children miss out on the critical educational experiences provided by high-quality programs, or, in order to afford early learning opportunities, parents mortgage the family’s future: unable to save, pay down debts, or pursue further education for themselves. Providing high-quality, voluntary, state-funded pre-k for all confers an important economic benefit to these strapped middle-class families while supporting the school readiness and future success of their children.

Especially in times of state and federal budget deficits and a global economic crisis, policymakers need sound, research-based guidance on the wisest use of public dollars. Few public policy options offer a guaranteed return as tangible as that of high-quality, voluntary pre-k. Through a review of the evidence, both quantitative and anecdotal, this report, “The Pre-K Pinch: Early Education and the Middle Class,” demonstrates that high-quality pre-k benefits all children, families, and society; describes the extent to which middle-class families are struggling to afford high-quality pre-k; and provides estimates of the number of middle-class children left out of pre-k because of family income. This report then offers recommendations for policymakers to aid them in providing financial relief to middle-class families, stimulating our sputtering economy, ensuring the school readiness of the next generation, and building our nation’s human capital. While increasing access to high-quality state pre-k will not address all of the economic troubles facing the middle class or the nation, it is an important and oft-overlooked part of the solution.

## Benefits of Pre-K for Middle-Class Children

Before deciding to extend state pre-k access to middle-class families, policymakers must be confident that such programs measurably benefit children from these families. After all, pre-k is an early education program, and so, its primary goal is to further the development of young children. Indeed, research shows that high-quality pre-k is effective on this score.

The most rigorous study to date of a state pre-k program that includes a substantial number of middle-income children shows that high-quality pre-k increases *all* children's school readiness skills, as measured by early literacy, language, and math assessments, regardless of income level. Research by Georgetown University evaluators in Tulsa, Oklahoma demonstrates that children who did not qualify for the free- or reduced-price-lunch program (those from families earning more than 185 percent of the federal poverty threshold) make significant gains in early literacy skills. Children in the study scored 41 percent and 17 percent higher than children without a pre-k experience in assessments of letter-word identification and spelling, respectively.<sup>6</sup> A more recent study, conducted in the United Kingdom by its Department of Children, Schools and Families, found that these benefits last beyond kindergarten only if pre-k programs are of high quality. Specifically, they found that, regardless of family income, participation in a highly rated pre-k program is correlated significantly to higher math scores at age 10.<sup>7</sup>

The fact is that the cut-off point at which a child is considered middle class, or too affluent for state-funded pre-k, has no meaningful relationship in research terms to children's potential to benefit educationally and developmentally from such programs. While it is certainly true that long-term educational outcomes are correlated with family income, it is *not* true that all five year olds from families earning a median income are optimally prepared to succeed when they enter school. When children enter kindergarten, the gap in cognitive development, as measured by early literacy and math skills, and social and emotional development between middle-income and upper-income children is just as large as that between low-income and middle-income children.<sup>8</sup> For instance, when they enter kindergarten, about one in three children from middle-income families do not know the alphabet as compared with only one in six children from upper-income families.<sup>9</sup> Clearly, to substantially narrow this achievement gap, both low-income and middle-income children need access to high-quality early education programs.



Middle-income children also face many of the same educational challenges as low-income children, including high grade-repetition, drop-out, and special needs-placement rates – precisely the problems that high-quality pre-k has proven effective in alleviating:

- During the 2005-06 school year, more than half of all dropouts were from middle-income families.<sup>10</sup>
- Among children receiving special education, more than half come from families earning between \$25,000 and \$75,000 per year.<sup>11</sup>
- Ten percent of all middle-income children age 16 to 19 have been retained at least once in their school career, more than double the rate for upper-income children.<sup>12</sup>

State education systems simply cannot tackle these problems when they limit access to high-quality pre-k to low-income children.

Moreover, the traditional responses to these challenges, such as remedial intervention programs, are costly for schools and taxpayers. Conversely, in the long run, reducing dropout rates and improving educational attainment lead to a more skilled workforce, which raises earnings and increases tax revenues.<sup>13</sup> In other words, expanding access to high-quality pre-k is a proven strategy for promoting both individual success and shared prosperity.

---

### One Family's Experience: A Great Start for the Middle Class

Linda Tandy, a stay-at-home mom, and her husband, a delivery-truck driver, remember being in kindergarten: playing catch, drawing, learning the ABCs. They remember first grade and learning to print their letters. So, in light of their own education experiences, their middle-class income, and their family circumstances – a toddler and a baby on the way – they concluded their son, Geoff, didn't need a "formal" pre-k program.

Instead, the Tandys sent Geoff to Sunday school and to a twice-monthly early education program. He learned his letters, could count, and interacted well with other children, and his parents thought he was ready for kindergarten. But kindergarten wasn't the way Linda and her husband remembered it. "There was a big list of expectations that were more in line with what I remembered from first grade," she says. "As the year progressed, I really didn't know if Geoff would make it."

Things got worse in first grade. "He was behind in writing, low in reading, and by January, the teacher was talking retention." The Tandys couldn't afford to hire a tutor as the parents of other "non-pre-k" students did, but they worked intensively with Geoff on reading, writing, and math. Though he has progressed through school and will soon enter the fourth grade, "that fear of being held back still hangs over him."

For their second son, Trevor, the Tandys made a different choice. Because he had a special needs diagnosis, Trevor qualified for Michigan's state-funded *Great Start Readiness Program (GSRP)*. "GSRP was excellent," says Linda. "He is now out of first grade and met all the benchmarks despite being one of the youngest students in the class."

The Tandys learned the value of quality early education, but they also know that they were lucky to qualify for *GSRP*. "As I look back on all of this, I think, 'We had the resources to help Geoff, not the money, but the education and the time. What happens in homes without those resources and without an opportunity like *GSRP*?' The simple answer is those kids get retained or worse, they get passed by."

---

## Who is the Middle Class?

The phrase “middle class” evokes different images for different people, and that’s no wonder: According to a study by the Pew Research Center, middle-income families fall within the earnings range of \$51,523 to \$103,046 for a family of four or between 75 percent and 150 percent of the national median income, estimated to be about \$68,000.<sup>14</sup> This comprises almost 40 percent of all families in the nation.<sup>15</sup> The heads of these households are social workers, small business owners, paramedics, and schoolteachers, everyday Americans who contribute to their communities and the national economy.

According to census data, about 42 percent of all families in the above income range are headed by at least one person who has a bachelor’s degree or higher. About 13 percent are single-parent families, for whom the financial strain is even more severe.<sup>16</sup> The average income of single-parent families, roughly \$44,000 per year, is slightly more than half that of all families.<sup>17</sup>

Of particular interest to this analysis are the nine million American families – about 20 percent of the middle class – who have at least one child younger than six.<sup>18</sup> For these families, finding affordable, high-quality early learning and care options is a priority. Most of these families are likely to be headed by young parents who are just starting their careers and are years away from their prime earning period. The median income for families with at least one or more children under the age of six is \$52,000 per year<sup>19</sup> or more than 20 percent less than the national median income. Further, because they have only worked a relatively short period of time, parents in this group have limited – if any – savings.

Demographics alone, however, cannot define the experience of the middle class. To a large extent, these Americans share certain perceptions about their lives and futures. According to the Pew study, increasingly, they are feeling financially vulnerable and pessimistic. Specifically, the study revealed that among the middle class:

- Only 41 percent think they are better off than they were five years ago.
- Almost 80 percent believe it is more difficult to maintain their standard of living than it was five years ago.
- More than half (54 percent) believe they have made no progress in life or fell backward in the last five years.
- Almost 60 percent believe it is harder to get ahead today than it was 10 years ago, and 68 percent feel that it is easier to fall behind.
- Fifty-three percent have had to cut back on household spending in the past year, and a similar proportion report they will have trouble saving for the future.
- Twenty-six percent believe it’s likely they will lose their job or face a pay cut in the coming year.
- Almost 20 percent think their children will have a lower standard of living than they do.

While recent economic crises at home and abroad have put middle-class families at greater risk, their anxiety and the financial squeeze in which they find themselves have been brewing for some time.

## The Squeeze

Taking a long view, middle-income families appear to have fared well until recently. Between 1979 and 2005, the average income of middle-class families increased by about 21 percent.<sup>20</sup> Since 2000, however, this trend has been reversing. From 2000 to the present, average income for these families decreased by 3.3 percent.<sup>21</sup> Meanwhile expenses have been going up. In fact, the year ending July 2008 saw the highest 12-month increase in the cost of living – 5.6 percent – since 1991.<sup>22</sup>

Rising expenses coupled with declining incomes not only mean that families are finding it harder to cover the basics; they also have less left over for savings. Today, two-income families with children actually have less discretionary income than a single-income family did in the 1970s.<sup>23</sup> Not surprisingly, the savings rate has been declining for two decades. On average, Americans currently save less than 1 percent of their income, and they know they should be saving more: Three-quarters of middle-class families acknowledge that they are not saving enough for their futures.<sup>24</sup>



Unfortunately for many families, the corollary to the inability to save is the inability to pay down debts or worse, the need to incur more. Today, 76 percent of all families – and 84 percent of families with incomes in the middle 20 percent nationally – have debt.<sup>25</sup> Further, not only are more middle-income families in debt, but that debt has grown at a rate of 160 percent and now, on average, exceeds their income. For example, in 1983, middle-income families owed 45 cents for every dollar of income, but by 2004, that ratio had grown to \$1.19 per dollar earned.<sup>26</sup> One common, but wrong, assumption is that families at all income levels have been living extravagant lifestyles and purchasing luxury items on credit. The vast majority of debt, however – more than 70 percent – is home mortgages. Credit cards account for only 7 percent of families' debt.<sup>27</sup> All in all, as a report by the Brookings Institution concludes: “The data... refute the notion... that Americans are taking on mountains of debt in order to support consumer buying sprees.”<sup>28</sup>

All of these forces – stagnating incomes, rising costs of living, shrinking savings, and persistent debt – contribute to the precarious financial lives of middle-income families who are often one accident, one illness, or one layoff away from losing their financial footing. Bankruptcy rates are increasing,<sup>29</sup> and families with children are more vulnerable than those without.<sup>30</sup> Income volatility has also increased. More and more families are experiencing significant drops in their income – as much as 50 percent – as a result of unanticipated circumstances.<sup>31</sup>

## The Squeeze

*continued from page 5*

Absent new policies that reverse these trends, middle-class families will find their safety net increasingly frayed and tattered. During the first half of this decade, the proportion of middle-income families who own assets and savings equal to three months of their income – a common indicator of financial security – fell to fewer than one in five.<sup>32</sup> One study analyzed middle-income families' assets, earnings, education level, health coverage, and housing expenses and found that 69 percent of these families “lack the basics they need to ensure financial security,” with 25 percent at “high risk” for slipping out of the middle class completely.<sup>33</sup> According to a Brookings Institution report: “Growing evidence suggests not just that achieving upward income mobility is becoming rarer, but that downward mobility may be increasingly common.”<sup>34</sup>




---

### One Family's Experience: The Fragile Middle

Amy Greear never expected to be in the situation she found herself in five years ago. “I had done everything ‘right’ so to speak,” she says. “I graduated with honors from college, had a job doing something I’d always wanted to do, married my high-school sweetheart, and owned my home. I had a good life.”

Not long after her daughter Maggie was born, however, Amy’s husband developed serious mental health problems, and her marriage fell apart. She also lost her home in the divorce. She moved to Tennessee with her daughter to take a better-paying job, but even then, she says, “Between rent, a car payment, and just basic expenses, we were barely making it.”

In spite of her situation, Amy was committed to ensuring that Maggie had a high-quality early learning opportunity. She had hoped to enroll Maggie in a state-funded pre-k program, but her income – \$26,000 a year – exceeded the program’s eligibility limit. Even if she had qualified, all the programs were part day only. “My job was from eight to five. Pre-k dismissed at two. I would have loved to enroll her in a school-based pre-k, but without an extended-care option, that was impossible.”

Instead, Amy enrolled her daughter in a high-quality, full-day, private child care program and used her entire monthly child support payments to cover the costs. This made Amy’s financial circumstances even more precarious. “At the time, the program was \$105 per week – almost as much as college tuition,” she says. “There were months when the child support was late, and I really struggled.”

Amy knows that despite the hardship she was fortunate to find and afford a high-quality program. “Maggie went to a great program and was able to read within the first six weeks of kindergarten,” she says. “It was a difficult time in my life, and I know there are other parents who have experienced similar financial crises trying to do the best for their children. I wish there had been help for me. I wish I had been able to enroll my daughter in a publicly funded pre-k program with a certified teacher and with the option of extended care.”

---



## How the Squeeze Affects Early Education

Recent economic trends and their impacts on the middle class have become major topics of concern for journalists, economists, and political leaders. Much of this attention is focused on how the squeeze affects families' ability to keep up with the rising price of gas, healthcare, and groceries. Comparatively little is said about early learning and care even though, for a family with two young children, the cost of programs usually exceeds the cost of any of the above items. Further, when the subject of education does come up, it's usually regarding the rise in college tuition. Yet, long before they must afford college, middle-class parents must find ways to pay for early learning programs that support critical cognitive, social, and emotional development, while also providing for their families and pursuing their own educational and career goals.

In most states, these parents do not qualify to enroll their children in state-funded pre-k programs.<sup>35</sup> Only eight states and the District of Columbia have passed legislation to extend eligibility for pre-k to all children whose families want to enroll them, and only Oklahoma has achieved an enrollment rate greater than 60 percent of four year olds. For the remaining 30 states with pre-k programs, 20 use family income on its own or with other "risk factors" to determine eligibility. In the majority of these states, a family of four earning a little more than \$40,000 a year would not be able to enroll their children in pre-k. Furthermore, 12 states currently have no state pre-k programs; the only statewide, publicly funded early education program available in these states is Head Start. Designed as an anti-poverty program, Head Start's income eligibility is set at the federal poverty threshold – \$21,200 for a family of four – which is much lower than the income-eligibility limits for most state pre-k programs. In these dozen states, middle-class families have even fewer options.

---

### One Family's Experience: Life on Hold

For Emily Binetti and her husband, finding quality early education and care for their three-year-old son, Mark, is a top priority, but because they don't qualify for Texas's state-funded pre-k, the costs have proven much higher than they imagined. Emily had hoped to send Mark to a local pre-k program. She identified a program in a nearby public school district and planned to buy a house there and move. But the Binettis earned too much to qualify for the free program and would have had to pay to enroll Mark. They could not afford both a new mortgage and the tuition; so they were not able to buy a home or send their son to a state pre-k program.

Instead, the Binettis stayed in their rental – forgoing homeownership – and enrolled Mark in a private, full-day, full-week, quality early education program at a cost of \$700 each month. To afford this, however, the Binettis now must share their rental house with Emily's brother and his girlfriend. "Our privacy as a family is sacrificed," Emily says.

The Binettis consider themselves typically middle class: Mr. Binetti owns a restaurant franchise; Emily works in radio. Yet, even with good jobs and respectable salaries, they have seen their savings diminish and their debt increase simply because they're trying to do what's best for their son.

Emily believes it's unfair that only certain families in Texas get free pre-k. If Mark were eligible for a free program, she says, they could afford a mortgage and not need to share their home. And they could afford something even more precious: another child.

"The most alarming sacrifice," Emily says, "is our desire to expand our family. We waited until our 30s to have Mark, and my biggest fear is that by the time we can afford early education for two, I will be too old to have another child.

"Never in my wildest dreams," she says, "would I have thought that two hard-working, college-educated people like us would be so financially burdened that the freedom of having the family we always wanted would be sacrificed in order to make ends meet."

---

---

## What Early Education Can Learn from Higher Education

A free, public K-12 education system for all has often been hailed as the bedrock of this country's democracy and a reflection of its promise of equal opportunity. For educational opportunities before and after the public school years, however, our society has typically expected the middle class to pay its own way.

At the higher education end of the spectrum, the rising cost of college for the middle class has attracted the attention of the media and policymakers. As a result, a number of bills and initiatives have been introduced to make public colleges and universities more affordable for the middle class.<sup>a</sup> Private institutions of higher learning are also implementing policies and directing resources to ensure that high-achieving, middle-class children have opportunities for a top-tier university education.<sup>b</sup> Remarkably, largely as a consequence of these recent efforts to ease the burden of higher education tuition on the middle-class, a college education, even at elite institutions, is now less expensive for many families than early learning and care:

- In the majority of states, the average annual cost of child care for a four year old exceeds the tuition and fees for public four-year colleges and universities.<sup>c</sup>
- In 32 states, a family of four earning \$80,000 per year would have a harder time affording one year of child care for a four year old than paying a year of tuition for one child at Yale University.<sup>d</sup>
- In every single state in the nation, for families earning \$60,000 per year, one year of child care would cost more than one year of tuition at Harvard University or Yale University.<sup>e</sup>

If middle-class families with college-age children – who presumably have had at least eighteen years to accumulate savings and assets and have more earning potential than their counterparts with young children – need assistance to afford college tuition, then middle-class families with three and four year olds certainly could use some relief as well. After all, a family that spends less on early education can put the savings into their children's college funds, reducing the need for state-financed assistance in the future. State leaders should look to state-funded pre-k programs as one promising policy option to help middle-income families afford early education today, and perhaps, even college in the future.

<sup>a</sup> See for example: Office of New York State Senator Kenneth P. LaValle, "Senator Lavallo Fights to Help Families Afford College," (Albany: 2008); and Office of the Governor, "Governor Outlines Plan for Higher Education Access and Affordability," (Indianapolis, IN: 2008).

<sup>b</sup> According to Arian Campo-Flores, "New Financial-Aid Rules Offer Middle-Class Relief," *Newsweek*, Aug. 18, 2008, Stanford University has eliminated tuition completely for accepted applicants from families earning up to \$100,000, and Harvard University has exempted tuition for students from families earning up to \$60,000, instituted a sliding tuition scale for families earning between \$60,000 and \$120,000, and limited tuition to 10 percent of income for families earning \$120,000 to \$180,000.

<sup>c</sup> "Parents and the High Price of Child Care: 2008 Update," (Washington, DC: NACCRRA, 2008).

<sup>d</sup> *Ibid*; and Campo-Flores, "New Financial-Aid Rules Offer Middle-Class Relief."

<sup>e</sup> *Ibid*.

## How the Squeeze Affects Early Education

*continued from page 7*

As a result, middle-class families in most states must pay for private early learning and care programs on their own, and they are finding it difficult to afford average, much less high-quality settings. The cost of such programs has risen faster than inflation for more than a decade: Between 1996 and 2006, while overall prices rose by about 30 percent, the cost of early education and care increased 60 percent.<sup>36</sup> A 2008 report on the cost of child care by the National Association of Child Care Resource and Referral Agencies (NACCRRRA) shows that, depending on the state, child care for a four year old can occupy up to 14 percent of the median income of a two-parent family. For many families, it ranks as one of the top two or three most costly household expenditures above food, healthcare, and even in-state college tuition.

For families with two young children, the added cost of care for an infant or toddler raises the burden to as much as 32 percent of the state median income. In most parts of the country, this would be the second-highest expense for a family behind only mortgage payments, and all this is just for average quality programs. Child care at an accredited center – a rough measure of higher quality – can cost an additional 6 percent to 27 percent.<sup>37</sup> The challenge to afford early learning and care has become so severe that Citibank is working with a loan company, I Pay Child Care, to offer affordable loans to families seeking to pay for private pre-k and child care.<sup>38</sup>

The consequence of these limited options is that some families sacrifice financial security, stretching budgets to the limit to afford high-quality programs. Others settle for low-cost, low-quality child care, make informal arrangements like having extended family

---

Between 1996 and 2006, while overall prices rose by about 30 percent, the cost of early education and care increased 60 percent.

---

members care for young children, or sometimes, give up jobs and crucial income to stay home and provide care themselves. Indeed, national data show that families earning between \$30,000 and \$40,000 a year are less likely to enroll their children in center- or school-based early learning and care programs than families living in poverty. Even children from families earning \$40,000 to \$60,000 are no more likely to participate in these programs than poor children. Only at family-income levels above \$60,000 does the enrollment rate increase.<sup>39</sup>

Public-opinion surveys indicate that these enrollment trends do not reflect a lack of interest in early education among middle-income families. A 2008 national survey of registered voters found that, of all income groups, middle-income families are among the most supportive of publicly funded, voluntary pre-k programs for all children. In the survey, more than half of middle-income voters believe that local and state governments are not doing enough to increase access to early education. (See Figure 1.) Further, the majority of those earning between \$50,000 and \$100,000 per year support government investments to increase the availability of high-quality pre-k for all families. (See Figure 2.) When asked whether they would be willing to pay more taxes to increase federal investment in pre-k, more than 60 percent of these voters said yes.<sup>40</sup>

## How the Squeeze Affects Early Education

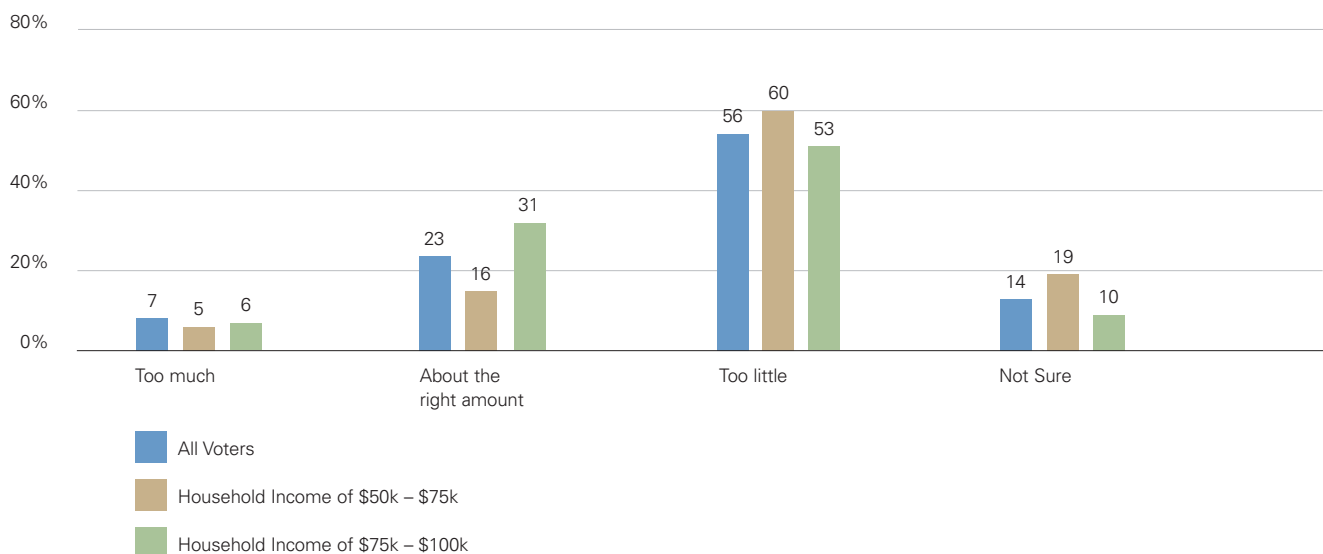
*continued from page 9*

Given their high level of interest in early education, the relatively low enrollment rate among middle-income families likely has more to do with issues of access and affordability than anything else. Findings from a RAND Corporation study of early education in the nation's most populous state, California, support this conclusion. In California, families of four earning more than about \$50,000 are not eligible for the state pre-k program and not surprisingly, the enrollment rate in center-based early education programs drops off right at that income level. Of all the income groups examined, families earning \$50,000 to \$70,000 were the least likely to enroll their children in these programs.<sup>41</sup>

This would not be as urgent a problem if the quality of the alternatives was high, but research shows that the typical child care arrangement – either in centers or family homes – leaves much to be desired. Research conducted by the National Institute of Child Health and Human Development found that the quality of most child care settings is either fair (53 percent) or poor (8 percent).<sup>42</sup> Another review of the literature by the National Research Council found that “about 10 to 20 percent of arrangements fall below thresholds of even adequate care.”<sup>43</sup> Recent reports by NACCRRRA showed that states are either setting a very low bar for quality in child care centers and family child care homes, providing weak oversight systems, or both.<sup>44</sup> These findings lend credence to a recent study that found cognitive gains achieved by children in pre-k tend to be greater than those achieved by children in center-based care.<sup>45</sup>

**Figure 1:**  
**Government Not Meeting Expectations**

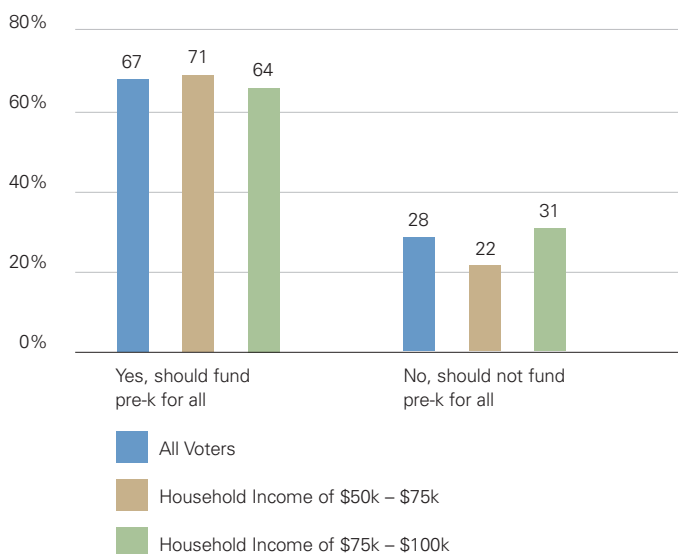
*Overall, do you think that state and local governments are doing too much, about the right amount, or too little to make sure that all parents have access to affordable pre-kindergarten programs for their young children?*



Using the education of center directors and teachers as a key measure of quality, this situation may not improve any time soon. From 1983 to 2004, the percentage of center-based early education administrators and teachers who had at least a bachelor's degree decreased from 47 percent to 30 percent. During that same period, those with at most a high school diploma increased from 18 percent to 26 percent.<sup>46</sup> Given this declining educational attainment by child care professionals and the link between teacher-education level and program effectiveness, families will continue to have difficulty finding quality settings for their young children, absent a focused effort to expand accessible, quality early education programs.

**Figure 2:**  
**Super-Majority Wants Pre-K For All**

*Do you think that state and local governments should or should not fund voluntary pre-kindergarten for all families, just as they do now for kindergarten through twelfth grade?*



### One Family's Experience: Can't Afford to Work

Kara Gore and her husband Raymond, both college educated and both pursuing advanced degrees, have two children, Madeleine and Grayson. Raymond is a schoolteacher, and, until Grayson was born, Kara worked for Texas's child care licensing agency. As young parents, the couple has struggled to find quality, affordable early learning and care environments. Their combined income is too high to qualify for state-funded pre-k or federal Head Start programs but too low to afford high-quality, private programs, which cost at least \$1,000 a month for two children.

Kara saw that their neighbors were sending their children to low-quality child care programs because that was all they could afford. "This trend to 'settle' for poorer-quality, cheaper care and education is quite the norm in our middle-class part of town," she says, but this was a choice the Gores were unwilling to make. With Madeleine, Kara was able to rely on the help of her family who lived 45 miles away. After Grayson's birth, however, Kara made the "very difficult decision to stop working."

Even after that decision, the Gores still earned too much to qualify for public pre-k, but without two incomes, they also couldn't make ends meet. So Kara started a small, home-based business. "This was our only option," she says, "but the constant pressure to make \$20,000 per year from my small business and maintain the role of primary caregiver for my children has been exhausting."

And Kara knows that, even as a stay-at-home mom, she can't give her children the same opportunities to learn and engage with peers as they would have in a high-quality pre-k program. "As a mother," she says, "I am concerned that my children will not be prepared academically for public school and will have lower social skills than those children who were able to participate in pre-k."

"Like so many educated, hardworking, middle-class families who earn at once too much and not enough, our children may miss out on a positive early start in learning. All children should have the same chance to experience quality education during their impressionable early years."

## State-Level Analysis

How many middle-income families struggle to afford even average-quality early learning and care programs because they earn too much to enroll their children in a state pre-k or federal Head Start program? To answer this question, this analysis examines census and household-expenditure data from states that use family income as one criterion for determining pre-k eligibility and calculates the estimated income needed to maintain a modest, middle-class standard of living in those states.<sup>47</sup> From these figures, then, it is possible to estimate the number of three and four year olds caught in the pre-k pinch because their families' incomes exceed state pre-k eligibility thresholds but are insufficient to afford average, private early education and care programs.<sup>48</sup>

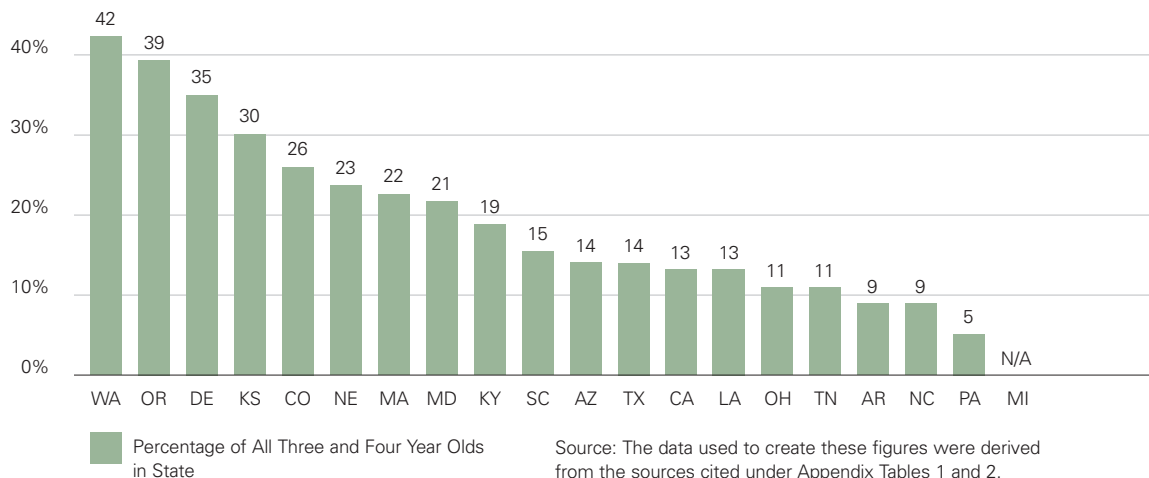
In states that use family income as one criterion to determine eligibility for pre-k, families must earn between about \$56,000 (Arkansas) and \$94,500 (Massachusetts), or 265 percent to almost 450 percent of the federal poverty threshold, to afford a middle-class standard of living. (See Appendix Table 1.) In other words, families in most of these states would need to earn from 1.3 times (e.g., Arkansas, Ohio) to more than three times the pre-k income-eligibility level (e.g., Delaware, Oregon, Washington) to afford an average early education and care program on their

own. Any less than that – absent an increase in income-eligibility levels – and they would have great difficulty paying for such programs.

Across these states, about 700,000 three and four year olds from middle-income families are caught in the pre-k pinch, ranging on a state-by-state basis from more than 6,000 children in Arkansas to nearly 132,000 in California.<sup>49</sup> (See Appendix Table 2.) Delaware, Oregon, and Washington have pre-k income-eligibility levels below \$24,000 per year, and more than one-third of all three and four year olds in these states are from families stretching to afford early learning and care programs. By contrast, in Pennsylvania, which has the nation's highest income-eligibility level for pre-k – \$63,600 annually – 5 percent of three and four year olds are from families confronting the pre-k pinch.<sup>50</sup> (See Figures 3 and 4.)

This analysis of middle-income-family budgets also shows that the cost of early education and care for two young children exceeds all other household expenses in almost all these states. In California, Colorado, Kansas, Maryland, Massachusetts, Nebraska, Pennsylvania, and Washington, early learning and care accounts for 30 percent or more of these families' monthly expenditures. Furthermore, because these

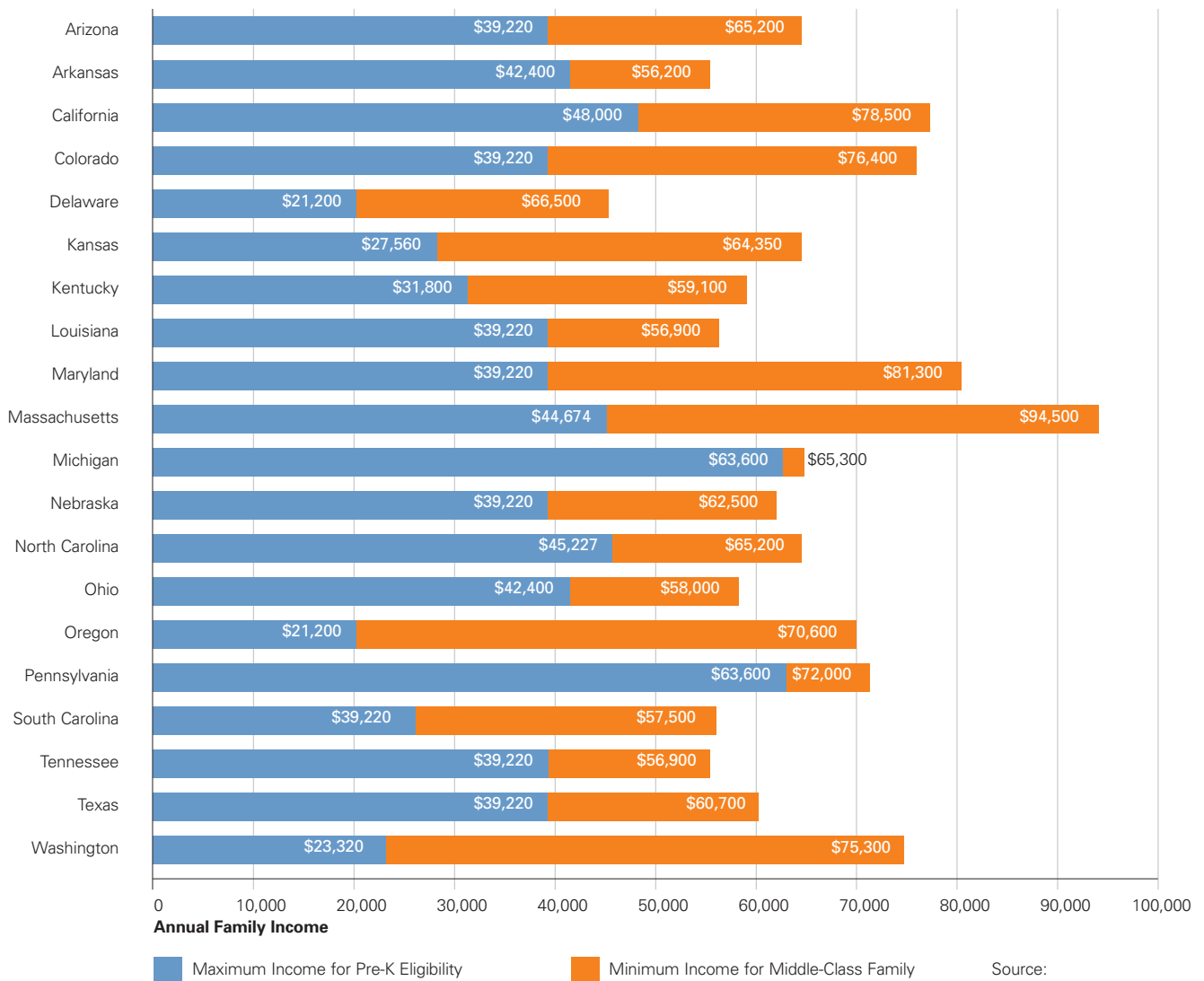
**Figure 3:**  
**Estimates of Children in Middle-Class Families Struggling to Afford Early Education and Care**



family-budget estimates are rather conservative, most families already have few if any discretionary expenses and so would be hard pressed to find areas where they can cut back. Thus, families are left with the very difficult choice of cutting back further on essential expenses such as healthcare, food, and clothing or settling for sub-par early learning and care programs.

Conversely, were states to expand their pre-k programs to serve the middle class, these families could reap annual savings ranging from \$4,475 in Arkansas to more than \$10,000 in Massachusetts.<sup>51</sup> These are substantial savings that could help families pay down debt or save for a home, for children’s college education, or for emergencies such as a health crisis. It is no wonder then that economists and community developers are increasingly looking at the expansion of publicly funded pre-k to all children as viable economic stimulus strategies.<sup>52</sup>

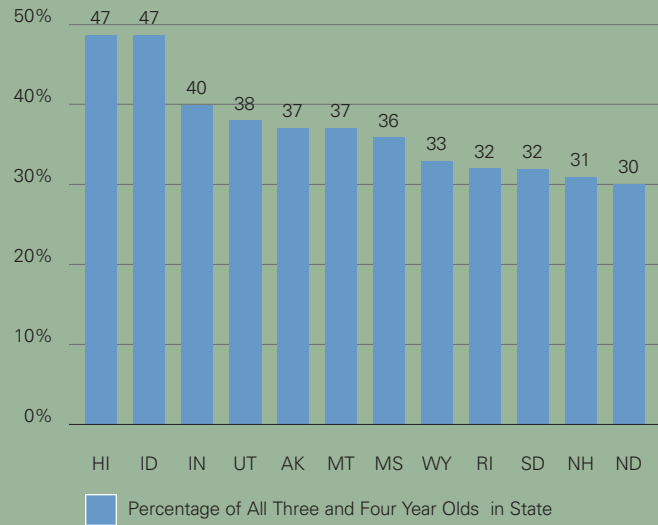
**Figure 4:**  
**Income Eligibility for State Pre-K vs. Minimum Income Needed to Support Middle-Class Family of Four**



**The Pre-K Wilderness and the Middle Class**

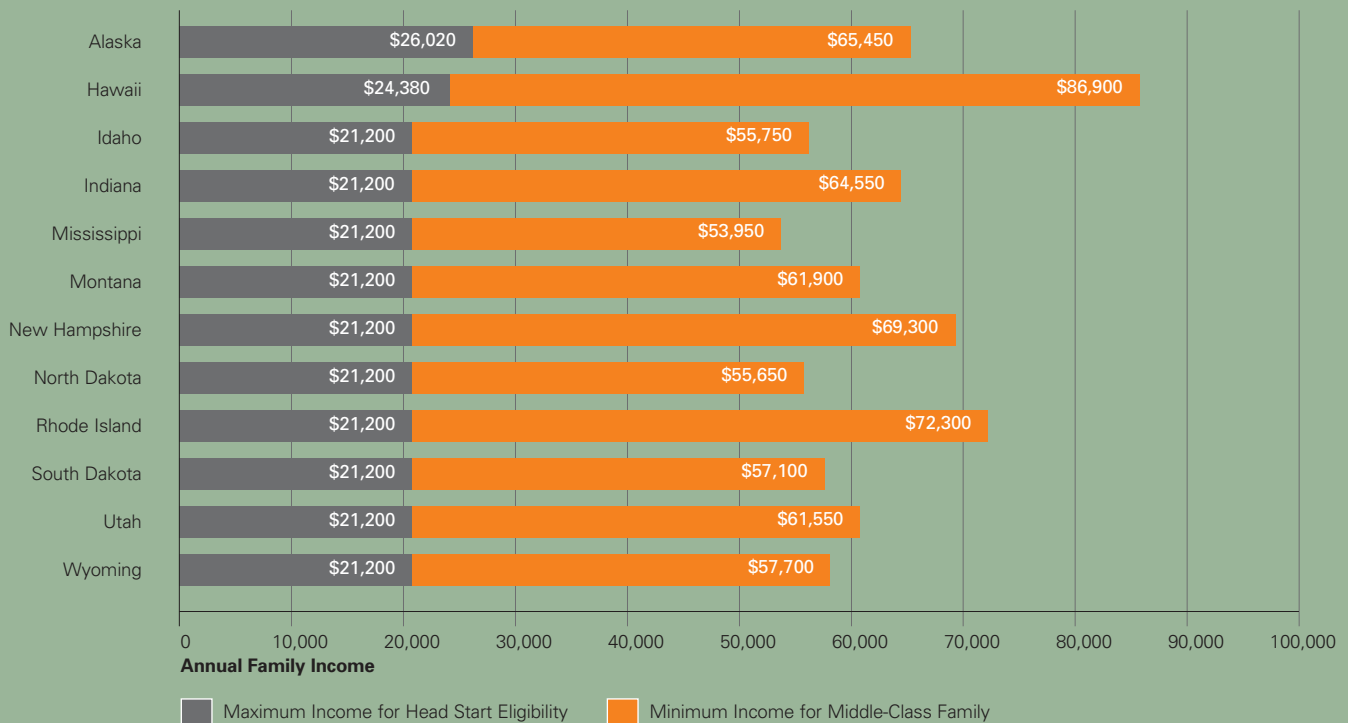
Twelve states currently offer no state-funded pre-k program. Therefore, in these states, the federal Head Start program, which is targeted to poor children and has an income-eligibility threshold lower than all but two state pre-k programs, is the only publicly funded early education option available statewide. As a result, middle-class families in these states are more likely to find themselves in the pre-k pinch than their peers in states offering even limited pre-k access. Specifically, the proportion of three and four year olds in these families ranges from 30 percent (North Dakota) to as much as 47 percent (Hawaii and Idaho).

**Figure A:**  
Estimates of Children in Middle-Class Families Struggling to Afford Early Education and Care



Source: The data used to create these figures were derived from the sources cited under Appendix Tables 1 and 2.

**Figure B:**  
Income Eligibility for Head Start vs. Minimum Income Needed to Support Middle-Class Family of Four





## Recommendations

Middle-class families and their children benefit from voluntary, high-quality, state-funded pre-k programs, but they need greater access to them. This need is made even starker by the recent upheaval in the financial markets and the global economy. The question is not why states should make middle-class children – and eventually all children – eligible for voluntary pre-k; it's how. Below are a number of actions for states to take and for the federal government to support in order to make this happen.

### 1. Create a phase-in plan for a gradual expansion of pre-k to all children beginning with the most vulnerable children and families, and moving to include those in the middle class.

Such a plan should be achievable both in terms of funding and infrastructure including supply of qualified teachers and facilities. States can also consider phasing in eligibility for pre-k to all children within a community or school district, starting with the areas of greatest need. Need can be defined by the socioeconomic status of the community (e.g., concentration of families with a certain level of income), the supply of high-quality early education programs relative to the population of young children, and/or the performance of school systems as measured by standardized test scores. For example, in 2006, the **Illinois** legislature passed the Preschool For All Children Act, which set the goal of providing voluntary pre-k for all three and four year olds by 2011. The bill gave top priority for new funding to programs serving children identified as at-risk of school failure. Second priority goes to programs that serve families who earn up to 400 percent of the federal poverty threshold (approximately \$80,000 for a family of four). To support this phase-in plan, the state also developed the Illinois Early Childhood Asset Map, a tool decision makers use to assess the distribution of pre-k and early education programs across the state based on community demographics.

### 2. Use factors other than family income to define eligibility.

Certain groups of young children may stand to benefit more from high-quality pre-k than the general population in ways that have little relation to family income. For instance, pre-k can provide much-needed stability for children whose parents are on active military duty or those from single-parent households. Research also shows that high-quality pre-k especially benefits English language learners and children whose parents have lower educational attainment. States can incrementally increase access to these groups as they phase in eligibility to all children. In the past two years, for example, the **Texas** pre-k program, which does prioritize low-income children, has extended eligibility to children in foster care and children from military families.

### 3. Fund programs adequately to serve eligible populations.

For middle-class families, a pre-k-for-all statute or high family-income threshold is meaningless if funding is inadequate to provide a pre-k opportunity for their children. For example, among states that use family income as a pre-k eligibility criterion, **California** has one of the nation's highest limits: Families earning up to 228 percent of the federal poverty threshold (equivalent to 75 percent of the state median income), or close to \$50,000 in 2006, are eligible. A RAND Corporation study, however, showed that as of 2006, California served only 53 percent of eligible four year olds and 25 percent of eligible three year olds, and these figures include state pre-k, Head Start, and other child development programs serving this age group.<sup>53</sup>

## Recommendations

*continued from page 15*

#### 4. Create full-day programs that meet the needs of working families.

About one in five middle-income families have to rely on multiple providers in order to cobble together a full day of education and care for their young children.<sup>54</sup> Even if middle-class families are eligible for pre-k, they may still face considerable challenges and stress if programs only last part of a working day. These families must find affordable, quality child care for the remaining hours as well as transportation between programs. States should promote – through training, regulation, and, if necessary, legislation – collaborations among schools, child care, and Head Start to ensure pre-k is part of full-day, quality education and care programs. For instance, the **Wisconsin** Department of Public Instruction has hired and trained collaboration coaches to help different programs, including state pre-k, child care, and Head Start, work together to develop “community approaches” that extend the services provided by pre-k programs.<sup>55</sup> Since 2004, these efforts have more than doubled the number of collaborations to 85 communities across the state.



#### 5. Establish high quality before making substantial program expansions.

Research shows that pre-k programs provide maximum benefit for children when they are high quality. Key elements of high-quality programs include: small class sizes, low child-adult ratios, appropriate curricula that address all areas of child development (e.g., cognitive, social, emotional, and physical), teachers with college degrees and training in early childhood, and professional development opportunities for pre-k teachers and classroom aides. Insisting upon such standards creates a classroom environment that supports nurturing, effective teacher-student interactions. Developing a high-quality program also requires policies and investments that build capacity, such as expanding access to quality teacher-preparation programs in colleges and universities, providing additional resources for community-based pre-k programs, and ensuring availability of appropriate pre-k facilities. For instance, over time, **Alabama** has increased quality standards for its pre-k program, which now meets all 10 quality benchmarks identified by the National Institute for Early Education Research (NIEER), including a teacher with a bachelor’s degree and certification in early education, an assistant with at least a child development associate (CDA) credential, and a child-adult ratio of no more than 10 to one. In addition to instituting these policies, the state’s Office of School Readiness is also working with the T.E.A.C.H. program and investing \$300,000 of its own resources to increase the supply of highly qualified pre-k teachers by providing college scholarships to early childhood professionals.

## Conclusion

### 6. Extend eligibility for voluntary pre-k to three year olds.

Middle-class parents who believe that their three year olds can benefit from an early education experience should have the choice to enroll them in a high-quality, state pre-k program. The savings they reap as a result can make a world of difference to their family budget. Importantly, research also shows that children achieve significantly greater cognitive gains when they participate in two years of pre-k rather than one.<sup>56</sup>

### 7. Commission state-specific analyses on the pre-k pinch.

State leaders should apply the model used in this analysis to derive more precise cost-of-living data and estimates of middle-class family budgets for their states. They may also choose to consider family expenses other than or in addition to those used in this analysis, such as a mortgage or debt payments, or to consider additional family types such as single-parent households. Similarly, they should acquire more state-level data on populations of children at various income levels who don't qualify for state-funded pre-k programs to determine with more certainty the extent of their state's problem.

This process will provide an initial picture of a state's pre-k pinch, but shifts in the cost of everyday expenses, employment patterns, and family-income levels occur frequently, and states must either invest in research capacity to keep up or risk operating from outdated data and leaving families behind. Also, inherent in income-based eligibility requirements are the administrative costs of ensuring that only the targeted group is served. The need to maintain and manage systems that restrict enrollment can become burdensome.<sup>57</sup> To alleviate these demands and ensure middle-class access to high-quality state pre-k programs, policymakers should pursue a strategy to phase in pre-k for all children.

High-quality pre-k for all children is not a panacea that will solve all the economic troubles of the middle class or address all the developmental needs of their children. As this analysis shows, however, the financial, social, and educational benefits can be significant and are often ignored. In order to realize these benefits, leaders at all levels – from neighborhood associations to the White House – must begin to see early childhood programs, including pre-k, in a different light. For too long, these programs have been considered necessary only for the disadvantaged, as “safety nets” for families unable to provide a high-quality environment for their young children. Yet, lessons from decades of research and experience tell a different story: High-quality pre-k programs benefit *all* children and families regardless of income. These programs provide children with unique and critical educational and social experiences at a key point in their development. They also contribute to middle-class parents' sense of security about their children's school readiness and their families' financial circumstances. Our nation's middle-class families – especially those with young children – should not have to live on a high wire. They need a solid foundation, financially and educationally on which to build prosperity in their homes and communities. Providing voluntary, affordable, high-quality pre-k for all children is critical to building that foundation – for children, for families, and for society.

## Appendix

**Table 1:**  
**Expense and Income Estimates for a Middle-Class Family of Four in States with Income-Based Pre-K Eligibility<sup>a</sup>**

<b>State</b>	<b>Rent<sup>b</sup></b>	<b>Food (at home)<sup>c</sup></b>	<b>Food (out of home)<sup>d</sup></b>	<b>Early education and care<sup>e</sup></b>	<b>Health – insurance premium<sup>f</sup></b>	<b>Health – out of pocket costs<sup>g</sup></b>
<b>Arizona</b>	\$ 862	\$ 797	\$ 225	\$ 1,197	\$ 272	\$ 87
<b>Arkansas</b>	\$ 678	\$ 797	\$ 198	\$ 809	\$ 265	\$ 107
<b>California</b>	\$ 1,300	\$ 797	\$ 225	\$ 1,519	\$ 256	\$ 87
<b>Colorado</b>	\$ 876	\$ 797	\$ 225	\$ 1,718	\$ 238	\$ 87
<b>Delaware</b>	\$ 932	\$ 797	\$ 198	\$ 1,261	\$ 210	\$ 107
<b>Kansas</b>	\$ 754	\$ 797	\$ 182	\$ 1,267	\$ 244	\$ 101
<b>Kentucky</b>	\$ 663	\$ 797	\$ 198	\$ 997	\$ 206	\$ 107
<b>Louisiana</b>	\$ 758	\$ 797	\$ 198	\$ 809	\$ 252	\$ 107
<b>Maryland</b>	\$ 1,324	\$ 797	\$ 198	\$ 1,559	\$ 249	\$ 107
<b>Massachusetts</b>	\$ 1,353	\$ 797	\$ 219	\$ 2,115	\$ 261	\$ 105
<b>Michigan</b>	\$ 805	\$ 797	\$ 182	\$ 1,360	\$ 201	\$ 101
<b>Nebraska</b>	\$ 710	\$ 797	\$ 182	\$ 1,248	\$ 253	\$ 101
<b>North Carolina</b>	\$ 740	\$ 797	\$ 198	\$ 1,213	\$ 239	\$ 107
<b>Ohio</b>	\$ 725	\$ 797	\$ 182	\$ 1,002	\$ 207	\$ 101
<b>Oregon</b>	\$ 757	\$ 797	\$ 225	\$ 1,289	\$ 275	\$ 87
<b>Pennsylvania</b>	\$ 932	\$ 797	\$ 219	\$ 1,500	\$ 232	\$ 105
<b>South Carolina</b>	\$ 649	\$ 797	\$ 198	\$ 958	\$ 250	\$ 107
<b>Tennessee</b>	\$ 743	\$ 797	\$ 198	\$ 967	\$ 230	\$ 107
<b>Texas</b>	\$ 852	\$ 797	\$ 198	\$ 1,103	\$ 252	\$ 107
<b>Washington</b>	\$ 942	\$ 797	\$ 225	\$ 1,734	\$ 241	\$ 87

Transportation <sup>h</sup>	Other <sup>i</sup>	Savings (3% of above expenses)	Total monthly expenditures	Total annual expenditures	Net annual earnings	Taxes <sup>j</sup>	Gross annual earnings needed
\$ 454	\$ 277	\$ 125	\$ 4,295	\$ 51,541	\$ 51,700	\$ 13,500	\$ 65,200
\$ 506	\$ 271	\$ 109	\$ 3,739	\$ 44,864	\$ 44,900	\$ 11,300	\$ 56,200
\$ 454	\$ 277	\$ 147	\$ 5,061	\$ 60,736	\$ 60,800	\$ 17,700	\$ 78,500
\$ 503	\$ 277	\$ 142	\$ 4,862	\$ 58,344	\$ 58,300	\$ 18,000	\$ 76,400
\$ 454	\$ 271	\$ 127	\$ 4,356	\$ 52,269	\$ 52,400	\$ 14,100	\$ 66,500
\$ 503	\$ 229	\$ 122	\$ 4,201	\$ 50,407	\$ 50,400	\$ 13,900	\$ 64,300
\$ 503	\$ 271	\$ 112	\$ 3,854	\$ 46,242	\$ 46,200	\$ 12,900	\$ 59,100
\$ 506	\$ 271	\$ 111	\$ 3,808	\$ 45,692	\$ 45,700	\$ 11,200	\$ 56,900
\$ 454	\$ 271	\$ 149	\$ 5,107	\$ 61,279	\$ 61,300	\$ 20,000	\$ 81,300
\$ 454	\$ 253	\$ 167	\$ 5,723	\$ 68,680	\$ 68,700	\$ 25,800	\$ 94,500
\$ 454	\$ 229	\$ 124	\$ 4,254	\$ 51,045	\$ 51,000	\$ 14,200	\$ 65,300
\$ 506	\$ 229	\$ 121	\$ 4,148	\$ 49,770	\$ 49,800	\$ 14,700	\$ 62,500
\$ 503	\$ 271	\$ 122	\$ 4,189	\$ 50,271	\$ 50,400	\$ 14,800	\$ 65,200
\$ 503	\$ 229	\$ 112	\$ 3,860	\$ 46,316	\$ 46,400	\$ 11,600	\$ 58,000
\$ 503	\$ 277	\$ 126	\$ 4,336	\$ 52,028	\$ 52,000	\$ 18,600	\$ 70,600
\$ 454	\$ 253	\$ 135	\$ 4,626	\$ 55,516	\$ 55,500	\$ 16,500	\$ 72,000
\$ 506	\$ 271	\$ 112	\$ 3,847	\$ 46,161	\$ 46,100	\$ 11,400	\$ 57,500
\$ 503	\$ 271	\$ 114	\$ 3,930	\$ 47,157	\$ 47,200	\$ 9,700	\$ 56,900
\$ 454	\$ 271	\$ 121	\$ 4,154	\$ 49,846	\$ 49,800	\$ 10,900	\$ 60,700
\$ 454	\$ 277	\$ 143	\$ 4,899	\$ 58,784	\$ 58,800	\$ 14,700	\$ 73,500

## Appendix

*continued from page 19*

**Table 2:**  
**Estimates of Children in Middle-Class Families Struggling to Afford Early Education and Care<sup>a</sup>**

<b>State<sup>b</sup></b>	<b>Minimum income for middle-class family (Percent of federal poverty threshold)</b>	<b>Maximum income for pre-k eligibility<sup>c</sup> (Percent of federal poverty threshold)</b>	<b>Three and four year olds in struggling families<sup>d</sup></b>	<b>Percent of three and four year olds in state</b>
<b>Arizona</b>	\$ 65,200 (308 %)	\$ 39,220 (185 %)	24,376	14 %
<b>Arkansas</b>	\$ 56,200 (265 %)	\$ 42,400 (200 %)	6,128	9 %
<b>California</b>	\$ 78,500 (370 %)	\$ 48,000 (226 %)	131,870	13 %
<b>Colorado</b>	\$ 76,400 (360 %)	\$ 39,220 (185 %)	38,536	26 %
<b>Delaware</b>	\$ 66,500 (314 %)	\$ 21,200 (100 %)	8,858	36 %
<b>Kansas</b>	\$ 64,300 (303 %)	\$ 27,560 (130 %)	23,197	30 %
<b>Kentucky</b>	\$ 59,100 (279 %)	\$ 31,800 (150 %)	24,848	23 %
<b>Louisiana</b>	\$ 56,900 (268 %)	\$ 39,220 (185 %)	15,167	12 %
<b>Maryland</b>	\$ 81,330 (383 %)	\$ 39,220 (185 %)	37,005	24 %
<b>Massachusetts</b>	\$ 94,500 (446 %)	\$ 44,674 (211 %)	31,297	22 %
<b>Michigan<sup>e</sup></b>	\$ 65,330 (308 %)	\$ 63,600 (300 %)	N/A	N/A
<b>Nebraska</b>	\$ 62,500 (295 %)	\$ 39,220 (185 %)	11,028	23 %
<b>North Carolina</b>	\$ 65,200 (308 %)	\$ 45,227 (213 %)	23,229	9 %
<b>Ohio</b>	\$ 58,000 (274 %)	\$ 42,400 (200 %)	33,050	11 %
<b>Oregon</b>	\$ 70,600 (333 %)	\$ 21,200 (100 %)	40,773	39 %
<b>Pennsylvania</b>	\$ 72,000 (340 %)	\$ 63,600 (300 %)	14,868	5 %
<b>South Carolina</b>	\$ 57,500 (271 %)	\$ 39,220 (185 %)	7,549	7 %
<b>Tennessee</b>	\$ 56,900 (268 %)	\$ 39,220 (185 %)	16,288	11 %
<b>Texas</b>	\$ 60,700 (286 %)	\$ 39,220 (185 %)	120,001	16 %
<b>Washington</b>	\$ 73,500 (347 %)	\$ 23,320 (110 %)	70,799	45 %

**Table 1: Expense and Income Estimates for a Middle-Class Family of Four in States with Income-Based Pre-K Eligibility**

- <sup>a</sup> These budgets assume a family of four with two working parents and two children: one four year old and one infant.
- <sup>b</sup> "Final FY 2008 Fair Market Rent Documentation System," HUD User, <http://www.huduser.org/datasets/fmr/fmrs/index.asp?data=fmr08>.
- <sup>c</sup> U.S. Department of Agriculture, Center for Nutrition Policy and Promotion. "Official USDA Food Plans: Cost of Food at Home at Four Levels, U.S. Average, June 2008." Alexandria, VA: 2008, <http://www.cnpp.usda.gov/Publications/FoodPlans/2008/CostofFoodJun08.pdf>.
- <sup>d</sup> U.S. Department of Labor, Bureau of Labor Statistics. "Consumer Expenditure Survey: Tables 1984 through 2006." Washington, DC: 2006, <http://www.bls.gov/cex/tables.htm>. (Calculated for families earning between \$40,000 and \$49,999 annually, adjusted to 2008 dollars)
- <sup>e</sup> "Parents and the High Price of Child Care: 2008 Update," (Washington, DC: NACCRRA, 2008).
- <sup>f</sup> U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality. "Average Total Employee Contribution (in Dollars) Per Enrolled Employee for Family Coverage at Private-Sector Establishments That Offer Health Insurance by Firm Size and State: United States, 2006," (Table II.D.2). In *Medical Expenditure Panel Survey*. Rockville, MD: 2006. [http://www.meps.ahrq.gov/mepsweb/data\\_stats/summ\\_tables/insr/state/series\\_2/2006/iid2.pdf](http://www.meps.ahrq.gov/mepsweb/data_stats/summ_tables/insr/state/series_2/2006/iid2.pdf). (These data are not adjusted to 2008 dollars because the Consumer Price Index does not include this expense).
- <sup>g</sup> -, "Medical Expenditure Panel Survey." Rockville, MD: 2005, [http://www.meps.ahrq.gov/mepsweb/data\\_stats/MEPSnetHC.jsp](http://www.meps.ahrq.gov/mepsweb/data_stats/MEPSnetHC.jsp). (adjusted to 2008 dollars). Methodology adapted from: S. Allegretto and Y. Fungard, "Family Budget Technical Documentation," (Washington, DC: Economic Policy Institute, 2005).
- <sup>h</sup> U.S. Department of Transportation, Center for Transportation Analysis. "National Household Travel Survey," Oak Ridge National Laboratory. 2001, <http://nhts.ornl.gov/index.shtml>. Cost per mile driven from: U.S. Department of the Treasury, Internal Revenue Service. "IRS Announces 2008 Standard Mileage Rates; Rate for Business Miles Set at 50.5 Cents Per Mile." Washington, DC: 2007, <http://www.irs.gov/newsroom/article0,,id=176030,00.html>. Methodology adapted from: Allegretto and Fungard, "Family Budget Technical Documentation."
- <sup>i</sup> "Consumer Expenditure Survey: Tables 1984 through 2006." (Calculated for families earning between \$40,000 and \$49,999 annually, adjusted to 2008 dollars; includes phone, laundry/cleaning supplies, postage and stationery, clothes, personal care products/services, reading.)
- <sup>j</sup> "Internet TAXSIM Version 8.0," National Bureau of Economic Research, <http://www.nber.org/~taxsim/taxsim-calc3/index.html>. (Includes state, federal, and payroll taxes)

**Table 2: Estimates of Children in Middle-Class Families Struggling to Afford Early Education and Care**

- <sup>a</sup> Because the income and population estimates presented in this table are based on national surveys, they are intended only to provide state-level policymakers and advocates with a broad sense of the pre-k pinch experienced by the middle class.
- <sup>b</sup> If a state has more than one state-funded pre-k program, the larger one was used in the analysis. These states include Kansas, Louisiana, and South Carolina.
- <sup>c</sup> Some of the states allow programs to enroll a proportion of children who are from families earning above the pre-k-eligibility level. In California, Delaware and Washington, 10 percent of enrolled children can be from families that earn more than the maximum income-eligibility level. Pre-k programs in North Carolina and Oregon allow 20 percent of enrolled children to be from families that earn more than the maximum income-eligibility level. In most cases, however, most of the enrolled children are from families at or below the income-eligibility level.
- <sup>d</sup> The estimates of children whose families earn above the pre-k eligibility level and below the minimum annual income necessary include three and four year olds. These estimates are derived from the Current Population Survey Table Creator ([http://www.census.gov/hhes/www/cpstc/cps\\_table\\_creator.html](http://www.census.gov/hhes/www/cpstc/cps_table_creator.html)) and represent a three-year average between 2005 and 2007. When the exact income cut-off points are not available in the table creator, a narrower range of income was used to produce a more conservative estimate. Some income-ineligible children may qualify for state-funded pre-k if they meet other risk factors, and in some states, they may qualify for child care subsidies. Also, in Arizona, Delaware, Kansas, Louisiana, Maryland, North Carolina, South Carolina, and Tennessee, three year olds are not eligible for state pre-k. Therefore, the analysis for these states underestimates the number of three year olds who live in families that are struggling to pay for early education programs.
- <sup>e</sup> Due to the limited range between the income-eligibility threshold for state pre-k and the minimum income necessary for a middle-class family in Michigan, this analysis is unable to provide an estimate of children from families in this income range.

## Endnotes

- <sup>1</sup> “Votes Count: Legislative Action on Pre-K Fiscal Year 2009,” (Washington, DC: Pre-K Now, 2008), 2. Enrollment figures from W. Steven Barnett, Hustedt, Jason T., Robin, Kenneth B, and Schulman, Karen L., “The State of Preschool: 2005 State Preschool Yearbook,” (New Brunswick: National Institute for Early Education Research (NIEER), Rutgers, The State University of New Jersey, 2006); and –, “The State of Preschool: 2007 State Preschool Yearbook,” (New Brunswick: NIEER, Rutgers, The State University of New Jersey, 2008).
- <sup>2</sup> Barnett, “The State of Preschool: 2007 State Preschool Yearbook.”
- <sup>3</sup> Ibid.
- <sup>4</sup> “The 2008 HHS Poverty Guidelines,” U.S. Department of Health and Human Services. 2008, <http://aspe.hhs.gov/poverty/08Poverty.shtml>.
- <sup>5</sup> In this report, “early education and care” and “early learning and care” refer to any fee-based arrangement for three and four year olds that would be available to families who don’t qualify for state pre-k programs.
- <sup>6</sup> William Gormley, Jr. et al, “The Effects of Oklahoma’s Universal Pre-K Program on School Readiness: An Executive Summary,” (Washington, DC: Center for Research on Children in the United States, Georgetown University, 2004).
- <sup>7</sup> Edward C. Melhuish et al, “Preschool Influences on Mathematics Achievement,” *Science*, 321 (2008).
- <sup>8</sup> W. Steven Barnett, Kirsty Brown, and Rima Shore, “The Universal vs. Targeted Debate: Should the United States Have Preschool for All?” *Preschool Policy Matters*, Apr. 2004.
- <sup>9</sup> Richard J. Coley, “An Uneven Start: Indicators of Inequality in School Readiness,” (Princeton, NJ: Educational Testing Service, 2002).
- <sup>10</sup> U.S. Department of Education, National Center for Education Statistics. “Dropout and Completion Rates in the United States: 2006” (NCES 2008-053), J. Laird et al. Washington, DC: U.S. Government Printing Office, 2008, <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2008053>.
- <sup>11</sup> U.S. Department of Education. “Twenty-Fifth Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act: Section I, the National Picture.” Washington, DC: U.S. Government Printing Office, 2005, <http://www.ed.gov/about/reports/annual/osep/2003/25th-vol-1-sec-1.pdf>.
- <sup>12</sup> U.S. Department of Education, National Center for Education Statistics. “The Condition of Education 2006: Indicator 25 Grade Retention.” (NCES 2006-071). Washington, DC: U.S. Government Printing Office, 2006, [http://nces.ed.gov/programs/coe/2006/pdf/25\\_2006.pdf](http://nces.ed.gov/programs/coe/2006/pdf/25_2006.pdf).
- <sup>13</sup> See for example: Clive R. Belfield et al, “The High/Scope Perry Preschool Program: Cost-Benefit Analysis Using Data from the Age-40 Followup,” *Journal of Human Resources*, 41, no. 1 (2006); and A. J. Reynolds et al, “Age 21 Cost-Benefit Analysis of the Title I Chicago Child-Parent Centers,” *Educational Evaluation and Policy Analysis*, 24 (2002).
- <sup>14</sup> “Inside the Middle Class: Bad Times Hit the Good Life,” (Washington, DC: Pew Research Center, 2008). The cited report has figures for a family of three. For purposes of this analysis, the range has been adjusted to a family of four and is based on communications with Richard Fry, a senior researcher for the report.
- <sup>15</sup> U.S. Census Bureau. “Percent Distribution of Families by Selected Characteristics within Income Quintile and Top 5 Percent in 2007,” (Table FINC-06). In *Current Population Survey (CPS) Family Income*. Washington, DC, 2008. [http://pubdb3.census.gov/macro/032008/faminc/new06\\_000.htm](http://pubdb3.census.gov/macro/032008/faminc/new06_000.htm).
- <sup>16</sup> Ibid.
- <sup>17</sup> –. “Presence of Related Children under 18 Years Old-All Families by Total Money Income in 2007, Type of Family, Work Experience in 2007, Race and Hispanic Origin of Reference Person.” (Table FINC-03). In *Current Population Survey (CPS) Family Income*. Washington, DC, 2008. [http://pubdb3.census.gov/macro/032008/faminc/new03\\_000.htm](http://pubdb3.census.gov/macro/032008/faminc/new03_000.htm).
- <sup>18</sup> –. “Percent Distribution of Families by Selected Characteristics within Income Quintile and Top 5 Percent in 2007,” (Table FINC-06).



- <sup>19</sup> –. “Presence of Related Children under 18 Years Old-All Families by Total Money Income in 2007, Type of Family, Work Experience in 2007, Race and Hispanic Origin of Reference Person,” (Table FINC-03).
- <sup>20</sup> Jared Bernstein, “Updated CBO Data Reveal Unprecedented Increase in Inequality,” (Washington, DC: Economic Policy Institute, 2007). This report defines “middle income” as the middle 20 percent of all families.
- <sup>21</sup> Christian E. Weller and Eli Staub, “Middle Class in Turmoil,” (Washington, DC: Center for American Progress and Service Employees International Union, 2007). This data reflects the middle 20 percent of all families.
- <sup>22</sup> Michael M. Grynbaum, “Living Costs Rising Fast, and Wages Are Trailing,” *The New York Times*, Aug. 15, 2008.
- <sup>23</sup> Elizabeth Warren and Amelia Warren Tyagi, *The Two Income Trap*. (New York: Basic Books, 2003).
- <sup>24</sup> Richard Morin, “Feeling Guilty: Americans Say They Aren’t Saving Enough,” (Washington, DC: Pew Research Center, 2008).
- <sup>25</sup> Julia B. Isaacs, Isabel V. Sawhill, and Ron Haskins, “Getting Ahead or Losing Ground: Economic Mobility in America,” (Washington, DC: The Brookings Institution, 2008).
- <sup>26</sup> “Inside the Middle Class: Bad Times Hit the Good Life.”
- <sup>27</sup> Gretchen Morgenson, “Given a Shovel, Americans Dig Deeper into Debt,” *The New York Times*, Jul. 20, 2008.
- <sup>28</sup> Isaacs, Sawhill, and Haskins, “Getting Ahead or Losing Ground: Economic Mobility in America,” 52.
- <sup>29</sup> Amanda Logan and Christian E. Weller, “Bankruptcies Back on the Wrong Track,” (Washington, DC: Center for American Progress, 2008).
- <sup>30</sup> Warren and Warren Tyagi, *The Two Income Trap*, 6.
- <sup>31</sup> Peter Gosselin, *High Wire: The Precarious Financial Lives of American Families*. (New York: Basic Books, 2008).
- <sup>32</sup> Weller and Staub, “Middle Class in Turmoil.” This data reflects the middle 60 percent of all families.
- <sup>33</sup> Jennifer Wheary, Thomas M. Shapiro, and Tamara Draut, “By a Thread: The New Experience of America’s Middle Class,” (New York: Demos, 2007). The cited report defines “middle income” as families earning two to six times the federal poverty threshold, adjusted for family size.
- <sup>34</sup> Hugh Price, Amy Liu, and Rebecca Sohmer, “Pathways to the Middle Class,” (Washington, DC: The Brookings Institution, 2008), 3.
- <sup>35</sup> In some of these states, families that do not qualify for state pre-k program due to income may be eligible for child care subsidies. They would still be responsible for a co-payment and the quality of programming they would be able to purchase is unlikely to be high. Some income-ineligible children may qualify for pre-k if they meet other risk factors.
- <sup>36</sup> Jared Bernstein, *Crunch: Why Do I Feel So Squeezed?* (San Francisco: Berrett-Koehler, 2008).
- <sup>37</sup> “Parents and the High Price of Child Care: 2008 Update,” (Washington, DC: National Association of Child Care Resource & Referral Agencies (NACCRRA), 2008).
- <sup>38</sup> Margaret Allen, “New Program Helps Families Pay for Quality Child Care,” *Dallas Business Journal*, Dec. 11, 2007.
- <sup>39</sup> W. Steven Barnett and Donald J. Yarosz, “Who Goes to Preschool and Why Does It Matter?” (New Brunswick: National Institute for Early Education Research, Rutgers, The State University of New Jersey, 2007).
- <sup>40</sup> Peter D. Hart Research Associates and American Viewpoint, “Poll Results: American Voters’ Views on Pre-K and Federal Funding,” (Washington, DC: Pre-K Now, 2008).
- <sup>41</sup> Lynn A. Karoly et al, “Prepared to Learn: The Nature and Quality of Early Care and Education for Preschool-Age Children in California,” (Santa Monica: RAND Corporation, 2008).
- <sup>42</sup> U.S. Department of Health and Human Services, National Institute of Child Health and Human Development. “The NICHD Study of Early Child Care and Youth Development.” Washington, DC: 2000.
- <sup>43</sup> Jack P. Shonkoff and Deborah Phillips, eds, *From Neurons to Neighborhoods: The Science of Early Childhood Development*. (Washington, DC: National Academy Press, 2000), 320.

## Endnotes

continued from page 23

- <sup>44</sup> “We Can Do Better: NACCRRA’s Ranking of State Child Care Center Standards and Oversight,” (Washington, DC: NACCRRA, 2007); “Leaving Children to Chance: NACCRRA’s Ranking of State Standards and Oversight of Small Family Child Care Homes,” (Washington, DC: NACCRRA, 2008).
- <sup>45</sup> Katherine A. Magnuson, C. Ruhm, and Jane Waldfogel, “Does Prekindergarten Improve School Preparation and Performance?” *Economics of Education Review*, 26 (2007).
- <sup>46</sup> Stephen Herzenberg, Mark Price, and David Bradley, “Losing Ground in Early Childhood Education: Declining Workforce Qualifications in an Expanding Industry, 1979–2004,” (Washington, DC: Economic Policy Institute, 2005).
- <sup>47</sup> This analysis assumes a family of four with two working parents and two children: one four year old and an infant. Family expenses include rent, an early learning and care program, food (including the occasional meals in restaurants), health insurance, out-of-pocket health expenses, transportation, household supplies, taxes, and savings. This is a rather conservative estimate, as it assumes that this family has no debt, has no budget for recreational activities, and does not own a home.
- <sup>48</sup> Because the income and population estimates presented in this report are based on national surveys, they are intended only to provide a broad sense of the pre-k pinch experienced by the middle class in any given state.
- <sup>49</sup> Some states allow programs to enroll a proportion of children from families earning above the pre-k eligibility level. In California, Delaware, and Washington, this figure is 10 percent; in North Carolina and Oregon, 20 percent; and in Michigan, 50 percent. In most cases, however, the majority of enrolled children are from families at or below the income-eligibility level. Also, in some states, children whose families do not meet the income-eligibility requirements can still qualify if they meet certain other “risk factors.” It is assumed that this represents only a limited number of admitted children.
- <sup>50</sup> In Michigan, 50 percent of children enrolled must be from families earning at or below 300 percent of the federal poverty threshold, and the others have to meet at least two risk factors designated by the state. According to this report’s analysis of family budgets in Michigan, this income-eligibility level could potentially cover all middle-class families who would otherwise be caught in the pinch. Due to limited funding for the program, however, the state is not able to serve all these children. Based on enrollment data, as of 2007, at least 30 percent of income-eligible four year olds remain unserved by state pre-k or any other publicly funded early education program.
- <sup>51</sup> “Parents and the High Price of Child Care: 2008 Update.”
- <sup>52</sup> See: “State Supported Preschool,” *2007–2008 Assets & Opportunity Scorecard*. (2008); [http://www.cfed.org/imageManager/scorecard/2007/policybriefs/state\\_supportedprek.pdf](http://www.cfed.org/imageManager/scorecard/2007/policybriefs/state_supportedprek.pdf); “A Plan to Revive the American Economy,” in *EPI Agenda for Shared Prosperity*. (Washington, DC: Economic Policy Institute, 2008); and Jill Khadduri, Heather Schwartz, and Jennifer Turnham, “Community Developers’ Guide to Improving Schools in Revitalizing Neighborhoods,” (Columbia, MD: Enterprise Community Partners, Inc., 2008).
- <sup>53</sup> Lynn A. Karoly, Elaine Reardon, and Michelle Cho, “Early Care and Education in the Golden State: Publicly Funded Programs Serving California’s Preschool-Age Children,” (Santa Monica: RAND Corporation, 2007).
- <sup>54</sup> U.S. Department of Education, National Center for Education Statistics. “Initial Results from the 2005 NHES Early Childhood Program Participation Survey,” (NCES 2006-075). I.U. Iruka and P.R. Carver. Washington, DC: U.S. Government Printing Office, 2006.
- <sup>55</sup> “Community Approaches to Serving Four-Year-Old Children in Wisconsin: Lessons Learned from Wisconsin Communities,” (Madison: Wisconsin Department of Public Instruction, 2003).
- <sup>56</sup> See: Ellen Frede et al, “The Abbott Preschool Program Longitudinal Effects Study (Apples) Interim Report,” (New Brunswick: NIEER, Rutgers, The State University of New Jersey, 2007); Susanna Loeb et al, “How Much Is Too Much? The Influence of Preschool Centers on Children’s Social and Cognitive Development,” *Economics of Education Review*, 26 (2007); and Edward Zigler, Walter S. Gilliam, and Stephanie M. Jones, *A Vision for Universal Preschool Education*. (Cambridge University Press, 2006).
- <sup>57</sup> Barnett, Brown, and Shore, “The Universal vs. Targeted Debate: Should the United States Have Preschool for All?”

## Author and Acknowledgements

### Author

Albert Wat is the state policy analyst at Pre-K Now. He tracks the latest information on state pre-kindergarten programs and keeps Pre-K Now and advocates across the country up to date on developments in early education research.

Jennifer V. Doctors edited this report.

### Acknowledgements

Pre-K Now thanks the following individuals for reviewing drafts of this report: Dale Epstein from the National Institute for Early Education Research; Cindy Heine from the Prichard Committee for Academic Excellence; Deborah Kong from Preschool California; Clinton Macsherry from Maryland Committee for Children, Inc.; David Mandell from the Children's Institute; and Karen Schulman from the National Women's Law Center. Thank you to Libby Doggett, Danielle Gonzales, Holly Barnes Higgins, Amy Katzel, Anya Malkov, Matt Mulkey, Kathy Patterson, Stephanie Rubin, and Shad White of Pre-K Now for their expertise and assistance in all aspects of preparation of this publication.

Pre-K Now is a project of The Pew Charitable Trusts and other funders to advance high-quality pre-k for all children. The findings and opinions expressed in this report do not necessarily reflect the views of the Trusts.

## Pre-K Now at a Glance

### Mission

Pre-K Now collaborates with advocates and policymakers to lead a movement for high-quality, voluntary pre-kindergarten for all three and four year olds.

### Vision

Pre-K Now's vision is a nation in which every child enters kindergarten prepared to succeed.

### Location

Washington, DC

### Leadership

Libby Doggett, Ph.D.  
Executive Director

### Media Contact

Holly Barnes Higgins  
Media Relations Director  
hhiggins@preknow.org  
202.862.9863 voice  
202.834.6846 mobile

### Funders

The Pew Charitable Trusts  
The David and Lucile Packard Foundation  
The McCormick Foundation  
The Nellie Mae Education Foundation  
The Foundation for Child Development  
RGK Foundation  
CityBridge Foundation  
The Schumann Fund for New Jersey

### Pre-K Now Key Differentiators

- Focuses exclusively on pre-k
- Provides the most up-to-date gauge of the pre-k pulse in any state
- Offers nationwide access to pre-k advocates
- Monitors and distributes daily pre-k newsclips
- Provides a national perspective on local pre-k issues
- Provides outreach, policy, and Spanish-language information targeted to the Latino community
- Leads a national movement which has gained significant momentum in the last five years

### The Case for Pre-K

- Pre-k benefits all children academically, socially, and emotionally.
- High-quality pre-k for all nets a high return on investment in children and the community.
- The most important brain development occurs by age five.
- Pre-k is the first step to improving K-12 education.

Pre-K Now

1025 F Street, NW  
Suite 900  
Washington DC  
20004

202.862.9871 voice  
202.862.9870 fax

[www.preknow.org](http://www.preknow.org)

The Pre-K Pinch:  
Early Education and  
the Middle Class