Children's Educational Well-Being

80 percent of an individual's brain development occurs between birth and age three, and early environments can either stimulate or hinder effective brain development. Nearly 85 percent of mothers in the U.S. work, as do 65 percent of mothers with children under the age of three. As is true across the country, many children in Shelby County spend a significant part of each day in the care of adults other than their parents.

The growing reliance on child care is a product of shifts in family structures and changing patterns of workforce participation (Heymann, Penrose & Earle, 2006). More than half of the children born in Shelby County each year are born to single mothers who rely on a network of formal and informal child care providers so that they are able to work. Large numbers of married parents also depend on child care because both parents are working. Additionally, even when parents are not in the workforce they may place their children in pre-school in order to provide them with high-quality early learning experiences.

Because these early environments play a large role in children's future academic outcomes, assessing the educational well-being of our children means considering both school and pre-school experiences. Accordingly, this chapter is divided into two parts. The first examines the availability, affordability, and quality of child care in Shelby County; the second evaluates the performance of Memphis City Schools in the context of state and national standards.

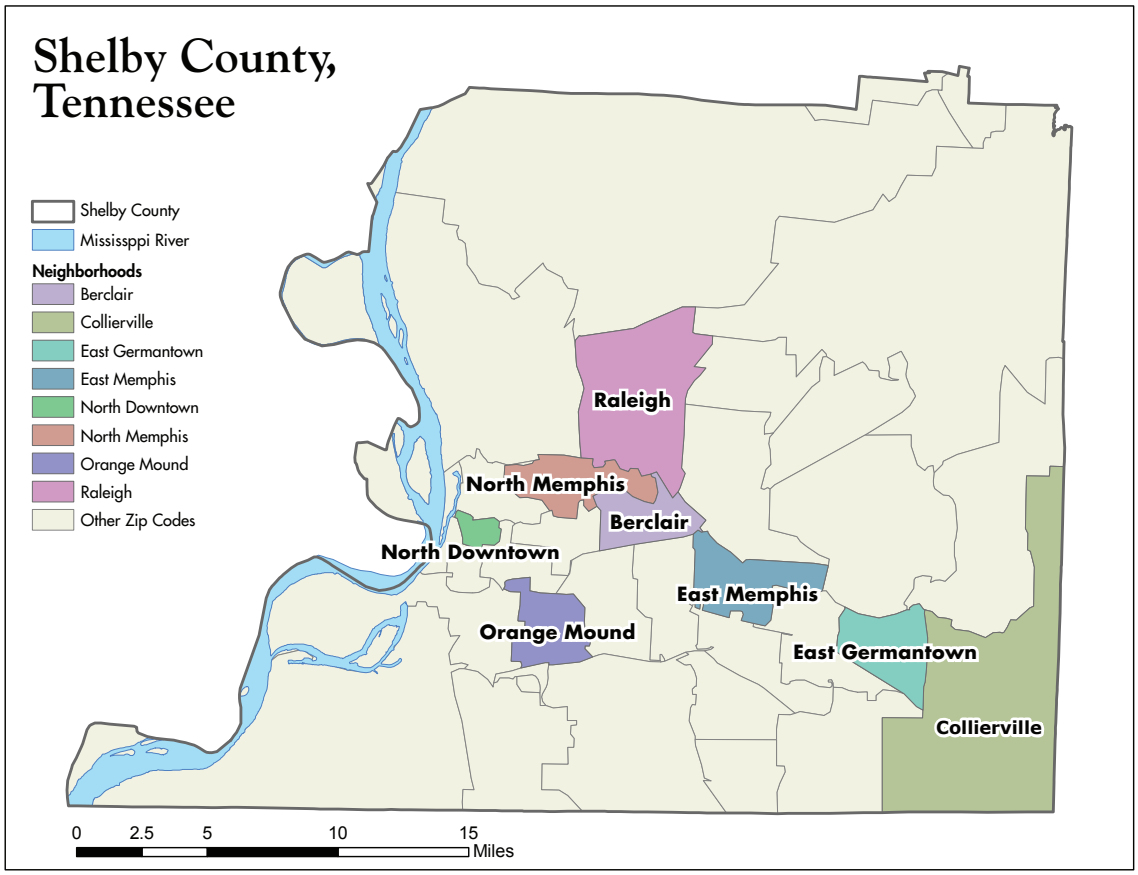
Quality child care benefits children and their families.

Child care plays a dual role for families. First, parents are better able to maintain steady employment and provide for their families when affordable, high quality child care is available (Kimmel, 1998). This is especially important for low income parents, whose jobs tend to permit less flexibility (Heymann, Penrose & Earle, 2006). Second, quality child care can improve children's cognitive and social skills, ensuring that they are prepared to enter kindergarten, and is associated with increased academic performance and fewer behavioral problems in the elementary school years (Peisner-Feinberg *et al.*, 2001). Research also suggests that poor children may have the most to gain from access to quality care (Fuller, Kagan, Caspary, & Gauthier, 2002; Wolfe & Scrivener, 2003).

Given the relationship between children's early experiences and their subsequent outcomes, attempts to measure the well-being of young children and their families in our community should include an understanding of the network of care provided to our children beyond time spent with parents.

Research on child care typically focuses on three domains: accessibility, affordability, and quality (*e.g.*, Kisker & Ross, 1997). Lack of accessibility can be a barrier to obtaining care if providers are not conveniently located or do not accommodate parents' scheduling needs. Similarly, child care is not an option if its cost exceeds the family's ability to pay or represents too high a percentage of the family's income. Finally, parents need to know that their child care arrangements are providing a safe and nurturing environment for their children. If care is of low quality, potential cognitive and social benefits for children will be lost.

Figure 1: Eight Neighborhoods Surveyed for Child Care Options



We begin our assessment of child care in Shelby County by examining the demographic variations among neighborhoods, then asking whether there are significant differences in the availability, quality and cost of early childhood care that correspond with these variations. To address this question, we surveyed the range of child care options available in eight neighborhoods in Shelby County (Figure 1)[1]. These neighborhoods were chosen because their median family incomes (for families with children living at home) were markedly different, ranging from a low of $13,000 to a high of $161,000.

For the purposes of this report, we group child care providers into four types[2]:

- Private centers which provide care for 13 or more children
- Family child care homes that care for five to seven children
- Private pre-schools located in private schools that also serve older students
- Public pre-schools located in public schools also serving older students

1 For the purposes of this report, we defined neighborhoods by zip codes, although we realize that there may be important variations within zip codes.

2 With the exception of before and after care slots, the majority of the child care options in the county are for children from birth through age four. In keeping with our focus on young children, we have excluded before and after care slots from our assessment because they are primarily for school age children. The majority of brain development has occurred by the time children reach school age.

The need for child care varies among neighborhoods.

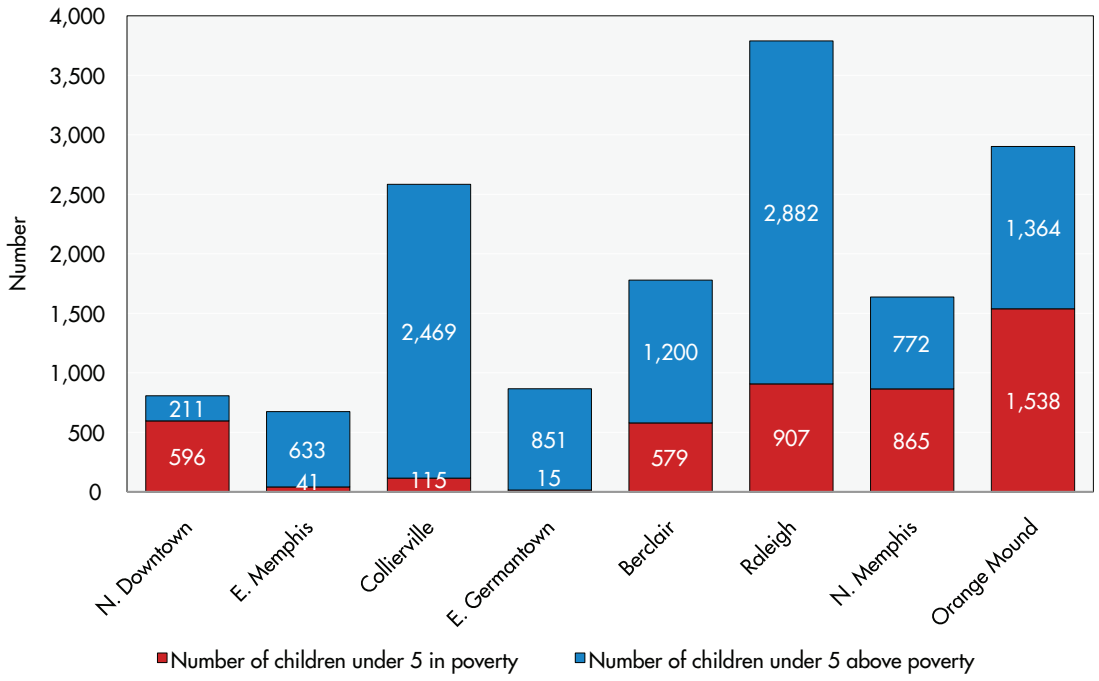
There are significant demographic variations among neighborhoods in Shelby County.

In 2000, 15,278 young children (under age five) lived in the eight neighborhoods included in our study (Figure 2).

- Over half of these children lived in Orange Mound, Berclair, or Raleigh, where 24-53 percent of children were living in poverty (Figure 2).

- Families with young children were more likely to live in lower-income neighborhoods (Figures 2 and 3).

Figure 2: Number of Children Under Five, by Poverty and Neighborhood, 2000



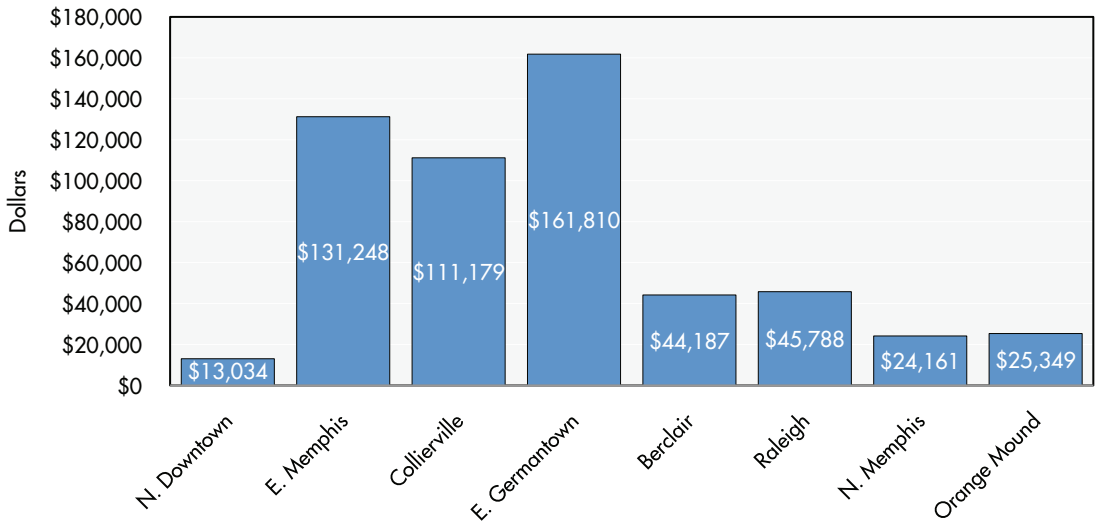
Source: US Census 2000, SF1 P12; SF3, P87.
http://factfinder.census.gov/home/saff/main.html?_lang=en

- There were also neighborhood-level variations in family structure that implied differing levels of child care needs and differing capacities to afford high quality care.

- The three neighborhoods with heavy concentrations of families headed by single parents were also the three poorest neighborhoods in the survey (North Downtown, North Memphis, and Orange Mound).

- East Memphis, Collierville, and East Germantown, the wealthiest neighborhoods, were characterized by the smallest concentrations of families headed by single parents (not shown) and the smallest concentrations of young children (Figure 2).

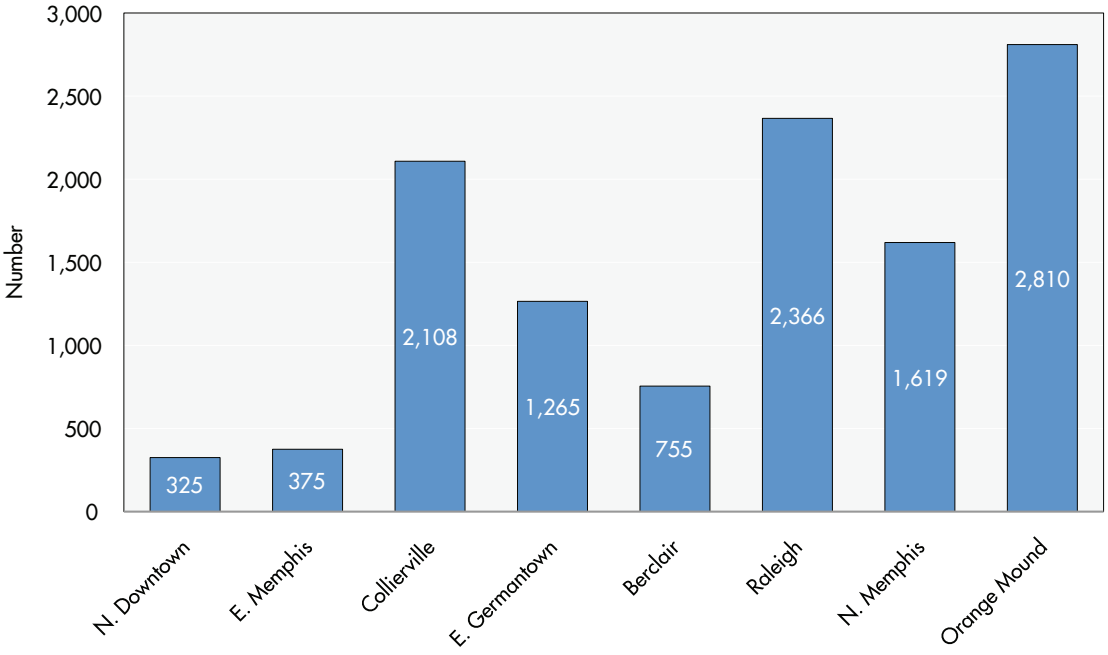
Figure 3: Median Income for Families with Children by Neighborhood, 2008



Source: US Census 2000, SF3, PCT39 (adjusted to 2008 dollars).
http://factfinder.census.gov/home/saff/main.html?_lang=en

Neighborhoods with more children have more child care slots.

Figure 4: Number of Child Care Slots by Neighborhood, 2008



Source: Tennessee Department of Human Services Child Care Providers Map.
http://www.state.tn.us/humanserv/childcare/79/prov.htm

At first glance, it is encouraging to note that the distribution of child care slots generally matches the distribution of young children (Figure 4); it appears that care is accessible in the areas where we would expect the highest need for it. Additionally, North Memphis and Orange Mound, high poverty neighborhoods where over half of families with young children were headed by single parents, had the greatest number of child care slots. (While North Downtown had the highest percentage of single parent families, it had comparatively few children.)

However, the mere availability of care is not a complete measure of how well an area is being served. The quality and affordability of care available vary widely between neighborhoods. For instance, child care which includes an educational focus was much more widely available in the two most affluent neighborhoods in our study (East Germantown and East Memphis) than in other areas. In the following sections we examine differences in quality and affordability across neighborhoods.

Even in wealthy neighborhoods, quality child care is scarce.

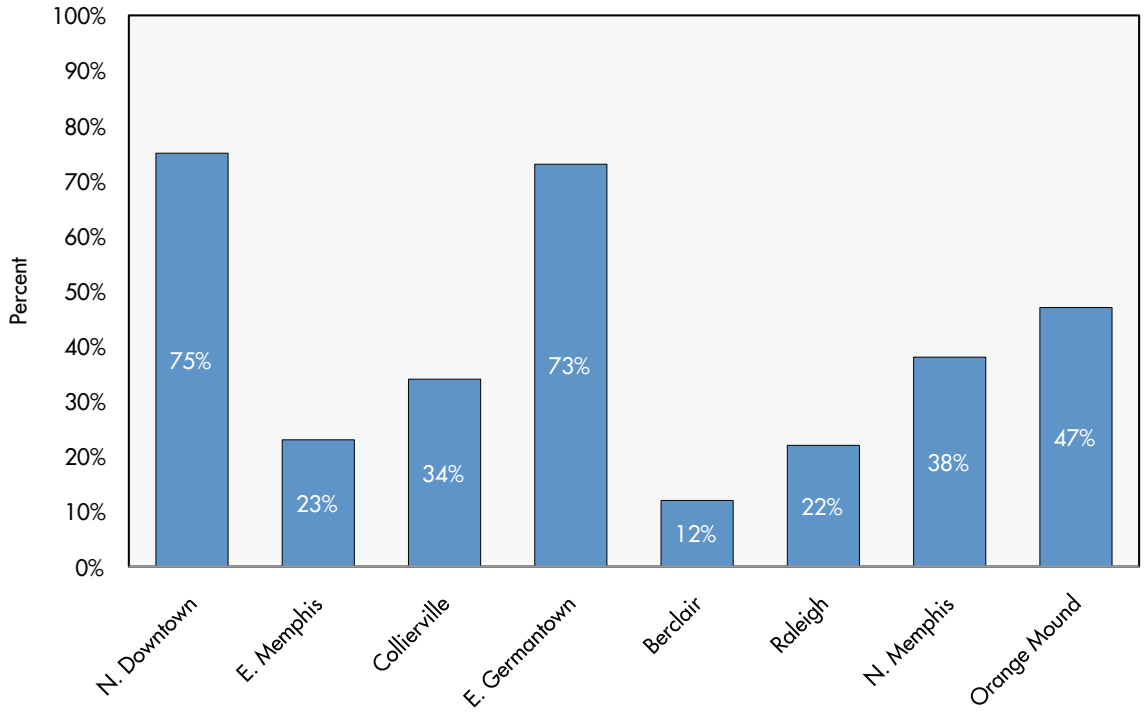
There are two available measures to evaluate the quality of child care in Shelby County:

- Tennessee's Star Quality Program is a voluntary program for child care providers that exceed the minimum state licensing requirements. Providers receive one to three stars, with three stars representing the highest quality rating.

- The National Association for the Education of Young Children (NAEYC) offers a voluntary accreditation program—available to most providers serving ten or more children—which evaluates centers according to several criteria, including curriculum quality, child health and safety, and teacher qualification.

Figure 5 indicates the availability of three-star care in each of the eight neighborhoods in our study. The number of available spaces in high quality centers differs widely across neighborhoods in Shelby County.

Figure 5: Percentage of 3-Star Child Care Slots by Neighborhood, 2008



Source: Tennessee Department of Human Services Child Care Providers Map. http://www.state.tn.us/humanserv/childcare/79/prov.htm
National Association for the Education of Young Children, http://www.naeyc.org/academy

In East Germantown, the wealthiest neighborhood in the study, 73 percent of the child care slots available for young children have the highest quality ratings of the state's star system. There also appears to be good news for low income children in this picture: in the poorest neighborhood, North Downtown, 75 percent of the available child care slots are in three-star centers.

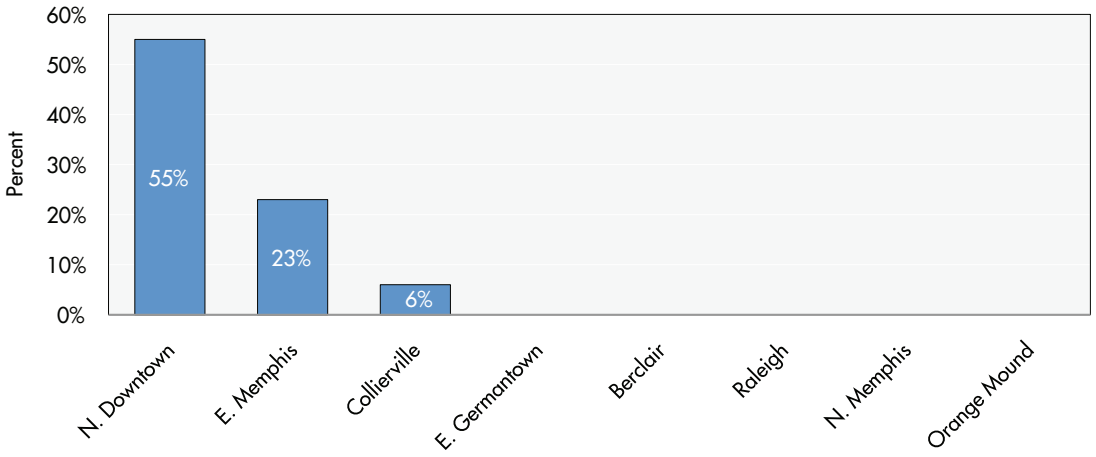
However, on closer inspection, these high quality child care slots in North Downtown may not be going to neighborhood residents. Many of the children attending pre-school in North Downtown are not the children of families in the area. Instead, they are the children of white-collar workers commuting into the city from outlying neighborhoods. For instance, the child care center at the University of Tennessee accounts for over half of the three-star slots in this neighborhood, but the center does not accept state child care subsidies. In order to enroll one child, a neighborhood family would have to pay 71 percent of the neighborhood's median annual income for families with children.

Moreover, Tennessee's Star Quality system is an imperfect measure of child care quality. An independent report has found that while the program has generally improved the overall quality of child care, there are numerous problems. For example, star ratings often do not match actual quality of care, parents are not well-informed about the program, and there are issues of fairness and consistency in the administration of the program (Pope, Denny, Homer, & Ricci, 2006).

NAEYC accreditation, based on nationwide standards, is a more reliable indicator of high quality. Independent studies find that accredited providers are superior to non-accredited ones, and that NAEYC standards are an advance over most state standards (Helburn, 2003; Whitebook & Sakai, 2004). Unfortunately, NAEYC-accredited providers are rare in Shelby County, representing only four percent of eligible child care centers.

As Figure 6 shows, NAEYC-accredited care is available in only three of the eight neighborhoods included in our study. With one exception—North Downtown—the lower-income neighborhoods had no NAEYC-accredited care. However, in North Downtown the only two providers which are certified by NAEYC are the University of Tennessee Child Care Program, which is beyond the means of most neighborhood residents, and Hope House, which specializes in the care of children with HIV or AIDS.

Figure 6: Percentage of NAEYC-accredited Child Care Slots by Neighborhood, 2008



Source: Center for Urban Child Policy, The Urban Child Institute

Working class parents pay the highest share of their income for quality child care.

Figure 7: Characteristics of the Neighborhoods Where Children Live

	North Downtown	East Memphis	Collierville	East Germantown	Berclair	Raleigh	North Memphis	Orange Mound
Average Weekly Cost of 2 Star Care	n/a	n/a	$175	n/a	$115	$133	$109	$109
% of Median Family Income	n/a	n/a	8%	n/a	13%	15%	23%	21%
Average Weekly Cost of 3 Star Care	$147	$176	$179	$214	$119	$147	$114	$114
% of Median Family Income	57%	7%	8%	7%	13%	16%	24%	22%
Average Weekly Cost of NAEYC Accredited Care	$185	$176	$198	n/a	n/a	n/a	n/a	n/a
% of Median Family Income	71%	7%	9%	n/a	n/a	n/a	n/a	n/a

Table 1 presents information on the cost of early childhood care by level of quality. The results underscore an important aspect of affordability in our current child care system: the most economically advantaged parents pay a smaller percentage of their income for high quality care than do other parents. In the three most affluent neighborhoods we surveyed, high quality child care was provided at the highest cost per child, but at the lowest percentage of median family income for families with children. Three-star care in these three neighborhoods costs seven to eight percent of annual income. In comparison, families in the working class neighborhoods of Raleigh and Berclair pay 16 and 13 percent of median family income, respectively, for three-star child care.

In the poorest neighborhoods included in this study, 20-40 percent of available child care slots are in three-star facilities. While the availability of high quality care in low income neighborhoods is encouraging, it raises the question of how residents are able to afford it. The answer is that many residents who place their children in these centers are likely able to do so because they receive public assistance, including vouchers for child care, through the Families First program, Tennessee's version of the Federal Temporary Assistance for Needy Families program. However, Families First benefits are available only for a lifetime total of 60 months (TN DHS, 2008).

Many families earn too much to qualify for the full range of Families First benefits, but still struggle to pay for quality child care. Through the Low Income Child Care Program, many of these families are eligible to receive child care assistance from Families First as funding permits. However, demand for these benefits far outweighs their availability. Due to funding shortages Tennessee has not added new families to this program since 2002, and additions to the waiting list were discontinued in 2004 (TN DHS, 2008).

Public assistance child care payments not only improve the availability of high quality child care options, but also make it possible for many families in poor neighborhoods to afford them. Most of the three-star facilities in the poorest neighborhoods charge the state's Child Care Assistance weekly rate, which places care within the means of residents who receive subsidies. The State's child care subsidy rate for three-star care for a child under age five is $138 a week; if families living in poverty had to pay for the same care out of pocket, it would cost them 43 percent of their annual income. Conversely, in lower middle class neighborhoods where a larger share of families may earn too much to receive child care assistance, there is a notably less favorable ratio of young children to high quality child care slots.

The quality of children's early experiences contributes to their well-being both now and in the future.

Healthy and nurturing child care contributes to early brain development, which in turn provides the foundation for subsequent social, emotional and cognitive development. If the well-being of our youngest children serves as a barometer of the health of our community, then we would do well to ensure that our youngest children experience high quality early learning experiences and healthy environments.

The shortage in affordable high quality child care in Shelby County affects all families with children. Poor families are priced out of high quality early care opportunities unless they have access to temporary child care subsidies provided through the state. Due to budget shortfalls, families who are eligible for Low Income Child Care Assistance are unable to receive it, although they pay a higher percentage of their income for care than more affluent families. And even affluent families are affected by the shortage of child care providers who are accredited in accordance with nationally accepted standards.

The current economic downturn will likely increase state budget restraints and place further financial hardship on poor and middle income families. However, it may also provide an opportunity for policymakers to increase awareness of the child care problem in Memphis and Shelby County by demonstrating that the issue is relevant to all working families with children.

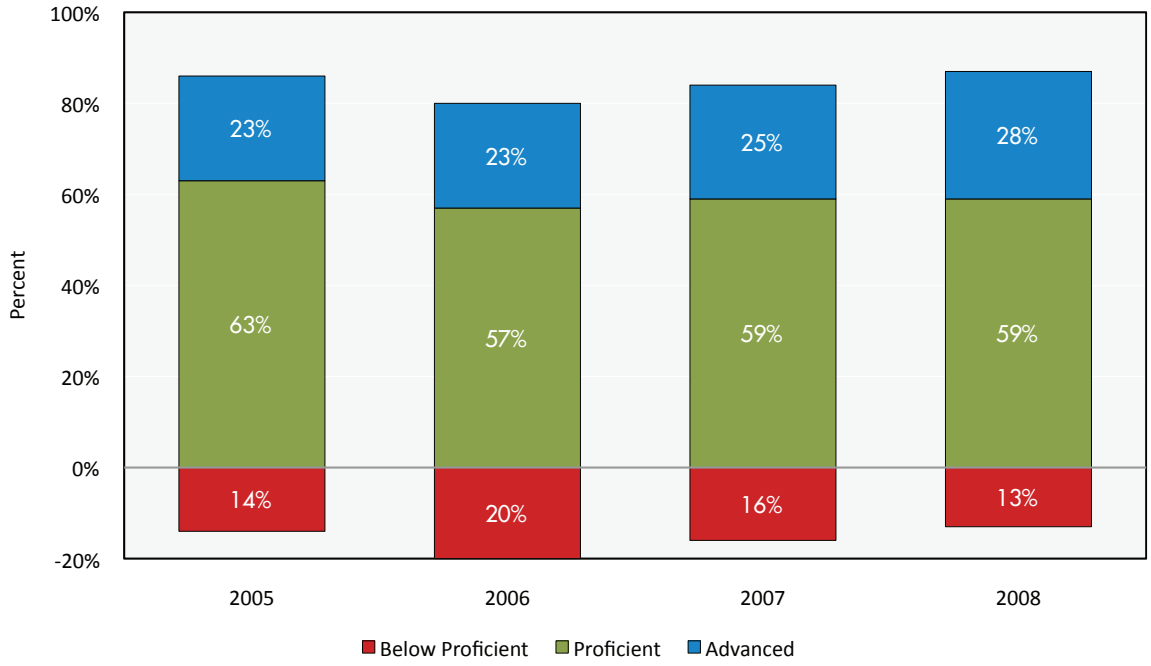
Memphis City Schools' performance on state achievement tests has been stagnant.

How do Memphis children fare once they reach school age? At first glance, it may seem that students in Memphis City Schools (MCS) are performing reasonably well. According to state achievement tests, 87 percent of all students are proficient or advanced in reading and language skills, and 82 percent are proficient or advanced in math. While these numbers are not stellar, they seem encouraging given that Memphis schools include a large proportion of minority and low-income students, groups that typically perform less well than others on standardized measures (Rothstein, 2004).

However, a closer look reveals that the news might not be so encouraging. The principal tool used for measuring the performance of public schools in Tennessee is the Tennessee Comprehensive Assessment Program (TCAP)[3]. The TCAP is mandated for grades three through eight, although schools may test earlier grades as well; the high school equivalent of the TCAP is the Gateway End-of-Course Test. TCAP scores are categorized as Advanced, Proficient and Below Proficient. The results of these tests are used to gauge the compliance of schools with the federal standards of the No Child Left Behind Act (NCLB), which requires states to reach 100 percent proficiency by 2014.

TCAP scores for Memphis City Schools have been stagnant for the past four years. About the same percentage of students were below proficient in reading in 2008 as in 2005 (Figure 8). In math, slightly fewer were below proficient in 2008 than in 2005 (Figure 9).

Figure 8: Percentage of Students in Memphis City Schools by TCAP Reading Scores, 2005-2008



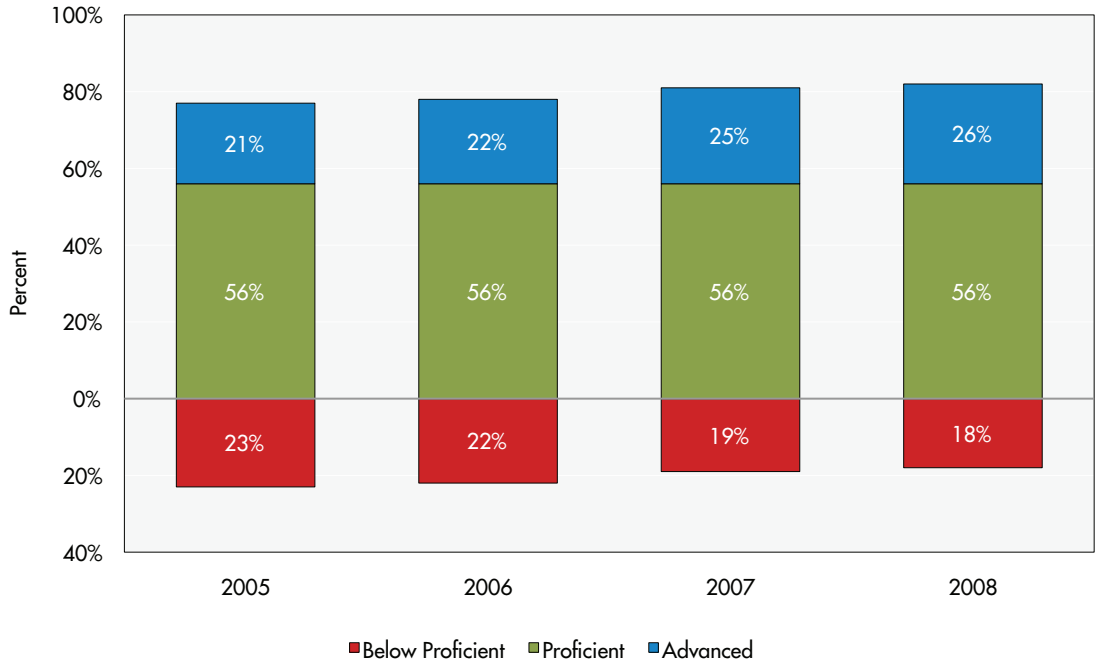
Source: Tennessee Department of Education, 2005-2008, http://www.tennessee.gov/education/reportcard/index.shtml

3 Data on TCAP results are drawn from the "report card" on Memphis City Schools available at the Tennessee Department of Education website. Current and archived report cards for all TN public schools are available at: http://www.tennessee.gov/education/reportcard/index.shtml

Unreliable standards make it difficult to measure the academic success of our children.

The fact that MCS are making little if any progress toward the NCLB goal of 100 percent proficiency is only part of the bad news. Under NCLB, each state is allowed to choose its own test and create its own definition of proficiency (NCES, 2007), and the result has been that many states set low standards in order to meet NCLB's stringent requirements. Each year from 2002 to 2006, Tennessee lowered the percentage of questions which students must answer correctly in order to be judged proficient, and standards remain at roughly the 2006 levels. In some content areas, the required percentage is as low as 25 percent. Given these low standards, the TCAP results shown in Figures 8 and 9 are less than impressive.

Figure 9: Percentage of Students in Memphis City Schools by Math TCAP Scores, 2005-2008



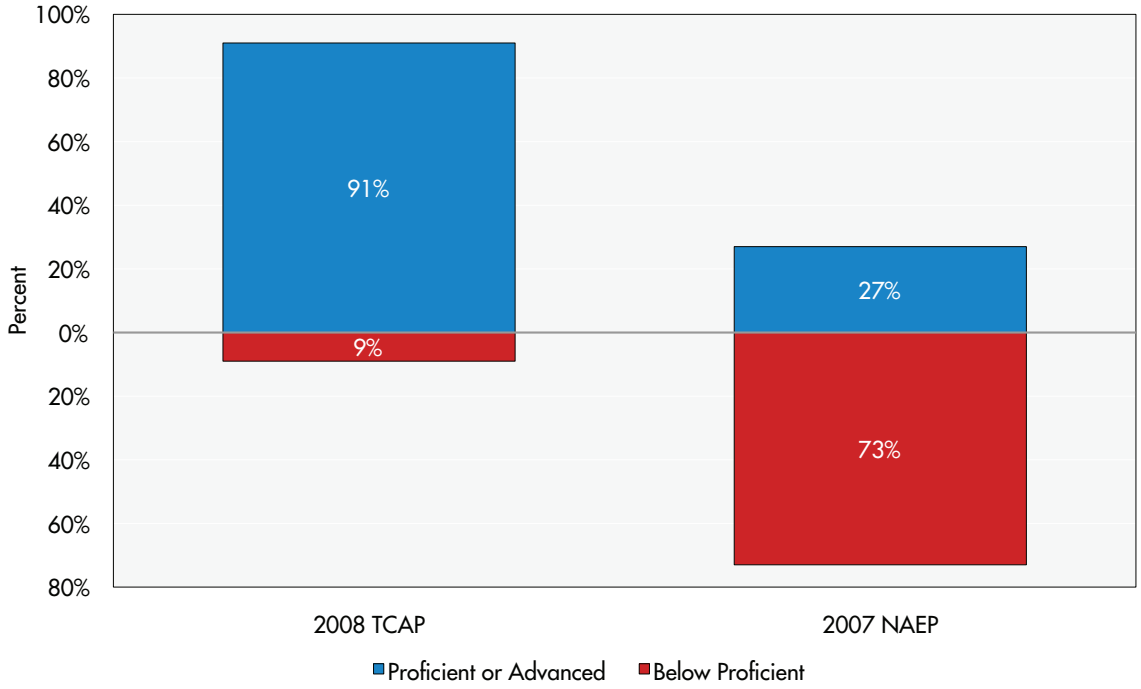
Source: Tennessee Department of Education, 2005-2008, http://www.tennessee.gov/education/reportcard/index.shtml

Evidence from national tests suggests that Tennessee's standards are inadequate.

One way to assess the strength of a state's standards is to compare the performance of its students on state achievement tests to their performance on national tests. The test administered by the National Assessment of Educational Progress (NAEP) is widely considered the gold standard of standardized assessments "because of its high technical quality and because it represents the best thinking of assessment specialists, education experts, teachers, and content specialists from around the nation" (NCES, 2008, p.2). The NAEP is given every two years to 4th and 8th grade students. Public school systems receiving federal funds are required to participate, but NAEP results are not used to measure compliance with NCLB standards. Because the NAEP is given to a random sample of students across the state, it is not possible to obtain results for Memphis City Schools; however, comparing Tennessee NAEP results with statewide TCAP results demonstrates the inadequacy of Tennessee's academic standards.

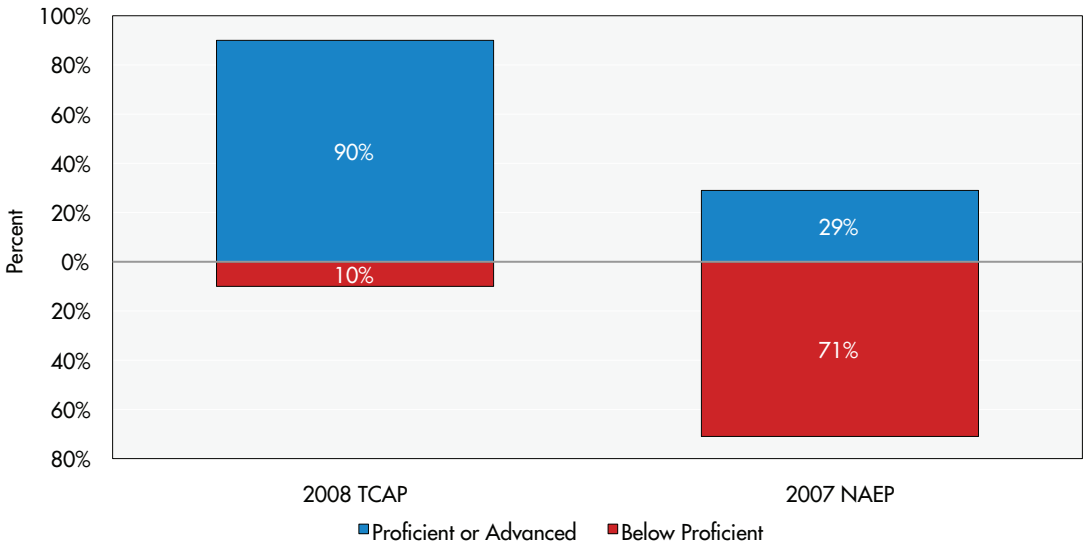
While 91 percent of Tennessee's fourth graders scored proficient or above in reading on the TCAP, only 27 percent scored proficient or above on the NAEP (Figure 10). Similarly, while 90 percent scored proficient or above in math, only 29 percent scored proficient or above on the NAEP (Figure 11).

Figure 10: Percentage of Tennessee 4th Grade Students by Reading Achievement: Gaps Between 2008 TCAP and 2007 NAEP



Source: Tennessee Department of Education, 2005-2008, http://www.tennessee.gov/education/reportcard/index.shtml and U.S. Department of Education, 2007, http://nces.ed.gov/nationsreportcard/states/profile.asp

Figure 11: Percentage of Tennessee 4th Grade Students
by Math Achievement: Gaps Between 2008 TCAP and 2007 NAEP



Source: Tennessee Department of Education, 2005-2008, http://www.tennessee.gov/education/reportcard/index.shtml and U.S. Department of Education, 2007, http://nces.ed.gov/nationsreportcard/states/profile.asp

In 2003, 2005, and 2007—the last three years in which the NAEP was administered—*Education Next* produced "report cards" which ranked states based upon the alignment of state standards with the national standards of the NAEP. States were assigned a grade of A through F according to the gap between the two sets of standards. "Those that receive an A have the toughest definition of student proficiency, while those with an F have the least rigorous" (Peterson & Hess, 2008, p.70). On each of these three report cards Tennessee earned a grade of F and was ranked last of all the states.

Tennessee is not the only offender. *Education Next* reports that most states have set their standards well below those of the NAEP. This seems to verify what some critics of NCLB predicted: that unrealistic goals and the lack of national standards would result in a disincentive for states to enforce high academic standards. The NCLB goal of 100 percent proficiency is widely criticized as unattainable (Sunderman, 2008). However, schools and school systems which repeatedly fail to meet NCLB benchmarks can eventually face serious consequences, including staff replacement and state takeover. As a result, "a state's proficiency definitions can be—and given the penalties in federal law, increasingly will be—watered down to the point that all children can achieve them with little improvement in instruction" (Rothstein, 2004, p. 89).

Other observers have claimed that the problem is with the NAEP itself. First, it is a "low stakes" test. Students are not informed of their scores on the test and there are no consequences for poor performance; consequently, it is claimed, they have little incentive to do their best. Additionally, NAEP standards may be too high (Hombo, 2003; Reckase, 2001). For example, in South Carolina, whose standards received the highest grades from *Education Next*'s report, only 25 percent of 4th graders scored proficient or above in reading on the NAEP.

The success of our schools should be everyone's concern.

Despite these criticisms, the NAEP is the most reliable measure available for evaluating our community's academic standards. Tennessee's poor performance relative to other states and Memphis City Schools' stagnant scores on the TCAP indicate that the educational well-being of our children is being threatened by low achievement and low expectations. Our children need quality education if they are to succeed in life, and our community needs educated citizens if it is to compete successfully in the knowledge economy. As the proportion of jobs requiring a college degree or other postsecondary training increases (Green, Costello, & Lippard, 2001), the effectiveness of our educational system becomes a crucial issue. In order to identify and implement successful policies and interventions, we must first be able to assess the performance of our schools. Meaningful standards that accurately reflect student achievement are a first step toward this goal.

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Data

Chart data can be downloaded at http://theurbanchildinstitute.org/databook